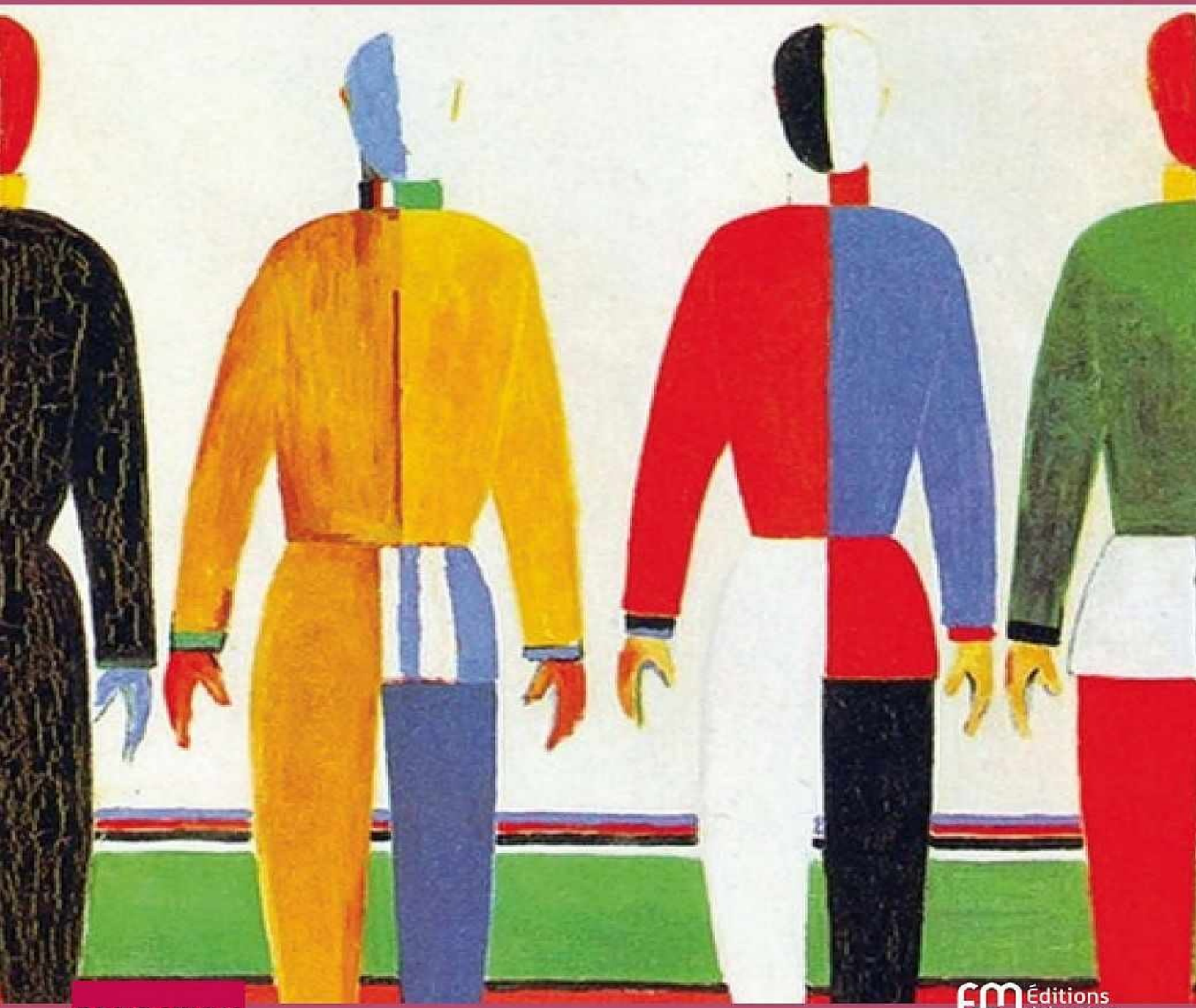
edited by

Jean-Daniel Rainhorn
& Samira El Boudamoussi

New Cannibal Markets

Globalization and Commodification of the Human Body

54



FONDATION BROCHER

Éditions de la maison des sciences de l'homme

New Cannibal Markets

Globalization and Commodification of the Human Body

Jean-Daniel Rainhorn and Samira El Boudamoussi (dir.)

DOI: 10.4000/books.editionsmsh.10732
Publisher: Éditions de la Maison des sciences de l'homme
Year of publication: 2015
Published on OpenEdition Books: 19 December 2017
Serie: 54
Electronic ISBN: 9782735122851

http://books.openedition.org
Printed version
ISBN: 9782735119981
Number of pages: 432

Electronic reference

RAINHORN, Jean-Daniel (ed.) ; EL BOUDAMOUSSI, Samira (ed.). *New Cannibal Markets: Globalization and Commodification of the Human Body*. New edition [online]. Paris: Éditions de la Maison des sciences de l'homme, 2015 (generated 09 January 2018). Available on the Internet: <http://books.openedition.org/editionsmsh/10732>. ISBN: 9782735122851. DOI: 10.4000/books.editionsmsh.10732.

Thanks to recent progress in biotechnology, surrogacy, transplantation of organs and tissues, blood products or stem-cell and gamete banks are now widely used throughout the world. These techniques improve the health and well-being of some human beings using products or functions that come from the body of others. Growth in demand and absence of an appropriate international legal framework have led to the development of a lucrative global trade in which victims are often people living in insecure conditions who have no other ways to survive than to rent or sell part of their body. This growing market, in which parts of the human body are bought and sold with little respect for the human person, displays a kind of dehumanization that looks like a new form of slavery.
This book is the result of a collective and multidisciplinary reflection organized by a group of international researchers working in the field of medicine and social sciences. It helps better understand how the emergence of new health industries may contribute to the development of a global medical tourism. It opens new avenues for reflection on technologies that are based on appropriation of parts of the body of others for health purposes, a type of practice that can be metaphorically compared to cannibalism. Are these the fi rst steps towards a proletariat of men- and women-objects considered as a reservoir of products of human origin needed to improve the health or well-being of the better-off? The book raises the issue of the uncontrolled use of medical advances that can sometimes reach the anticipations of dystopian literature and science fiction.

Jean-Daniel Rainhorn

Jean-Daniel Rainhorn is professor of international health and humanitarian action and holds the Social Inequalities, Health and Humanitarian Action chair at the College of Global Studies, Fondation Maison des sciences de l’homme in Paris. Previously he was professor of international health at the Graduate Institute of International and Development Studies in Geneva and director of the Geneva Center for Education and Research in Humanitarian Action. He was also invited professor of development studies and/or humanitarian assistance in various universities, including the Université libre de Bruxelles, Leopold

Senghor University of Alexandria, Hanoi School of Public Health and Tel Aviv University, as well as former director of CREDES in Paris, and author of numerous articles, reports and books.

Samira El Boudamoussi

Samira El Boudamoussi is a researcher at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris, and visiting researcher at the Centre of Studies on International Cooperation and Development of the Université libre de Bruxelles (ULB). She earned her PhD in education from the Universitat Rovira i Virgili in Tarragona and conducted various research projects at the ULB and Universitat Autònoma of Barcelona. The overarching theme of her research is science– technology–society: how society relates to scientific knowledge and technical advances, and how these are used in personal and public decision-making.

Table of contents

Foreword

Globalization and Misuses of Biotechnologies: Back to Cannibalism?

Jean-Daniel Rainhorn

Part 1. Trading in the Human Body

New Markets, Old Questions?

Samira El Boudamoussi and Vincent Barras

Rest in Pieces: A Short Genealogy of Cannibal Markets

Jean-Jacques Courtine

To Ban or Not to Ban: The Ethics of Selling Body Parts

Samia A. Hurst

The Value of Life: Religions and Commodification

Samira El Boudamoussi

Part 2. Wombs for Rent

How Do We Balance Risk and Desire?

René Frydman

States of Confusion: Regulation of Surrogacy in the United States

Seema Mohapatra

Danish Sperm and Indian Wombs: Fertility Tourism

Elisabeth Beck-Gernsheim

For Motherhood and for Market: Commercial Surrogacy in India

Sarojini Nadimpally

Within Me, But Not Mine: Surrogacy in Israel

Etti Samama

Part 3. Brain Theft

Is Brain Drain Cannibalism?

Alex Mauron

An Unfair Trade? Mobility of Africa's Health Professionals

Delanyo Dovlo and Sheila Mburu

Double Movement: Health Professionals and Patients in Southeast Asia

Nicola Suyin Pocock

Selective Immigration: Nurse Importation by Developed Countries

Barbara L. Brush

Part 4. Organs for Sale

Is Transplantation Tourism a Form of Cannibal Market?

Philippe Steiner

State of the Trade: World Transplant Tourism

Jacob A. Akoh

Lessons in Donation: The Spanish Experience in Latin America

Rafael Matesanz and Beatriz Mahíllo

An Alternative to Trade: The Iran Experience

Mitra Mahdavi-Mazdeh

The Ends of the Body: Neocannibalism and Military Necropolitics

Nancy Scheper-Hughes

Part 5. The Human-Product-Banking Industry

Do Human Body Parts Have a Social Life?

Vinh-Kim Nguyen

In the Name of Quality and Safety: Commercialization of Human Cells and Tissues

Jean-Paul Pirnay

Selling Donations: Ethics and Transfusion Medicine

Jean-Daniel Tissot, Olivier Garraud, Jean-Jacques Lefrère and Jean-Claude Osselaer

Who Are the Owners?

Commercialization and Biobanking

Bernice S. Elger

Part 6. The Bigger Picture

What else? Development, Gender, and Human-Rights

Philippe Goyens

From Colonization to Neocolonization: New Forms of Exploitation

Firouzeh Nahavandi

Commodified Bodies: Is It a Gender Issue?

Judit Sándor

Trafficking in Persons for the Removal of Organs: A Human-Rights Approach

Debra Budiani-Saberi and Seán Columb

Part 7. Mapping National and International Responses

Questions for the future

Edward Kelley

Limiting Commodification: International Law and Its Challenges

Carmel Shalev

Medical Products of Human Origin: Towards Global Governance Tools

Luc Noël and Dominique Martin

Human Commodification: Professions, Governments, and the Need for Further Exploration

Alexander M. Capron

Conclusion

Jean-Daniel Rainhorn and Samira El Boudamoussi

Biographies of the Contributors

Foreword

The development of new biomedical technologies (organ or tissue transplantation, medically assisted reproduction, blood components, etc.) has led to, among other things, an increase in demand for health-care. However, for economic, legal or ethical reasons, or due to human resource shortages, public health services in developed countries cannot respond to this growing demand, leaving the needs of some patients unmet.

The liberalization of the international health-care market and the rationalization of public health expenditure over the past twenty years have resulted in two fundamental changes in the organization of healthcare services at a global level. On the one hand, some emerging countries have developed private, highly specialized health services specially designed to meet foreign demand at low cost. This new type of medical supply has a growing influence on the behavior of patients, who are seeking care abroad more and more. On the other hand, liberalization has also allowed greater workforce mobility, enabling health professionals from poor regions to look for better-paid jobs outside their countries. This double movement of health professionals and patients is one of the most noteworthy features of the new globalized healthcare industry.

Traveling for medical care, known as medical tourism, has recently grown in fields such as oncology, cardiovascular surgery, medically assisted reproduction, and organ/tissue transplantation. In some countries the development of medical services in the last two of those fields is made possible by the lack of sufficiently binding legislation and the existence of a large number of socially vulnerable people. The result is a wide availability of low-cost resources needed for specific treatments (organs, human material, surrogate mothers, etc.), making it more or less legal to rent or purchase human body parts of socially disadvantaged

persons in order to meet the needs of patients who can afford the costs of those medical services. Commodification of human body parts is another feature of the global health-care market. A new type of trade based on increasing social inequalities in most societies and between countries is developing. The result is an economy that is comparable not only to a neocolonial one, but also to a kind of cannibal market.

Aiming to better understand various aspects of this new market and assess its implications for the future, an international and multidisciplinary symposium [1] took place in Geneva, Switzerland, on February 6 and 7, 2014. Its major objectives were: (i) to analyze, from a social sciences perspective, the globalized development of the commodification of the human body for medical purposes; (ii) to develop the outline of a research agenda based on key ideas and findings that emerge from the discussions; and (iii) to create an international network of social scientists on this topic. The discussions were based on four case studies: (a) the unregulated market of assisted reproductive technology and, in particular, the development of commercial surrogacy; (b) the conditions for harvesting organs that feed the market for transplantation; (c) the “brain drain” of health professionals which reduces the capacity of poor countries to respond to their health challenges; and (d) the development of private institutions that collect, store and sell human material (gametes, embryos, blood, tissues, etc.). These represent four areas in which the growth of this market has significant human, social, medical, economic, legal, religious, and ethical implications.

This book brings together the contributions made at the symposium. After a very fruitful meeting, each speaker was asked to write a chapter based on his or her oral presentation and the questions it raised. All chapters were reviewed by the editors in order for each part to offer a logical and consistent approach to the addressed issue.

The book is divided into seven parts inspired from the structure of the symposium. Each part has an introduction and three to four chapters. It is therefore a collective work involving some thirty senior researchers from sixteen countries where different issues related to commodification of the human body

are a particularly acute concern.

Notes

1 The Symposium was organized by the College of Global Studies, Fondation Maison des sciences de l'homme (FMSH), Paris, with the generous support of the Brocher Foundation, Geneva, the Swiss Academy of Medical Sciences, Basel, the National Fund for Scientific Research, Brussels, the Royal Academy for Overseas Sciences, Brussels, the Institute of History of Medicine and Public Health, Lausanne, the Research Center on International Cooperation and Development (CECID), Université libre de Bruxelles (ULB), Brussels and the Institute for Biomedical Ethics, Geneva. The symposium was cosponsored by the World Health Organization (WHO).

Globalization and Misuses of Biotechnologies: Back to Cannibalism?

Jean-Daniel Rainhorn

> “It has become appallingly clear that our technology has surpassed our humanity.”—A. Einstein

> “Act in such a way that you treat humanity, whether in your own person or in the person of another, always at the same time as an end and never simply as a means.” —E. Kant

This book results from a multidisciplinary symposium held in February 2014 in Geneva. A group of international scientists from both medicine and the social sciences gathered with the goal to collectively explore how some misuses of new biotechnologies—that make it possible to provide consumers with “medical products of human origin” [1] —tend to consider the human body or parts of the body as reservoirs of “natural resources.” [2] Advances in biomedicine have led to new, and particularly lucrative, health industries, and their rapid development has contributed to major behavioral changes that sometimes call into question certain well-established values that have until now been considered universal. Indeed, today, in a globalized neoliberal environment, there are markets for the human body that have little or no regulation and depend in part on the massive rise in inequalities worldwide. Such inequalities are at once social, economic and cultural and the created markets allow improved health for some people—those in privileged social classes—by exploiting the bodies of other human beings—the disadvantaged. These new markets result in a new way of looking at the integrity of the human body, which is no longer a sacred universal value.

Advances in biomedicine

It is easy to understand the fascination the media, and therefore the general public, have for medicine as it contributes to improving the overall health of the population. Average life expectancy at birth has doubled in a century. Improved hygiene and vaccinations have reduced the spread of infections and diseases. Progress is being made in treating cancer, in pain management, in reducing the risks of pregnancy and birthing, in assisted reproduction technologies, in tissue and organ grafts. These are just a few of the spectacular advances made in the last few decades. Technological developments are by far not the only explanation for a decrease, or at least control, of some diseases, but they clearly play an important role in improving overall health.

The realm of scientific advances is not one in which it is always easy to remain objective. The spectacular and the emotional often override fundamental questions linked to their use, when it is not monitored or regulated in some way. Medicine and science in general have the goal of making new biotechnologies available to as many patients as possible. We cannot however underestimate the fact that these same technologies can sometimes be used for other ends than those for which they were originally designed.

We are living in a very particular era, in which we see easy-to-use technology marketed in areas as vastly different as biomedicine and genetics, computers and communication, the environment, energy and the food industry. Today, these technologies have a determining influence on whole sectors of the world economy, but many of them also impact the daily lives, and particularly the physical, mental and social well-being of individuals. Rarely in the history of humanity have human beings had to face and adapt to so many changes in such a short lapse of time. Concomitantly, the use of these technologies raises many cultural, socioeconomic, and political issues.

Some of these technologies also raise non-negligible ethical questions, impacting areas or life and values that have until now been more or less untouchable, such as respect of privacy and individual freedom, confidentiality of correspondence, non-commercialization of living beings, parenting, food safety, and more. In addition, the globalized nature of their use, and the fact that they generate profits that can be very high, lead to new forms of criminality that are challenging both national and international legal systems.

We are seeing the development of worldwide markets in which everything can be bought and sold—even the human body—under conditions that are farther and farther from a respectful vision of the human person. It is like a huge supermarket in which the consumers can find everything they think they need. We are experiencing a true cultural revolution, one that provides the immediate satisfaction of personal needs. Everyday, we have access to more and more commodities that come to us via new technologies and new means of production. Generally, we access them with little regard for the conditions in which they were produced (child labor, bonded labor, banned chemicals, products of human origin, etc.) as long as they respond to the need or to the desire of the person who has the means to pay for them. A new type of society seems to be developing insidiously, a profoundly unequal global society that is less respectful of human beings and, perhaps, in the long run, more totalitarian. It is a society in which we will be able to buy/rent human body parts or products based on our own needs, often regardless of the person from whom they come. This society operates under rules that more often than not escape all forms of public regulation, even when they impact the most basic human-rights. As Herbert Marcuse (1955) reminds us: “Concentration camps, mass exterminations, world wars, and atom bombs are no ‘relapse into barbarism,’ but the unrepressed implementation of the achievements of modern science, technology, and domination.”

The slow desubjectification [3] of the human person

Examples of unrepressed implementation of biomedical achievements and the resulting behavioral changes are legion. One of the most recent is certainly the double scandal that broke out in Thailand in the summer of 2014.

“Baby Gammy,” a child conceived through in vitro fertilization by an Australian couple and born with a twin sister to a Thai surrogate mother, was abandoned by his genetic parents because he had Down’s syndrome. This example sheds light on a movement toward desubjectification—of both the surrogate mother and the child—that can be found in the words chosen by people using surrogates. When the biological parents returned to Australia with the apparently healthy little sister, abandoning the little brother, who was also genetically their child, because he was handicapped, they more or less consciously considered that paying a large sum of money to the surrogate mother guaranteed them a “good quality” product. To them, Gammy—the purchased object—did not correspond to what they had imagined when they began the process of assisted reproduction. So, they did what they would have done with any other consumer good, they went as far as demanding some of their money back.

The minimal consideration they demonstrated for the surrogate mother—who did accept to raise the child as her own—also raises the more general questions about the nature of the relations between intended parents and those that carry the children for nine months. This relationship is particularly unequal, because it reduces the surrogate mother to a function—reproduction—while imposing an obligation of results: a “perfect child.” This is a form of servitude that is certainly not fully compensated by the payment received, no matter what some say.

The second scandal is that of a young, rich Japanese man. DNA tests showed

him to be the biological father of fifteen or so children via surrogate mothers. He declared that he really did want a large family and didn't do anything illegal. Indeed, nothing can keep someone with the financial means to pay as many surrogate mothers and he wants, in as many countries as he wants, to make as many children as he wants. The extent of megalomaniac desire is no longer limited by morality, respect of human beings or the law. Money is the only limit. If I am rich, I can buy as many cars, trips or babies that I want. I therefore can reduce the women who carry the children and the children themselves to simple commodities.

It is understandable that, despite its tradition of tolerance, Thai society was particularly shocked by these two events. In November 2014, the Thai Parliament gave initial approval to a bill—on the first reading and nearly unanimously—that outlaws commercial surrogacy. Will this put an end to this new form of slavery? Perhaps in Thailand it will, although the law has not yet been voted by Parliament. But, the increasing worldwide demand and the absence of international regulation respected by all countries suggests that the assisted reproduction industry, and therefore use of others to carry babies to term, will continue to grow.

Healing that exploits bodies of others

Taking some distance from some ethically questionable uses of assisted reproductive technology, it becomes clear that the same types of questions also come up in other areas of medicine and public health in which products of human origin are used for therapeutic reasons. Today, whole industries are developing, industries with asymmetric socioeconomics based on exploiting bodies and products of bodies from some people for the health needs of others. Trade in organs, blood, tissues, and human reproduction have become globalized markets that—beyond the legal practices generally offered in the public sector—have spread across the planet with impunity. Furthermore, the transplantation of an organ, the supply of a tissue or a gamete, or the use of a surrogate mother often occurs in a country that is not home to the "buyer," and this cross-border nature makes it more difficult to establish a consistent legal framework applicable to all. Strengthening local legislation by forbidding these practices for foreigners and/or formulating or adopting an international legal framework like the World Health Organization has done in other areas are approaches currently being explored. This book sets out to contribute to this reflection.

In the end, isn't exploiting another person's body to improve the "performance" of one's own body or mind the same as ritual cannibalism, that is, eating an enemy's body to appropriate his courage and intelligence? Can we apply the metaphor of cannibalism to these new health markets that use living or dead body parts to produce means to treat disease, to replace organs or simply to respond to a desire to have a child—which is sometimes considered to be a right?

If we push the metaphor further, can't we consider the pillaging of essential human resources in the form of doctors and nurses from poor countries as another form of cannibalism? Brain drain does consist of appropriating qualified

human resources from countries with considerable health-care needs to transfer them to rich countries where the aging population—and with it the desire for immortality—is increasing the need for health-care professionals. Already weak countries are being emptied of their most qualified professionals, or symbolically of part of their life blood. Couldn't that be considered a form of vampirism? These are strong, and even provocative, images touching myths that run very deep in the human unconscious. Perhaps not everyone will agree that they describe what many consider to be a market norm. Perhaps such words seem far from reality. But isn't it also a myth to imagine a world in which the "invisible hand of the market" alone frames human relationships, a world that does not take into account the profound inequalities that exist?

The association of scientific progress with neoliberal globalization has led to new realities and new behavior in the health sector, such as cannibal markets, new forms of servitude and slavery, medical tourism, and unequal treatment in the face of illness and death. The result is a slow migration away from the Hippocratic principles that have served as an ethical framework for medicine for the past two thousand years. Of course, many would argue that health-care is not like other fields, that it is about suffering, illness and death, and in addition that "health has no price." But is that a reason to go as far as dehumanizing the other —the other who is also a human being—to the point of reducing his or her body to an object you can pay for to benefit from?

Unfortunately, there is no lack of examples today to convince us that the misuse of certain biotechnologies can lead to an objectification of the human body and to the industrialization of their use. One would have to be blind, or unrealistic, not to see how close we are coming to the world described by A. Huxley in *Brave New World* (1932) or K. Ishiguro in *Never Let Me Go* (2005).

Sensational headlines or real facts?

The international news is constantly covering stories that provide insight into the scope of these new markets that exploit the bodies of some to satisfy the health needs or well-being of others. These are no longer isolated events, whose illegal and sometimes sensational nature could make for tabloid headlines, but the inevitable consequences of the development of veritable globalized industries. Four examples taken from recent news are food for thought.

In 2011, *The Guardian* and then later other newspapers (Gupta 2011; Bhalla and Thipliyal 2013; Rudrappa 2014) reminded us that India has more than 300 clinics in which medical teams and women are available to provide pregnancies for others, that rental of wombs of Indian surrogate mothers by foreign couples represents several thousands of births a year and that according to a report by the Confederation of Indian Industry, this type of practice brings in $2.3 billion a year. The growth of this market continues despite efforts by the Indian government to limit it. Although quantitatively lower, the situation is comparable in countries like the United States, Ukraine, Thailand and Israel.

Surrogacy has all of the elements needed for the structuring and growth of an international market. On one hand, there is solvable demand represented by consumers whose desire for a child is limited by the legislation of their own country, to which can be added a new type of demand represented by homosexual couples wanting children. On the other hand, a nearly unlimited supply is developing in the form of surrogate mothers, based on a desire to overcome situations of great social vulnerability. In between the two, there are intermediaries—generally private profit-driven agencies looking for quick earnings through more or less honest means. This is a very asymmetric market, in which the body of some serves to satisfy the desires of others. Is the enslavement of surrogate mothers any different from that of prostitutes?

In a second example, the serious German newspaper *Der Spiegel* (Putz 2013) carried a story about Syrian refugees selling their organs in Lebanon in order to survive. It added that, because of this new supply, the price of organs had dropped significantly. So, to survive, some of the three million Syrian refugees (UNHCR 2014), who now live without any income, depend on humanitarian aid and have no hope of returning to their home country in the near future, have nothing but their organs to sell. That gives an idea of the degree of despair in which they find themselves. A similar situation occurred in India after the December 2004 tsunami. It led to the arrest of a network that recruited refugees to supply grafts to hospitals (Schmitt 2007).

So, when it comes to harvesting and transplanting organs, all the elements needed for the development of an international market exist. On one hand, there is a constant demand from consumers who suffer kidney or liver failure and who urgently need organ transplants. On the other, there is an unlimited supply represented by the planet's socially excluded—be they refugees or just simply living in poverty—who are looking for any possible means to get out of a situation of great social vulnerability. Between the two, most countries have restrictive legislation that pushes individual or institutional intermediaries to look for—often in more or less licit ways—organs to graft. This very lucrative activity takes place more often than not through the purchase of organs from living donors under ethical and medical conditions that are more than questionable (Goyal *et al.* 2002; Mendoza 2010).

A third example dates from the summer of 2012, when numerous serious newspapers published the results of an international survey on human tissue trade carried out by the International Consortium of Investigative Journalists (ICIJ) (Willson *et al.* 2012). This investigation, conducted in eleven countries, explored supply chains of human products used routinely to treat patients throughout the world and that are dominated by publicly traded Western companies (*Le Monde* 2012). According to this investigation, this market has been experiencing exponential growth, with revenue doubling in ten years. Once again and although the origin of these products are unclear, there is no doubt that

such a market has a growing demand and a nearly unlimited supply.

Finally, a fourth example is related to brain theft as another form of cannibalism, even if it does not directly concern a product of the human body. In the *Daily Mail*: “Out of around 13,000 new doctors registered by the General Medical Council every year, just 7,000 come from British medical schools” (Levy and Osborne 2013) and that two-thirds of them were trained in poor or emerging countries, essentially the Indian subcontinent and Africa. In some English-speaking African countries, as many as fifty percent of doctors have migrated in the last twenty years. This organized migration of health-care professionals—both doctors and nurses—seriously weakens the capacity poor countries have to respond to medical crises. Here too, there is a supply, a demand and intermediaries, all the elements needed for the development of a totally asymmetric international market.

Of course, these examples may be considered as mere sensationalism of the media. However, they provide indications of a reality that deserves to be examined by the research community.

What do these phenomena have in common?

In these four examples, an identical mechanism is at work: patients belonging to a privileged population directly or indirectly purchase body parts or products from people who live more often than not in dire poverty and have nothing else to sell to survive. This trade is growing steadily and, due to a lack of sufficient international legislation, is doing so with little or no transparency and far from ethical standards. Its economy, because it focuses on raw materials, resembles a neocolonial economy. Isn't the human body the most basic of all raw materials?

Although there are some differences between these examples, there are also many similarities:

- They were marginal before the 1980s for technical, ethical, economic and legal reasons, but have become a new kind of commercial activity based on the use of recent biotechnology and generate large profits.
- They require the presence of health-care professionals in the chain that starts with the expression of a need and goes through to the satisfaction of that need. This raises the question of what role doctors play in activities that are often motivated more by gain than by their duty to treat patients.
- They often occur on the edge of legality. They are a particularly violent illustration of how a globalized neoliberal market, by diminishing the role of the state, favors the development of illicit, and even criminal, commercial activities.
- Finally, these activities participate in a desacralized vision of the body in which human beings are dehumanized. In these four examples, the human being is reduced to being an "object" that you can sell and buy, whole or in pieces, dead or alive.

Ultimately, these phenomena reduce human beings to a function or a product that can be traded. Doesn't that make them new forms of contemporary slavery?

Yes, they may use medical technology with the goal of improving the health of some thanks to the “voluntary” contribution of others. This gives them an appearance of respectability that is sometimes reinforced by the application of ethical principles such as informed consent—when it has been given—or financial compensation—when it is paid. However, in extreme cases, such practices announce the development of a proletariat of object-people whose role would be to produce human substances and improve the health of those who could buy them.

The fact that there are many similarities among these different events gives a certain legitimacy to the suggestion that these examples form a coherent whole that we can refer to as the “commodification of the human body for medicine, health or well-being.” And it is tempting to use the metaphor of cannibalism to describe this phenomenon and call it a “cannibal market.”

Why the metaphor of cannibalism?

Using money to purchase the functions or products of a human body to improve one's health is surprisingly similar to the ritual cannibalism of eating someone's body to take on their virtues.

As we know, cannibalism has very old and very deep roots in human history. Greek mythology gives many examples, starting with Kronos, Zeus's father, right through to Dionysus and his bacchanals, and Prometheus, each of these being an attempt to explain the origin of humanity. One also finds the metaphor of cannibalism in Christianity, with Jesus's words at the Last Supper: "Whoever eats my flesh and drinks my blood has eternal life" (New Testament, John 6:54). In psychoanalytic language, cannibalism expresses the notion of "incorporation," a phase in a child's development when he or she develops a perception of the world by "devouring" the maternal breast (Freud 1950).

Finally, the expression "cannibalize" is often used in the trade of used parts, particularly of cars and machines. Here, we see how close this expression is to the realities of trade in the human body which, based on this image, is reduced to the simple purchase of used objects in more or less good condition.

In a word, the metaphor of cannibalism could seem excessive to some, yet it admittedly does illustrate well the trading mechanism of appropriating bodies for medicine, health or well-being, a practice that is developing in the health-care sector on an international scale.

Trade in bodies: a neocolonial economy?

Colonialism is a phenomenon that goes back to antiquity. It can be defined as a combination of policies and practices by which a group of people dominate another group, often through the use of violence. It translates specifically into the exploitation of resources in colonized countries and the enslavement of populations generally deprived of their most basic rights. Immense wealth has thus been pillaged and hundreds of millions of people reduced to slavery. Between the fifteenth and the twentieth centuries, European colonialism imposed its power on a good portion of the world, and colonial economics largely contributed to European wealth (Galeano 2009).

One can note that the majority of countries in which body resources are "purchased" today are emerging countries that have a colonial past. India, a former British colony, is the most characteristic of these countries. There, the privileged categories speak English, which contributes to the country being the world's top exporter of health-care professionals (Mullan 2005), and it is the country with the most developed markets for assisted reproduction and for organ transplantation for foreigners. English-speaking sub-Saharan African countries, who see their health-care professionals "sucked up" by the United Kingdom and South Africa, can also be considered victims of a neocolonial pillaging of the human resources in a sector—health-care—in which the needs are tremendous and recognized by the international community as a priority (Sharples 2015). Egypt, an organ provider for the privileged in the Arabian peninsula, is another example. And finally, the Philippines, a former American colony, are the top exporter of nurses around the world, particularly to the United States and the Gulf countries, and an unlimited reserve of organs, particularly for the well—off in Japan. [4] These are just a few examples of many that demonstrate how the flow of resources—both material and human—continues in essentially the same

direction as during the colonial period, even if today, for technical and economic reasons, it is often the patients that travel to benefit from these services. The areas covered in this book are no exceptions.

Despite efforts from some neoliberal economists to convince us that, when the money sent back by emigrated professionals is greater than the cost of their training, the source country benefits from the exchange, proof shows that the patients from rich countries are the main beneficiaries in this especially unequal exchange (Amin 1973). And presenting organ trade in the light of freedom to do what one wants with one's body is intellectually dishonest when one knows that the large majority of "sellers" are poor and illiterate and that in the end many receive only small amounts of money for the use that is made of their bodies. Are there fundamental differences between pillaging primary resources by violence and human beings by money? In both cases, there is no real negotiation. And in the commodification of the body, there is only a relationship of power disguised as consent and politely called an exchange. Very little progress indeed has been made since the time of colonial economics.

Appropriating the other’s body: an attempt at classification

Commodification of the human body for medicine, health or well-being is a growing area of research, although the number of scientific articles in the literature remains modest. [5] In fact, the literature covers either specific topics (organ trade, reproductive tourism, blood and plasma trade, tissue banks, etc.), or more general questions such as those related to ethics and morality. The marginal amount of research in the area is certainly related to these technologies being relatively recent—with the exception of the collection, storage and distribution of blood—and also because it tends to only look at problems from a relatively specialized perspective (transplantation, assisted reproductive technologies, blood, etc.) and not as a coherent whole in which there are similar mechanisms. Indeed, as is common practice in medical sciences, each specialty works in its own specific field with its own criteria and, in a way, is unaware of what is going on in other specialties. For the moment, the various medical fields in which there is trade in human body functions or products for medicine, health or well-being are rather impermeable. They form a list of practices without obvious connections. And until now, little effort has been made to better analyze their possible similarities.

By bringing together the contributions of researchers from a wide variety of disciplines and countries who found themselves together for the first time to share their experiences in areas considered to be very different, this book aims to raise certain questions that could lead to a more general vision of these emerging commercial activities in the health-care sector and potentially foresee how medicine will be practiced in the near future. For this, an interdisciplinary approach is essential, as it enables classifications that could facilitate the search for shared solutions.

Using the human body or products of the human body in an unregulated manner to treat others leads to forms of exploitation that are incompatible with a respect for the most basic human-rights. To observe, analyze and better understand this phenomenon, it is first of all useful to provide a methodological framework based on a classification of the various practices. At the current stage of reflection, at least two types of classification can be discussed. A first type could, for example, use resources from the human body as criteria and could be called an “anatomo-physiological classification.” A second type of classification could be based on a more functional notion: the way in which the human body is appropriated to be exploited for its resources; it could be called a “functional classification.”

Anatomo-physiological classification

An anatomo-physiological classification would distinguish three categories of trade in the human body.

a) Trade in the human body as a whole to have a workforce. This kind of contemporary work resembles slavery, in other words, the reduction of an individual to the state of a good that can be used to meet the needs of an economic activity. Reduced to the state of being merchandise, whose muscles are rented and can be disposed of at will, the "contemporary slave," like his or her ancestors, has little or no possibility of deciding on his or her own destiny. He or she depends on the person who pays for the use of the labor. Except in certain regions of the world where slavery exists in its traditional form, today it takes the form of overexploited individuals who generally do not have their basic rights respected and who live in such poverty that they do not have other means to survive than to sell their capacity for work day to day in often inhuman conditions. These are rural migrants in China, landless farmers in India or Latin America, undocumented migrants in Europe or the United States, indentured workers in Asia, laborers imported to work on major construction projects in the Gulf countries, and others. According to the International Labor Organization (ILO), the condition in which these people work today—there are probably hundreds of millions of them—are so similar to those of slavery that this institution has set up rules that define what they call a "decent work agenda" and guarantee basic labor rights that could legally be demanded of all employers. [6]

b) The trade of whole human bodies for the use of a specific organ. The body is used as a whole, but reduced to a specific function. The function will be rented to respond to the needs of an individual or a group of individuals. Of course, prostitution is the oldest and best-known model for this kind of trade. In addition, it is also a very ancient practice for the upper classes to "rent" nursemaids' breasts to provide milk for their children. Today, there is a new type

of trade that involves renting wombs to carry someone else's child. In these three examples, it is specifically the woman's body involved, in its "sexual and reproductive functions." [7]

Although not literally trade in the human body, one can be tempted to add to this category the theft of brains from poor countries to respond to the needs of rich societies lacking specialized human resources, and specifically health-care professionals. This pillaging can also be considered, at least metaphorically, as trade in a human being reduced to an organ or a function—in this case, the brain and its skills.

c) Trade in a part or product of the human body: organs, tissues, blood, cells or gametes. This is a new form of trade that requires the use of very specialized and recently developed medical technology, although trade in blood is older. An organ or body product is bought from one human being—called the "seller"—to be introduced into the body of another human being—the "buyer"—through the intermediary of a qualified professional. This kind of intervention requires the use of biotechnologies and often sophisticated medical and surgical techniques. Some body parts and products are renewable—blood, gametes, cells, genes, etc. Others are not—organs, tissues—or can only be removed from deceased individuals, such as the heart.

In the two initial categories, the human body is kept whole and in general it is in the interest of users that the body be maintained in good health for as long as possible, even if the unlimited supply makes individuals easy to replace. However, in the third category, harvesting organs and body products can be done either with little damage or, on the contrary, cause irreversible mutilation.

Functional classification: new forms of appropriation [8]

A second classification, more legal, can also be proposed to simplify the analysis. It is based on how the human body is appropriated.

a) The appropriation of the "right to use the human body" and more specifically:

- its muscles, that is its work capacity;
- its sexual organs, through prostitution;
- its brain and skills, which refers to the pillaging of health-care professionals from poor countries;
- its womb, or the human reproduction function in order to carry out someone else's pregnancy.

This category thus covers some very ancient realities—slavery and prostitution—as well as more contemporary forms of servitude, including brain drain of health-care professionals and surrogacy.

b) Appropriation of the "fruits" of the human body. These "fruits" could refer to substances removed from the human body and that renew themselves without a significant alteration to the individual. They include hair, sperm, ova, and blood, although some nuancing among them is necessary, as the conditions and consequences of harvesting are quite different.

c) Appropriation of human body "products." These would include parts of the body that are removed and in general do not regenerate. Organs and tissues that can be transplanted fit this category, even if livers can regenerate [9] and the heart can only be removed from a deceased person, no matter how you define death.

Are the new forms of exploiting the whole human body or parts of it that we see today a foreshadowing of how the human body will be exploited in the future? This kind of exploitation on an industrial scale could not have been imagined even thirty years ago, but now could, if we are not careful, lead to the rise of a

new group of human beings who are more or less forced to participate because their survival depends on renting or selling their bodies, a kind of “object-person” who would be “cannibalized” as needed.

Towards an object-person proletariat?

Part of humanity lives in social exclusion, which means it does not have access to essential social goods as defined by the United Nations. These hundreds of millions of people live in precarious housing, without running water and sanitation; they do not have enough to eat, and the majority of their children remain more or less illiterate; their health is fragile and they do not generally have access to health-care.

These people who have been “left behind,” who are “useless in the world” (Geremek 1976; Castel 2002) try to survive in face of greater and greater indifference, and little by little become “others” to the welloff. The “others” are more and more distant, and less and less considered to be human. A mass of anonymous individuals, a kind of proletariat who, if we go back to Karl Marx, is made up of people who “must sell themselves piecemeal, are a commodity, like every other article of commerce, and are consequently exposed to all the vicissitudes of competition, to all the fluctuations of the market” (Marx 1848). This definition is particularly visionary and consistent with the idea of a proletariat of “object-persons” whose function would be to sell and rent their own bodies to produce human products that would improve the health of the better-off.

This function is described in such novels as *Never Let Me Go* by K. Ishiguro, in which children are cloned to supply needed organs, or in M. Atwood’s *The Handmaid’s Tale* (1985) in which women are chosen based on their fertility to produce children for officers of the regime, an image that brings to mind the Lebensborn set up by the Nazis to ensure the reproduction of the Aryan race.

Controlling women’s fecundity has always been an obsession of totalitarian regimes. What then can be said about the two Silicon Valley giants, Facebook and Apple, offering to freeze oocytes so that their employees don’t need to

choose between having a career and having children (Friedman 2014)? Will these star tech companies set examples that bring into question a woman's basic right to have children when she decides to and not when it is in her employer's interest? Is fiction, with its totalitarian horrors described so well in dystopian literature, becoming reality?

In these novels, however, the topic is planned desubjectification by a totalitarian system. Today, the situation seems to be different. It is not an imposed plan, but rather the insidious and generalized apparition of a cultural and economic environment that is favorable to the increased use of products of human origin, be the reasons therapeutic or hedonic.

Unfortunately, medicine does not escape the influences of the neoliberal revolution in which everything can be bought and sold, a reality that moves the doctor progressively away from Hippocratic Oath and sometimes reduces people to nothing more than a "living currency" (Klossowski 1997).

Doctors or merchants?

Considering the complexity of the medical techniques needed to harvest human products and for assisted reproduction, medical professionals are necessarily involved in these new markets of the living. It is hard to imagine that the involved doctors are not aware that they are participating in a lucrative trade that is not always legal and not always ethical. At this stage, we can even wonder if the use of new technologies to improve the health of some by using the body functions and resources of others is not in the process of changing the objectives of medical practice. The Hippocratic Oath, which has served as a framework for medical practice for centuries, reads: “I will take care that they suffer no hurt or damage.” The Principles of Medical Ethics proposed by the American Medical Association [10] stipulate that “a physician shall be dedicated to providing competent medical care, with compassion and respect for human dignity and rights” and that “a physician shall support access to medical care for all people.” How far from these guidelines do medical doctors stray when they participate in the commodification of the human body?

Conclusion

Many other questions deserve to be raised. It appears that, in effect, commodification of the human body for medicine, health and wellbeing is turning our world upside down. Behavioral changes line up, the insidious growth of the idea that money can buy everything including human beings—whole or in pieces—for the sole reason of satisfying one's needs, the lack of questioning among the beneficiaries of such markets regarding the origin of these products are all factors that contribute to the fear that these practices will develop even more.

Other key questions are raised in this book. For example, how do religions, which position themselves as the "guardians of morality" view trade in human bodies? Do they have clear opinions on the topic, or are they exceeded by the rapid changes and not capable of providing overall answers?

The fact that even beyond assisted reproduction technologies and surrogacy, these cannibal markets affect women in particular raises other important questions. In India, women represent a significant portion of organ "sellers." That reality cannot be kept under wraps, much like the conditions near slavery in which live thousands of Philippine nurses in the Gulf countries. Must we consider that commodification of the body is also a gender issue?

Would it be possible to imagine international regulations that could reduce this trade when supply and demand are all but unlimited? Can market forces be limited by a national and/or international legal framework when the profits generated by these activities are so high? Unfortunately, one can imagine that the opposite will happen.

As a matter of fact, for two years, in great secret—with no official announcements and no documents made public—meetings have been held at the World Trade Organization preparing for greater commercial flexibility in the

services, and particularly in the health-care sector, in order to transition the General Agreement for Trade in Services (GATS) towards a new agreement—the Trade in Services Agreement (TiSA). This agreement would reduce the role of the public sector in one area—health-care—an area where it plays a key role in developed countries other than the United States. Such a change would deliver health-care right into the “invisible hand” of the market.

Clearly, commodification of the human body raises a considerable number of questions, not all of which are treated in this book. It may still be a marginal phenomenon compared to others that touch billions of people, yet it raises the symbolic question of our relationship to others. Isn’t the respect for the other, including the sacred value of his or her body, one of the key principles that allow us to live together?

Bibliography

References

Amin, S. 1973. *L'échange inégal et la loi de la valeur* (Unequal Exchange and the Law of Value). Paris: Éditions Anthropos-IDEP.

Atwood, M. 1985. *The Handmaid's Tale.* Toronto: McClelland and Stewart.

Bhalla, N., and M. Thapliyal. 2013. India seeks to regulate its booming "rent-a-womb" industry. *Reuters,* September 30.

Castel, R. 2002. *From Manual Workers to Wage Laborers: Transformation of the Social Question.* New Brunswick, NJ: Transaction Publishers.

Derbyshire, D. 2007. Inside the transplant tourism trade: the desperate man of "One kidney island." *The Daily Mail*, December 3.

Fabre-Magnan, M. 2013. *La gestation pour autrui. Fiction et réalités*. Paris: Fayard.
—. 2014. Les nouvelles formes d'esclavage et de traite, ou le syndrome de la ligne Maginot. *Recueil Dalloz* 8/7589:491–492.

Freud, S. 1950. *Totem and Taboo. Some points of agreement between the Mental Lives of Savages and Neurotics.* London: Routledge & Paul.

Friedman, D. 2014. Perk Up: Facebook and Apple now pay for women to freeze eggs. *NBC News*, October 14. Accessed at www.nbcnews.com/news/us-news/perk-facebook-apple-now-pay-women-freeze-eggs-n225011.

Galeano E. 2009. *Open Veins of Latin America: Five Centuries of the Pillage of a Continent*. Brunswick, VIC: Scribe Publications.

Geremek, B. 1976. *Les marginaux parisiens aux XIV^e^ et XV^e^ siècles.* Paris: Flammarion.

Goyal M., R. L. Mehta, L. J. Schneiderman, and A. R. Sehgal. 2002. Economic and health consequences of selling a kidney in India. *JAMA* 288 (13): 1589–1593.

Gupta, D. 2011. Inside India's surrogacy industry. *The Guardian,* December 6.

Huxley, A. 1932 [2006]. *Brave New World*. London: HarperCollins Publishers.

Ishiguro, K. 2005. *Never Let Me Go*. London: Faber.

Klossowski, P. 1997. *La Monnaie vivante* (*Living currency*). Paris: Rivages.

Le Monde. 2012. Les tissus humains, un troublant filon commercial. July 27.

Levy, A., and L. Osborne. 2013. Straight-A students forced to go abroad to study medicine as

NHS recruits record number of foreign doctors. *The Daily Mail*, August 26.

Marcuse, H. 1955 [1966]. *Eros and Civilization*. Boston, MA: Beacon Press.

Marx, K. 1848 [2002]. *The Communist Manifesto*. London: Penguin Classics.

Mendoza, R. L. 2010. Colombia's organ trade: Evidence from Bogotá and Medellín. *Journal of Public Health* 18:375–384.

Mullan, F. 2005. The metric of the physician brain drain. *New England Journal of Medicine* 353:1810–1818.

Putz, U. 2013. Lebanese black market: Syrian refugees sell organs to survive. *Spiegel Online,* November 12. Accessed at www.spiegel.de/inter national/world/organ-trade-thrives-among-desperate-syrian-refugees-in-lebanon-a-933228.html.

Rudrappa, S. 2014. The international surrogacy market. *Pacific Standard*, September 23.

Schmitt, T. 2007. A pound of flesh: Organ trade thrives in Indian slums. *Spiegel Online*, June 14. Accessed at www.spiegel.de/inter national/world/a-pound-of-flesh-organ-trade-thrives-in-indian-slums-a-488281.html.

Sharples, N. 2015. Brain drain: Migrants are the lifeblood of the NHS, it's time the UK paid for them. *The Guardian*, January 6.

UNHCR. 2014. UN News Centre, August 29.

Wieviorka, M. 2012. Du concept de sujet à celui de subjectivation/dé-subjectivation. FMSH-WP-2012-16. Paris.

Willson K., V. Lavrov, M. Keller, T. Maier, and G. Ryle. 2012. Human Corpses are Prize in Global Drive for Profits. Washington, DC: The International Consortium of Investigative Journalists, July 17. Accessed at www.icij.org/human-corpses-are-prize-global-drive-profits.

Notes

1 Concept proposed by the World Health Organization, Geneva. See document EB136/CONF/3. January 2015.

2 Oxford Dictionaries define "natural resources" as: "Materials or substances occurring in nature which can be exploited for economic gain: '*the sustainable use of natural resources.*'" Retrieved from www.oxforddictionaries.com/definition/english/natural-resources (emphasis is the author's).

3 See Wieviorka (2012).

4 One poor neighborhood in the capital city of Manilla has 20 million inhabitants and is called

the “one-kidney island.” Nobody knows the number of its inhabitants who have sold one of their kidneys, nor how many have died from it. See Derbyshire 2007.

5 A search on Pubmed (www.ncbi.nlm.nih.gov/pubmed) in January 2015 using the keywords “commodification” and “human body” resulted in 119 articles published since 1985, of which 13 (10.9%) were published in 2014. The number of articles is much higher using the keywords “trade” or “commercial” with an organ, a tissue, “blood”, a gamete or “surrogacy.”

6 According to the ILO, implementation of the Decent Work Agenda includes four strategic objectives, with gender equality as a crosscutting objective: promoting jobs, guaranteeing rights at work, extending social protection, and promoting social dialogue (www.ilo.org/global/about-the-ilo/decent-work-agenda/lang--de/index.htm).

7 The term “reproductive functions” is used here in the meaning of “reproductive health,” a concept used by the World Health Organization to cover “the reproductive system, processes, and functions at all stages of life” (www.who.int/topics/reproductive_health/en).

8 This attempted classification is in part inspired by Fabre-Magnan (2013, 2014).

9 A phenomenon apparently known in Ancient Greece as it appears in the Prometheus myth.

10 www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medicalethics/principles-medical-ethics.page. (retrieved on January 12, 2015).

Author

Jean-Daniel Rainhorn

Professor of international health and humanitarian action and holds the Social Inequalities, Health and Humanitarian Action chair at the College of Global Studies, Fondation Maison des sciences de l’homme in Paris. Previously he was professor of international health at the Graduate Institute of International and Development Studies in Geneva and director of the Geneva Center for Education and Research in Humanitarian Action. He was also invited professor of development studies and/or humanitarian assistance in various universities, including the Université libre de Bruxelles, Leopold Senghor University of Alexandria, Hanoi School of Public Health and Tel Aviv University, as well as former director of CREDES in Paris, and author of numerous articles, reports and books.

Part 1. Trading in the Human Body

New Markets, Old Questions?

Samira El Boudamoussi and Vincent Barras

The commodification of the human body and body parts for medical and health purposes raises major controversial questions in various fields including, among others, medicine, the law, ethics, philosophy and religion. This ensemble of questions gave birth to new areas of research that began to appear in the late 1990s in various disciplines, including social sciences, anthropology, development studies, gender studies, and public health.

For some authors, the commercialization of human body parts may be considered a mere issue of offer and demand, since markets for human body parts are already well established and flourishing rapidly, yielding billions of dollars every year. For them, these markets should be regulated in order to avoid —or at least reduce—any abuse. For others, the central question is one of human-rights and should be tackled as such, given that most of these markets are illegal and based on trafficking, coercion, and exploitation of the vulnerable.

Are these new markets characteristic of our era and therefore to be accepted? Are they normal or logical issues in modern, industrialized, and liberal societies? Is there historical evidence of commercialization of the human body in other cultures and civilizations? If so, what have been the context and justifications for such practices? Do the major religions express any opinion about the commodification of the human body for medical and health purposes? If so, what are these opinions? Are there ethically good reasons to ban such commercialization beyond the anticommodification discourse? Why are the anticommodification arguments considered weak and easily deconstructed? To what extent does the concept of “commodification” and the metaphorical description of a “cannibal market” apply to the four areas of activities involving the commercialization of human body parts for medical and health purposes that

are considered in this book?

These questions and many others characterize the perspectives developed by the authors in this first part of the book. Some areas of activities in the health sector, including assisted reproductive technology, organ transplantation, brain drain of health professionals, and biobanks are examined from different historical, ethical, juridical, and theological points of view.

It is shown how the characterization of "the neoliberal and global markets as 'cannibal' rests on ancient genealogical foundations, the traces of which can be literally uncovered in different historical contexts and in different time periods." The sacred nature of the human body appears not to have always been a disincentive to its commodification in the commerce or traffic of religious relics of saints in medieval Christianity. In the same way, scholars from various religions hardly ever evoked the intrinsic priceless value of the human body. Whereas monotheistic religions may agree that human beings should not gain money with their bodies and rather use their bodies to work, they seem divided with respect to purchasing organs for transplantation or similar operations.

The contributions in this section underline the complexity and genealogy of the debates and bring to light that modern liberal societies regard any regulation aiming to control individual behavior as a form of reduction of freedom. Furthermore, they stress the importance of cultural motives in the way different areas of the world may or may not react to the question of the commodification. Proposed regulations might only be applicable within a single country and would only work in a society where hardly anyone would need to sell a kidney, which is not realistic. Furthermore, none of the required safeguards would be applicable at an international level because of the absence of global governance. If so, the question remains of what opportunities are at our disposal to conceptualize ourselves as human beings and to enhance our responsibility towards our common goods and resources, including those that lie within our bodies?

Authors

Samira El Boudamoussi

Researcher at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris, and visiting researcher at the Centre of Studies on International Cooperation and Development of the Université libre de Bruxelles (ULB). She earned her PhD in education from the Universitat Rovira i Virgili in Tarragona and conducted various research projects at the ULB and Universitat Autònoma of Barcelona. The overarching theme of her research is science–technology–society: how society relates to scientific knowledge and technical advances, and how these are used in personal and public decision-making.

Vincent Barras

Doctor in medicine and historian, is professor of the history of medicine at the University of Lausanne, and also teaches sound theory at the Art University of Geneva. He has published books, essays, and articles on the history and theory of the body, medicine and psychiatry, contemporary poetry and music, and has translated works by Galen, Adorno, Cage, and Sanguineti among others. His recent publications include: "Neurosciences et médecine" (*Revue d'histoire des sciences*, 63, 2010), ed. with J.-Cl. Dupont; *Le courrier du corps au XVIII^{e} siècle* (with S. Pilloud and M. Louis-Courvoisier), Lausanne, 2013; *Maladies en lettres, XVII^{e}-XX^{e} siècle*, Lausanne, 2013 (ed. with M. Dinges).

Rest in Pieces: A Short Genealogy of Cannibal Markets

Jean-Jacques Courtine

The possibility of transferring living human organs or tissues from one body to another did not occur before the nineteen forties, when blood transfusion became widely available. As a result, the presence in this publication of a cultural historian specialized in the body over a long time span may seem odd. In order to overcome this apparent paradox, I have taken the very title of our meeting —"a cannibal market"—quite literally, very seriously, and, of course, historically. And I have done the exact same thing with some of the propositions spelled out in the presentation of the project that gathers us here, in which several traits of a new global health-care market are defined: "Human body parts of socially disadvantaged persons are rented or purchased on a more or less legal basis. Commodification of human body parts is another feature of such a market. A new type of trade based on increasing social inequality in most societies and between countries is developing. The result is an economy that is not only comparable to a neocolonial one, but also to a kind of cannibal market."

"A kind of cannibal market.…" Let us begin by questioning the very metaphor central to the project's presentation in a historical perspective: Is it relevant? Did such cannibal markets for body parts exist before the advent of mass blood transfusion in the 1940s, and, later, organ transplantation? Yes, they did, though of course in quite a different way. Were human organs commoditized in various markets before the days of contemporary biomedical technologies? Yes, they undoubtedly have been, continually throughout history. And finally, are there any historical precedents of the project of improving the health of some by using elements from the bodies of others? Yes, many, too many, indeed.

So we could say that the intuition that led the organizers of our meeting to characterize the new neoliberal and global market as “cannibal” rests on ancient genealogical foundations, the traces of which can be literally uncovered in different historical contexts (in the history of religion, that of medicine, that of war, and even that of mass entertainment, [1] among others) and in different time periods. The metaphor is, for that matter, quite relevant, for if you follow this discursive thread, you end up in a dark side of history, unearthing the “shadow” or the “phantom” memory of Western cannibalism. [2]

If we choose to explore the long genealogy of such a memory, what do we discover? We find out that there are innumerable historical instances when human bodies and organs have had a long afterlife—and not in Heavens, as some might expect, but on earth. And there they did not rest in peace, but rather, if you will allow me the expression, they rested in pieces. Or, more exactly, they traveled in pieces, which is what commodities do in any kind of market, and cannibal markets are no exception to that golden rule.

Let me give you a few memorable examples of the strange itineraries followed by commoditized body parts in the modern period. There was, for instance, the case of the tribulations of Swedenborg’s (1688–1772) skull. The man was a famous mystic and interlocutor of spirits. His restless cranium had a busy afterlife, seeing its market value rapidly inflating in a time of phrenological mania and cabinet curiosities, the skull passing from one owner to another over two centuries to be eventually sold at auction at Sotheby’s for £1,500. Here is a typical example of the rhetoric of commodification of body parts from the auction catalogue: “[The skull is] of dark ivory color, jawbone lacking…, otherwise in very good condition with attractive patina” (Walford Davies 2013). Swedenborg’s Swedish brainpan may have crossed paths with that of René Descartes, which was separated from his body during his repatriation from Sweden to France in 1667 and finally sent back to the Natural History Museum in Paris, adorned with various inscriptions from successive owners. There is no need to insist here: from the eighteenth century onward, an informal but vast and versatile market for famous body parts existed where circulated Galileo Galilei’s

middle finger, Ludwig van Beethoven's eardrums, Walt Whitman's brain, Percy Bysshe Shelley's heart, and let's not forget what was to be expected by any serious reader of Sigmund Freud in such a fetishist environment: the penis of Napoleon himself. Emperors never totally die: they leave behind withered fragments of their glory. The emperor had two bodies indeed.

This compulsive craze for the remains of celebrities would be of little interest here if it did not point to the next step in our genealogical quest for cannibal markets: that of the continuation of the ancient commerce of religious relics at the time of the formation of a mass society in which celebrity was becoming a major currency. I have obviously no space here to dedicate to this very long history of sacred human remains, dating back to the oldest forms of religious and magical beliefs, way before their Christianization. If we limit our enquiry to Medieval and Modern Europe, suffice it to say that the trade in religious relics of saints and martyrs was a massive undertaking of collecting, fabricating, exhibiting and selling organs, bits and pieces of the body, to obtain all sorts of benefits. This is where religious genealogy encounters medical history: what was expected from the contact with the relic was healing. But this is also how such commodification of body parts in the religious commerce of relics meets with the underlying elusive question of ritual and therapeutic cannibalism: one can be cured by someone else's body, as one could long ago be fed by it. The traffic in relics is a cannibal market, transferring to the living what was thought to be the strength, the power of the dead. The harvesting and commodification of sacred relics in traditional European societies was, long after anthropophagy, another symbolic way of using the bodies of the dead to keep the living alive.

But, as far as we are concerned here, what the history of the trade in religious relics makes perfectly explicit is that, first of all, the sacred nature of the human body is no obstacle to commodification—just the opposite. And, second, the perception of this traffic as a cannibal market was already perfectly clear in the controversies that arose in the ideological fight between the clergy of the Roman and Protestant churches regarding selling relics and indulgences.

At the end of the fifteenth century, the Catholic theologian Petrus Albinianus

commented on the matter: “The blood outpouring of Christ and the Saints is a treasure kept in the safe of the Church, and the Church has the key to that safe. Thus, when the Church decides, they can open the safe and have anybody they choose benefit from this treasure, by offering healing and indulgences” (Baud 1993, 151). So, beyond the invention of the first Christian blood bank and of Christ as first blood donor, this text clearly shows that the fragmentation of the bodies of saints as relics and the traffic in indulgences were perfectly compatible with commercial exchanges. Unsurprisingly, this became one of the central arguments of Jean Calvin’s violent diatribe against the adoration of relics in *A Treatise on Relics* ([1543] 1870). Let us summarize what Calvin had to say against it. First, worshipping and selling relics were execrable sacrileges because they were a continuation of paganism and idolatry within Christianity. Second, this commerce treated faith as a commodity. And third, all of this happened in what Calvin calls the “Pope’s kitchen.” He meant that the priests fed on relics, becoming as fat as pigs. This was one of his main arguments: the clergy in Rome was a cannibal clergy, the priests lived on the dead to fill the insatiable stomach of the Church. And, beyond the dead, they ate the poor themselves, “they skin them alive and keep on devouring them” (Calvin [1543] 1870, 220). [3] This is why Calvinists considered the disenchantment of the saints’ bodies to be a key intellectual obligation, and why relics were desecrated, destroyed, and treated as rubbish during the Wars of Religion in France.

These are old stories, you may object, stories of ancient cannibal markets, long gone. Are we so sure? The exact same metaphors were used during the French and the Bolshevik revolutions with the exact same consequences: the destruction of religious cannibal markets and their replacement with new ones for the benefits of the state. This did not, as we know, prevent the Soviet Union from reinstating the adoration of relics in its most archaic form by mummifying Comrade Vladimir Ilyich Ulyanov, aka Lenin, and offering up his living-dead body to be worshipped by the Soviet masses. This tribute demonstrated the indifference of old bones and dry skin to political ideology, as well as their power to behave like Russian dolls and generate another relic from within the one that has just been destroyed (Tumarkin 1983; Verdery 1999).

But this is far from being the only resurgence of the metaphor of cannibal markets in Western collective memory. Another example is to be found in the history of medicine. Let me provide you, if I dare say it, with the bare bones of the story, which happened mostly in England, though there were other cases here and there in Europe. From the reign of Henry VIII, the only legal provider of bodies for dissection in England had been the gallows: corpses of murderers were given to anatomists for what was considered by popular wisdom to be a terrible *post mortem* punishment. Inevitably, over the course of the eighteenth century, an increased interest in human anatomy "promoted a black market in corpses. Anatomists offered money for them and were abundantly supplied. Dismembered, they sold to students at a profit" (Richardson 1987, 71). Human organs had become commodities on very dark markets indeed. At night, gangs of "body-snatchers," otherwise known as "resurrectionists," visited cemeteries in big cities and disturbed the peace of eternal sleep.

The structure of the market was such that the fresher the meat, the higher the price. It was then just a matter of time before the idea arose that killing would be more profitable than digging. The commodities would still be warm when they reached the anatomy school, no questions asked. The infamous gang of Burke and Hare thus murdered sixteen people in Edinburgh, and so powerfully stirred collective imagination that the verb "burking" entered the English language of the time and that Mary Shelley found in these nocturnal activities a large part of the inspiration that led to the invention of her immortal Frankenstein.

The authorities finally dealt with the problem. In 1831 a new anatomy bill was introduced to Parliament, providing the basis of modern law on the subject. It recommended that instead of giving hanged murderers, the government should confiscate bodies of paupers who died in workhouses and hospitals, too poor to pay for their own funerals. What had been a feared and hated punishment for murder became one for poverty. From that point on, schools of anatomy would consume the organs of the destitute (Richardson 1987; Shultz 1992; MacDonald 2006; MacDonald 2010; Ferber and Wilde 2011; Carney 2011). This immediately resuscitated in collective memory the metaphor the genealogy of

which we are trying to retrace here. One editorial from *The Lancet* had this to say about it in 1832: “It is disgusting to talk of anatomy as a science while it is cultivated by means of practices which would disgrace a nation of cannibals.”

And, as a matter of fact, this was one historical moment when bodies were treated as mere commodities: corpses were tagged, bought, sold, and delivered. Human bodies were stuffed into boxes and crates, treated like meat, carried in carts and on horseback, hidden under other commodities, damaged in transit. “They were dismembered and sold in pieces, or measured and sold by the inch” (Richardson 1987, 72). In this process of commodification in these cannibal markets, the bodies lost their names: anatomists called them “subjects”; resurrectionists referred to them as “things” (Richardson 1987, 72).

This is why there is certainly a lesson or two to be learned from these fragments of history. The task of the historian is to give those collections of organs their names back whenever possible, and to insist that they should be remembered as the human subjects they once were. It is also to remind us that as human subjects, they were the only ones that should have had a right to the free disposal of their bodies. And finally, to claim that the human body is not, and should not be treated as commodity like any other, even if contemporary biomedical technologies tend to consider it as a purely material thing. The body is also a thing, but a thing unlike any other.

Another lesson is older, and it can be found in Montaigne’s *Essays*. It is about what we have called here “shadow” or “phantom” cannibalism, the repressed memories of the original cannibalism of Europe and of its subsequent symbolic substitutes, which simply endlessly repeat, over and over again: “The cannibal is the Other, the barbarian, elsewhere to be found, far away, at the outskirts of the civilized world…” This was not Montaigne’s opinion, when he came to meditate over the violence of early colonization in the Americas: “I am sorry that we should be so blind to the barbarous horrors of our actions. I conceive that there is more barbarity in eating a man alive than there is when he is dead” (Montaigne [1854] 1979). [4] Montaigne had undoubtedly a point, and recent twentieth-century unprecedented mass industrial cannibalism has tragically confirmed the

accuracy of his judgment. The cannibal is not the Other; the cannibal temptation is still among us, casting its long shadow over today’s cannibal markets.

Bibliography

References

Baud, J.-P. 1993. *L'Affaire de la main volée. Une histoire juridique du corps*. Paris: Seuil.

Boutry, P., P.-A. Favre, and D. Julia, eds. 2009. *Reliques modernes. Cultes et usages chrétiens des corps saints des réformes aux révolutions*. 2 vols. Paris: EHESS.

Calvin, J.. [1543] 1870. *A Treatise on Relics*. Edinburgh: Johnstone, Hunter & Co.

Carney, S. 2011. *The Red Market. On the Trail of the World's Organ Brokers, Bone Thieves, Blood Farmers, and Child Traffickers.* New York, NY: William Morrow.

Ferber, S., and S. Wilde. 2011. *The Body Divided. Human Beings and Human "Materials" in Modern Medical History*. Burlington, VT: Ashgate.

Lévi-Strauss, C. 2013. *Nous sommes tous des cannibales*. Paris: Seuil.

MacDonald, H. P. 2006. *Human Remains. Dissection and Its Histories*. New Haven, CT: Yale University Press.

—. 2010. *Possessing the Dead. The Artful Science of Anatomy*. Melbourne, VIC: Melbourne University Publishing.

Montaigne, M. de. [1854] 1969. Des cannibales. *Essais*. Book I, Chapter XXXI. Paris: Garnier-Flammarion.

Richardson, R. 1987. *Death, Dissection and the Destitute*. London and New York, NY: Routledge & Kegan Paul.

Shultz, S. M. 1992. *Body Snatching: the Robbing of Graves for the Education of Physicians in Early Nineteenth Century America.* Jefferson, NC: McFarland and Company.

Tumarkin, N. 1983. *Lenin Lives! The Lenin Cult in Soviet Russia*. Cambridge, MA: Harvard University Press.

Verdery, K. 1999. *The Political Lives of Dead Bodies. Reburial and Post-Socialist Change*. New York, NY: Columbia University Press.

Walford Davies, D. 2013. The unquiet cranium. *Times Literary Supplement*, November 6.

Notes

1 Here, I will only focus on the first two areas, leaving the question of war and that of mass entertainment for a forthcoming work.

2 The existence of which a posthumous collection of essays by Claude Lévi-Strauss (2013) has recently reminded us.
3 For a more general view on this topic, see Boutry, Favre and Julia 2009.
4 Translated by the author of this article.

Author

Jean-Jacques Courtine

Professor of European studies at the University of Auckland (New Zealand), professor emeritus at the University of Sorbonne Nouvelle (Paris III) and at the University of California (Santa Barbara). He is working in cultural history and anthropology. Among his recent books: *Histoire du corps, XVI^{e}-XX^{e} siècle* (3 vol., Seuil, 2006) and *Histoire de la virilité, de l'Antiquité au XXI^{e} siècle* (3 vol., Seuil, 2011), both in collaboration with Alain Corbin and Georges Vigarello.

To Ban or Not to Ban: The Ethics of Selling Body Parts

Samia A. Hurst

Should we be allowed to sell blood, or kidneys? The standard answer is no. A broad consensus in international regulatory documents supports a ban on all forms of sale of organs and human body parts (WHO 2010). This consensus has, however, been critiqued and prominent calls made for “economic rewards to motivate blood donation” and for regulated markets for human organs (Becker and Elias 2014; Lacetera, Macis and Slonim 2013; Radcliffe Richards 1996).

Opposition to selling human organs is usually based on risks of harm for vendors and buyers, the potential for exploitation in an asymmetric power relationship, and concerns regarding commodification (Wilkinson 2012). Proponents of markets in organs argue that such concerns are weaker than they appear, and can be allayed by appropriate regulations. Moreover, banning the sale of human body parts is an obstacle to access to care for patients on transplantation lists. Were we to be allowed to sell organs or other body parts, such as blood, availability would dramatically increase and lives would be saved. If arguments in favor of a ban are weaker than we thought, it is argued, they should not in such diminished form trump the chance to save many lives by making more organs available than is currently the case.

The case in favor of regulated markets in human organs is strong and should be properly understood. In this chapter, I will argue that we nevertheless have good reason to ban the sale of human organs.

The case in favor of selling body parts

Organ trade as it currently exists, largely as an illegal black market, is ugly. No one seriously defends an unfettered market in human organs (Daar 2006). The serious, increasingly respected, case is being made for the legalization of selling human organs: (1) within a closed, and reciprocal, system; (2) to a public body responsible for buying at a fair price and allocating fairly; (3) at a sufficiently generous price for sales to be voluntary; and (4) with guarantees for additional requirements, such as medical care for vendors (Erin and Harris 2003; Wilkinson 2012). Such a market would be limited to organs "whose loss will not affect the vendor's ability to live as he or she did prior to the sale" (Taylor 2002) and enforcement agencies should be efficient in applying its limits (Kishore 2005).

There are three main arguments in favor of such a regulated market. Autonomy implies the right to do as one pleases with one's own body, especially if this harms no third parties. Selling organs will (largely) empty transplant waiting lists for organs that can be sold, and will result in saving or extending many lives. Finally, selling organs is consistent: we pay for people to take greater risks for money with no qualms (Savulescu 2003). In the specific case of selling blood, a further argument is that risks of attracting high-risk vendors who may have greater need of money may have been overestimated (Lacetera *et al.* 2013). Based on these arguments, allowing the sale of human organs should be the presumptive option unless we have good reasons to ban it (Daar 2006; Radcliffe Richards 2003).

Do we have such reasons? Many points made against selling body parts are indeed weaker than we might assume. In the following section, I will review them and examine which ones withstand scrutiny, which ones do not, and where some aspects may have been overlooked.

The case against selling body parts

Harm to vendors

On the illegal market, vendors are operated in dismal circumstances, trafficked (the value of their organs often exceeds their own value in the slave trade), and are often turned away from medical care if they develop complications. The risk of grievous harm to vendors thus seems to be a strong argument against the sale of human organs. The existence of such risks, however, actually provides a powerful argument for just the sort of regulated market proponents would allow as it would enable safeguards such as the requirement for appropriate medical care and long-term follow-up of vendors.

Under such circumstances, harm to vendors is no longer an effective argument against selling organs. We allow voluntary donation, and it is not clear how paying the “donor” would by itself add any risks to the act of allowing an organ to be surgically removed for transplantation (Matas 2004). Nor can paying for the remaining risk be the problem, since we allow paying for risk in other circumstances.

One part of this argument may nevertheless survive: organ vendors are not just at risk of physical harm, they are at risk of reputational and psychological harm as well. This has been well documented (Scheper-Hughes 2003) and would be more difficult to alleviate through effective regulation. While some have claimed that the stigma attached to selling organs might simply disappear if the practice were more widespread (Becker and Elias 2014), there is no evidence to back this claim.

Decreased altruism

Selling organs replaces an altruistic voluntary donation by a sale. Would selling organs, then, reduce the amount of altruism in the world? [1] The available data seems inconclusive. Compensations in the form of nonmonetary material incentives may not have such a deleterious effect as might have been anticipated (Lacetera *et al.* 2013), but a "crowding-out" effect does exist with monetary compensation (Dhingra 2013). Altruistic donation could be reduced even without reduction in altruistic motivation. If I can pay for my daughter's kidney, perhaps I will feel less inclined to donate one to her. Indeed, I may be dissuaded from placing my own life at risk even were I to remain so inclined. The institutions of voluntary donation will also tend to encourage altruism while the institutions of organ sale will not (Singer 1973).

On the other hand, it has been argued that risks to altruism are most concerning when there is a lot of altruism to be harmed (Radcliffe Richards 2008). Questions of whether we ought to pay for organs, however, arise precisely because there isn't all that much altruism.

In any case, a trade-off is involved here (Gillon 1997). Were we to allow selling body parts, then, altruism may be perceptibly weakened. Proponents of organ markets argue that, in this trade-off, saving lives through increased transplantation is more important than maintaining a greater degree of altruism). [2]

Instrumentalization and commodification

Purchasing an organ risks instrumentalizing the vendor, and can represent a problematic commodification of human body parts. The origin of this argument is usually traced to Immanuel Kant's *Groundwork for the metaphysics of morals*:

> In the realm of ends everything has either a price or a dignity. What has a price is such that something else can also be put in its place as its equivalent; by contrast, that which is elevated above all price, and admits of no equivalent, has a dignity. (Kant [1785] 2002)

Things, here, have a form of value translated as price. Persons, on the other hand, have a different form of value translated as dignity. The thrust of the argument is that we ought not to confuse them. Doing so can lead to two distinct wrongs: mistaking a person for a thing—objectification—or exchanging for money an entity that should not be—merchandization.

To attempt to avoid the wrongs of objectification and merchandization, it seems then that we must first categorize body parts—which are neither things nor persons—as either one or the other. On the standard international view, body parts are like persons because they are part of persons. Objectifying them is wrong: we are untruthfully signifying that a part of a person is a thing. Merchandizing them is also wrong: we are wrongly attributing a monetary value, as opposed to a dignity value, to a part of a person.

To this, they are several classic responses. The first is that a person is not the same as that person's blood or kidney. In selling body parts, no wrongful objectification of persons has occurred (Wilkinson 2000). Indeed, by leaving the choice whether or not to sell to the vendors themselves, we are guaranteeing against the risk that they might be considered as another person's property (Dworkin 1994).

The second is that price is not the same as value, even for things that we agree we ought to be able to buy and sell. Therefore, a price would not convey

anything like the true value of an organ either.

The third response is that although untruthfulness is wrong, it may not be sufficiently wrong to trump other concerns. Yes, we may be untruthfully conveying that a human body part is a thing and has a price, and this is wrong. But it seems exaggerated to conclude that this is wrong enough to ground a ban on selling organs all things considered. [3]

Endangering informed consent

Being paid can encourage people to accept things that are harmful for them, which they would not accept without payment, and that go against their own better judgment. If this is the main problem, however, then it is the level of risk rather than the payment that constitutes the wrong-making feature. So long as we can keep the level of risk acceptable, it seems we no longer have a problem.

This argument is sometimes explicitly limited to situations where the payout is huge relative to the vendor's life circumstances, or where these initial circumstances are severely constrained. Arguably, in both circumstances, the offer of selling an organ is difficult to refuse. Even in such circumstances, however, it is not clear that this is problematic. Offering payment for an organ constitutes an additional option relative to the ones the potential vendor would otherwise have (Dworkin 1994). Indeed, the very reason why we consider consent endangered is because the vendor prefers this option to the others. Banning this option is, then, a strange way of protecting either the vendor's freedom or interests.

Coercion

The possibility of selling an organ is often described as coercive because potential sellers seem to have no other way out of dire circumstances. Coercion, however, requires an agent; considering the sale of human organs to represent coercion thus requires that someone manufacture the circumstances. This does exist on the illegal market: migrants can be lured into debt in exchange for illegal passage into another country and the promise of work there. Once they arrive, they are told that the job offer has fallen through. Since they must still repay their debts, they are given the—only—option of selling an organ in order to do so. Such a case fulfills the classic definition of coercion. It is, however, precisely the sort of thing that a legal markets might be designed to avoid.

There is, however, another side to coercion. What if we have a duty to alleviate poverty: would offering money for organs not really be extorting organs against something—a way out of poverty—which we ought to be giving anyway to those in such dire straits that they would sell a body part? Arguably, it would depend on what kind of duty there was in the first place, but this point would be of particular relevance in the case of state buyers, which we are considering here. If such a duty exists, a government that simultaneously has the resources to help every one fulfill basic needs, but withholds these resources, and then offers the possibility of selling an organ in order to fulfill those same needs is manipulating the neediest (Veatch 2003). Under such circumstances, buying human body parts is not coercive but instead represents an extortive exchange.

Exploitation and extraction

Because the possibility to sell a human organ targets the poor, it is argued that it "leads inexorably to inequity and injustice" (Participants in the International Summit on Transplant Tourism and Organ Trafficking 2008). Exploitation exists when there is an unfair distribution of benefits and burdens from a transaction. To avoid it, vendors would need to be richly compensated if the benefit to the recipients is to save their life and if the risk to the vendors is significant. This, however, may be feasible in a regulated market.

Another way in which selling body parts may resemble exploitation is that it is quite unlike paying people for qualified jobs and more similar to mining them. In considering what could be wrong with buying and selling human organs, it may not be so much buying and selling themselves that constitute the problem. Rather, it could be what typically happens to what we buy and sell. Once markets and the profit motive can transform something into a monetary value, they are very effective in doing just that and transforming essentially all of it into monetary value.

This can be illustrated if we imagine the sort of circumstances where one might sell a kidney. Body parts that can be sold tend to become collateral for debt (Goyal *et al.* 2002). If people become indebted to the point where they need to sell a kidney, however, it is quite likely that they were not free not to become indebted in the first place. If their circumstances have this consequence, they will predictably become indebted again, this time minus one kidney. At some point, she will default. Their lenders, in turn, have no reason to stop hounding them until their resources are finished. Allowing the sale of organs has effectively increased the lenders'ability to earn money from the loan. By allowing even a regulated market, the debtors'body parts have been transformed into a saleable thing. The problem here is not that it is untruthful to call it a thing. The problem is that things can be mined. If we have a good reason to limit

the violence that a loan shark may inflict by allowing default instead, and unless we can show why breaking people's legs for failing to pay is wrong, but taking their kidneys is permissible, then we also have good reason to allow default before a kidney is removed.

That the option to sell an organ removes from debtors the option of defaulting at an earlier time illustrates the limits of the "additional option" argument outlined above. Giving piople in this situation the option to sell an organ does provide them with an additional option, which they may truly prefer to being punished by a loan shark. The debtors, however, may actually prefer the option of defaulting earlier. These options are not mutually compatible. The defense of organ markets is based on the assumption that prospective sellers would prefer selling to defaulting. It is not obvious that this would be correct.

Qualifying the required regulations

Many of the problems outlined here could be decreased by regulations. These would require a single buyer within a closed system. Sellers need to have access to medical care and follow-up, and to be protected from stigmatization. Protection should also exist to avoid signalizing, by paying money, that having a kidney extracted was no longer an act of altruism to be encouraged as such. Prices would need to be high enough to avoid the recurrence of systemic debt. Alternately, this risk would have to be avoided through a social safety net, or the sale of human organs would have to be limited specifically to avoid the use of organs as a collateral for debt. In addition, organs should not be able to be exchanged for the means to obtain basic goods which the seller otherwise has a right to.

Could any of these regulations work? Arguably, within a single country they might. Then, however, we would have constructed the sort of society where hardly anyone would need to sell a kidney (Hughes 1998). The main argument in favor of an organ market would become invalidated as waiting lists might no longer decrease all that much.

On the international scene, where it is clear that many people need what money they could get from selling a kidney, hardly any of the required safeguards are applicable (Jha and Chugh 2006). Given the absence of global governance, anything other than an unfettered market will be difficult to achieve. This is exactly what no one is advocating.

In the real world, the first—national—option may not even really exist. As long as there are illegal residents or relatives of residents who live in other parts of the world, the second situation will apply. This implies a further argument against allowing the sale of human organs: if specific safeguards are inapplicable, limits may require a ban.

Conclusion

A regulated market in organs might look like the perfect solution in theory. It could, however, be a perfect solution for conditions we might never realistically achieve. The case in favor of allowing the sale of human body parts is strong because arguments against it are weak or contradictory in theory. In considering such legalization we may, however, may be facing a practical rather than a theoretical contradiction. If, in practice, a justifiable market in human organs still requires that some persons live in constraining circumstances without access to the range of goods they have a right to, and if the sort of regulations required to justify selling human organs would eliminate this situation, then we cannot have a justifiable market in human organs.

Bibliography

References

Becker, G. S., and J. J. Elias. 2014. Cash for Kidneys: the Case for a Market for Organs. *Wall Street Journal*, January 18.

Daar, A. S. 2006. The case for a regulated system of living kidney sales. *Nature Clinical Practice Nephrology* 2(11):600–601. doi:10.1038/ncpneph0320.

Dhingra, N. 2013. In defense of WHO's blood donation policy. *Science* 342(6159):691–692.

Dworkin, G. 1994. Markets and morals: the case for organ sales. In *Morality, Harm and the Law*. Boulder, CO: Westview Press.

Erin, C. A., and J. Harris. 2003. An ethical market in human organs. *Journal of Medical Ethics* 29(3):137–138.

Gillon, R. 1997. Commerce and medical ethics. *Journal of Medical Ethics* 23(2):67–68.

Goyal, M., R. L. Mehta, L. J. Schneiderman, and A. R. Sehgal. 2002. Economic and health consequences of selling a kidney in India. *JAMA* 288(13):1589–1593.

Hughes, P. M. 1998. Exploitation, autonomy, and the case for organ sales. *International Journal of Applied Philosophy* 12(1):89–95.

Jha, V., and K. S. Chugh. 2006. The case against a regulated system of living kidney sales. *Nature Clinical Practice Nephrology* 2(9):466–467. doi: 10.1038/ncpneph0268.

Kant, I. [1785] 2002. *Groundwork for the Metaphysics of Morals*. New Haven, CT: Yale University Press.

Kishore, R. R. 2005. Human organs, scarcities, and sale: morality revisited. *Journal of Medical Ethics* 31(6):362–365. doi: 10.1136/jme.2004.009621.

Lacetera, N., M. Macis, and R. Slonim. 2013. Economic rewards to motivate blood donations. *Science* 340(6135):927–928.

Matas, A. J. 2004. The case for living kidney sales: rationale, objections and concerns. *American Journal of Transplantation* 4(12):2007–2017.

Participants in the International Summit on Transplant Tourism and Organ Trafficking. 2008. The Declaration of Istanbul on Organ Trafficking and Transplant Tourism. *Nephrology, Dialysis, Transplantation* 23(11):3375–3380.

Radcliffe Richards, J. 1996. Nepharious goings-on. Kidney sales and moral arguments. *Journal of Medicine and Philosophy* 21(4):375–416.

—. 2003. Commentary. An ethical market in human organs. *Journal of Medical Ethics* 29(3):139–140, author reply 141.

—. 2008. Organ transplants. *Ethics Bites*.

Savulescu, J. 2003. Is the sale of body parts wrong? *Journal of Medical Ethics* 29(3):138–139.

Scheper-Hughes, N. 2003. Keeping an eye on the global traffic in human organs. *The Lancet* 361(9369):1645–1648. doi: 10.1016/S0140-6736(03)13305-3.

Singer, P. 1973. Altruism and commerce: a defense of Titmuss against Arrow. *Philosophy and Public Affairs* 2(3):312–320.

Taylor, J. S. 2002. Autonomy, constraining options, and organ sales. *Journal of Applied Philosophy* 19(3):273–285.

Veatch, R. M. 2003. Why liberals should accept financial incentives for organ procurement. *Kennedy Institute of Ethics Journal* 13(1):19–36.

WHO (World Health Organization). 2010. *WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation*. Geneva: WHO.

Wilkinson, S. 2000. Commodification arguments for the legal prohibition of organ sale. *Health-Care Analysis* 8(2):189–201. doi:10.1023/A:1009454612900.

—. 2012. The sale of human organs. In *The Stanford Encyclopedia of Philosophy*. Edited by E. N. Zalta. Accessed at plato.stanford.edu/archives/fall2012/entries/organs-sale.

Notes

1 It has been argued that the possibility of selling and buying organs could lead to additional acts of altruism such as donating money for a relative to purchase an organ (Becker and Elias 2014). It is only outside the allegedly defended model of a regulated market, however, that relatives may have to donate money to pay for an organ.

2 A part of this question hinges on how many lives are actually saved by the transplantation of organs that can be sold. In the specific case of kidneys, it is of course not true that one life is "saved" by each transplantation since the alternative of dialysis allows a somewhat inferior but similar life expectancy. This point, however, does not make the trade-off any less real, but only affects arguments as to which side we should come down on.

3 N. Eyal, personal communication.

Author

Samia A. Hurst

Professor of bioethics at Geneva University's medical school, ethics consultant at the Geneva University Hospitals, and a member of the European Clinical Ethics Network, the Central Ethics Committee at the Swiss Academy of Medical Sciences, and the Swiss National Advisory Commission on Biomedical Ethics. Her research focuses on fairness in clinical practice, and the protection of vulnerable persons.

The Value of Life: Religions and Commodification

Samira El Boudamoussi

> “The Roman Catholic Church reacted negatively to the announcement that the Nobel Prize for Medicine had been awarded to Robert G. Edwards. Thirty-three years ago, Cardinal Albino Luciani, on the eve of his election to become Pope, stated that, whereas progress is certainly a beautiful thing, mankind has not always benefited from progress.” (Benagiano, Carrara, and Filippi 2011)

Religious considerations are usually evoked in debates about science and technology and, more particularly, in those about the use and applications of innovative medical technologies (Ahmad 2011; Hamdy 2010; Hamdy 2013). Because of the issues raised regarding the human body, life and death, human reproduction, and human suffering, among many others, religious instances are often expected to take clear positions (e.g., debates on brain death and organ donation in Egypt [Hamdy 2010], Israel [Scheper-Hughes 2004], and Malaysia [MOH Malaysia and JAKIM 2011]). Moreover, people seek religion guidance and support in their decision-making (e.g., saving the life of a loved one or donating the organ of a family member, etc.), sometimes before the decision is made and at other times afterwards.

For all these reasons, and because religion has always been one of the components of human societies, this article explores the positions of some major world religions regarding the issues related to the growing commercialization of the human body and body parts for medical and health purposes. It focuses on the issues raised by four case studies: (1) selling and purchasing organs for transplantation, (2) renting wombs of surrogate mothers, (3) the human-product banking industry, and (4) looting brains in health-care sector.

If some positions such as those of Sunni Islam, Catholic Christianity, and Judaism, are made public and thus widely discussed (Fortier 2010; Inhorn, Patrizio and Serour 2010; Silber 2010; Ahmad 2011; Benagiano, Carrara, and Filippi 2011; Ghaly 2012), the positions of other major world religions remain less present in the literature or at least less known. Furthermore, those positions may concentrate more on specific issues of each case study than the general issue of trading with a human body part or putting a price on it.

Methodological aspects

This paper presents the views reported by one representative from each of six major world religions: Hinduism, Buddhism, Catholic Christianity, Protestant Christianity, Judaism, and Sunni Islam. All representatives were selected among high-level theologians or religious clerics (priest, reverend, rabbi) in Germany and according to their knowledge of the religion they represent, their interest in the four case studies of commodification of the human body, and their willingness to be interviewed or provide their answers in writing. Beforehand, potential respondents received a brief description of the topic along with the main questions of the interview protocol.

The objective of the interviews conducted with the selected theologians and clerics was to explore the religious points of view of the six selected religions regarding the commercialization of the human body and body parts for medical and health purposes. Thus, a semistructured interview made of five items was used. The first item included questions about the religion of the interviewee, its main values, and principles. The other four items included questions about the four case studies chosen to illustrate the commercialization of the human body and body parts for medical and health purposes. Those questions and subquestions intended to grasp the positions of each religion about the following topics:

1. The selling and purchasing of organs (for transplantation)
2. The renting of wombs for surrogacy
3. The human-product banking industry
4. The looting of brains in health-care sector from poor to rich countries

In total, four personal interviews were conducted while two representatives accepted to send their answers in writing (Table 1).

Table 1. Information about the interviewees

Religion	Interviewee	Notes
Hinduism	Priest of the Hindu Temple in Cologne, Germany.	Personal interview conducted in English at the Hindu Temple in Cologne.
Buddhism	Buddhist teacher and director of a spiritual center, active in the German Buddhist Union and European Buddhist Union. Author of a book on mindfulness in Buddhism: *In Achtsamkeit zueinander finden: Die buddhistische Sprache der Liebe. Diederichs Verlag*. 2006.	Personal interview conducted in German, Cologne, Germany.
Protestant Christianity	Reverend and preacher at Landeskirchenamt Rheinland (Office of Churches of the Rhineland), Düsseldorf, Germany.	Reverend and preacher contacted via the Evangelische Kirche in Deutschland (EKD), which is a federation of 22 Lutheran, United Protestant, and Reformed Protestant regional church bodies in Germany. Personal interview conducted in English, at the Landeskirchenamt Rhineland (Office of Churches of the Rhineland), Düsseldorf.
Catholic Christianity	Chair Professor of Catholic Moral Theology, University of Tübingen.	Written answers in German.
Judaism	Rabbi and cofounder of Tzohar, an organization of modern orthodox rabbis in Israel.	Written answers in Hebrew (accompanied with English translation).
Sunni Islam	Professor of Islamic theology, University of Tübingen, Germany.	Personal interview conducted in French, in Cologne, Germany.

It is clear that each of the selected religions should be considered as a spectrum

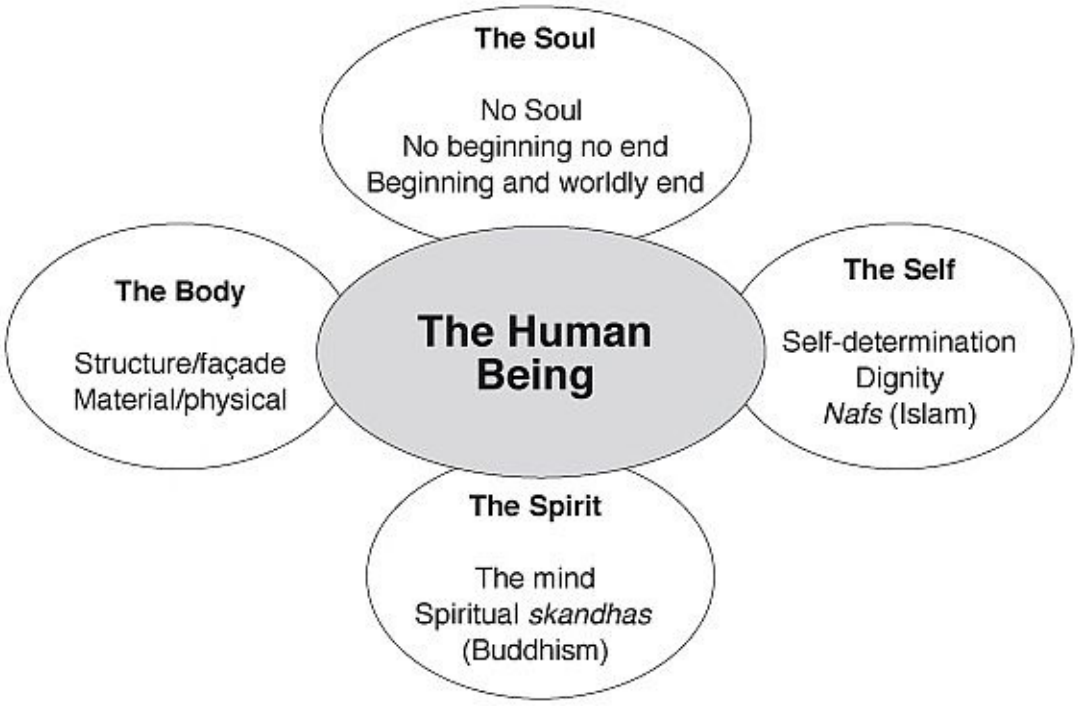
of divisions with respect to a wide range of issues. The positions regarding the commercialization of the human body may differ even within what is traditionally known as the same school of thought. This paper will focus on comparing the interreligious views—and not the intrareligious ones—based on the positions expressed by one interviewee per religion. Therefore, it would be interesting to conduct more interviews in the future in order to capture the internal tensions and compare the different views within each religion.

The human body from a religious perspective

In all world and tribal religions, the human being occupies a central place. From a religious point of view, the human being is generally perceived as made of a body and a soul (Figure 1), but other elements are also considered, such as the spirit, the mind, or the self (Ben Ammar 2010).

Each of these concepts alone is the subject of an extensive literature in various fields (philosophy, theology, medical anthropology, etc.). However, the human body represents a key notion when considering the religious views regarding its commercialization.

Figure 1. Conceptual elements of the human being from a religious perspective



The human body in Hinduism, for example, represents a structure and a façade for the soul. [1] So while the body begins with birth and ends with death, the soul has no beginning and no end following the path of reincarnation (Bowker 2000).

In monotheistic religions, the soul has generally a beginning and a worldly end (Bowker 2000). However, contrary to Judaism and Christianity, a clear distinction is made in Islam between the body and the soul. The soul in Islam may be understood as the equivalent of “life,” and it is also believed that the soul is individual and that resurrection involves both the body and soul (Ben Ammar 2010).

In Buddhism, the human being is believed to be made of five aggregates called *skandhas*: one material and physical *skandha*, which may be equated to the body, and four mental *skandhas*: (1) senses or feelings, (2) perception, (3) mental formations producing the character, and (4) awareness or consciousness (Encyclopædia Britannica).

Two main categories of conceptions of the human body resulted from the interviews. The first category will be referred to as “my body does not belong to me,” and the second one as “my body belongs to me but not exclusively.

” The first perception of “my body does not belong to me” was identified in the discourses of both respondents representing Buddhism and Sunni Islam, with two main differences. First, the Buddhist interviewee pointed out that “the body is not individual, but belongs to the community, the ancestors and the cosmos.” He linked his statement with the Buddhist belief that “all things are related to each other and everything interacts with everything.” Second, the Sunni Islam interviewee insisted on the fact that Sunni Islam represents a plurality of views and that the perception of “my body does not belong to me” exists within some of those views.

The second perception of “my body belongs to me but not exclusively” is present in all monotheistic religions as well as in Hinduism. According to the respondents representing the four monotheistic religions (Catholic and Protestant Christianity, Judaism and Sunni Islam), it is believed that the body is a creation of God and, therefore, belongs to the person (who has the right of self-determination) but also to God. It is important to note though how the same perception may be used for different purposes as it has been the case with the dead organ donation debate in Egypt (Hamdy 2010).

In Hinduism, there is no such concept of creation, the human being is part of an endless process of rebirths with no beginning and no end, and the body belongs to the person first and then to the family and the community.

Both categories of conceptions of the human body from a religious perspective are not compatible with some modern perceptions in which the human body is perceived as a property of the individual (Goodwin 2006). The religious perspectives seem to put limits to this right by insisting on two main values: responsibility and respect.

Except for Hinduism, in which the human body is considered as “a structure and a façade for the soul,” both perceptions—“my body does not belong to me” and “my body belongs to me but not exclusively”—lead to two main conclusions. On the one hand, the human being has the responsibility of taking care of his own body and must show respect for his body and the body of other human beings because—as stated by both the Jewish rabbi and the Protestant reverend—they are “created as an image of God.” On the other hand, according to the Sunni Islam interviewee, in those conceptions of Sunni Islam in which the body does not belong to anybody, it is believed that the individual has only a limited right to use or modify his body, but he has the obligation (responsibility) to take care of it and preserve its integrity.

Commercializing the body: religious perspectives

Selling and purchasing of organs

Since the 1980s, the clinical introduction of cyclosporine as an immunosuppressive agent has contributed to a substantial increase in the success rate of organ transplantations (Rubin *et al.* 1999; Graeb *et al.* 2004). As transplantation became one of the components of health systems in various countries (WHO 2003), the demand in solid organs such as lungs, hearts, livers, and kidneys increased considerably (Shimazono 2007; WHO 2003), while legislations about organ procurement and allocation did not immediately follow and the number of patients on waiting lists continued to increase.

If the lack of legal frameworks or their delayed implementation contributed to the development of black markets of organs in various countries, poverty, vulnerability, and destitution are generally social determinants of the commercialization of organs obtained from living “donors” across a variety of contexts (Budiani-Saberi and Golden 2009).

In this context and with respect to the commercialization of organs for transplantation purposes, a distinction has been made between the religious views regarding the selling of organs and those regarding their purchase by patients in need of a transplant.

Religions on selling organs for transplantation

Based on the analysis of the interviews and written answers, three positions were identified in regard to the selling of organs for transplantation:

- A “Yes” position, which means that the selling of organs is allowed or that

there is no religious considerations that stand against it.

- A “No” position, which means that a given religion is categorically and explicitly against the selling of organs for transplantation.
- A “Yes and No” position, which means that there is no clear/categorical religious position.

The “Yes” position was identified in the case of Hinduism. As will be shown in the other case studies as well, the general position of the Hindu priest was that the religion has no opinion about these issues and that it is up to individuals to decide for themselves. According to the priest, “Everything has a reason, and one should go on with this reason. Perhaps because we believe in reincarnation, one may think that perhaps in their last life they had done something so they have to donate this part of their body.”

This means that the selling of organs is not clearly forbidden or at least that there is nothing in Hindu religion that prevents it.

This is not the case of Sunni Islam and Catholic Christianity, in which both interviewees confirmed that a “No” position exists within each of these religions, and this position is clear and categorical. One of the main differences is that the Catholic position is endorsed by the Catholic Church, while in the case of Sunni Islam this is the theological point of view that was widely agreed upon and adopted by the ethical committees in various Muslim countries despite other controversial positions expressed by some muftis or Muslim scholars (Fortier 2010; Hamdy 2010).

Finally, the “Yes and No” position was formulated in the case of Protestant Christianity, Judaism and Buddhism, with main differences in the underlying concerns. First, the Protestant reverend confirmed that she “could not consider someone who sells his organs as a sinner,” but that “it is known that they would do that only to find a way out of poverty.” Second, the Buddhist interviewee was also concerned by the fact that people would sell only because they need money. But, as a “free mind” and “against the institutionalization of Buddhism at least in Europe,” he considered that there should be no “institutional” position because, according to him: “the issue is… too complex to address it with a ‘yes’ or ‘no.’

It is something that is already happening, so if we say ‘no,” it would still be happening undercover, and that is not what we want.”

Third, according to the Jewish rabbi, this question is very controversial within the Jewish religious world, because some think that the possibility of selling increases the supply of life-saving organs. And, thus, there is no Jewish consensus in this area.

Religions on purchasing organs for transplantation

The Hindu priest’s position regarding the purchase of organs for transplantation was the same as with respect to the selling of them, while the Jewish rabbi affirmed that a sick person may buy an organ in order to save his life.

In both Catholic and Protestant Christianity, the interviewees referred to “the official position” which is that “any transaction between the donor and receiver of an organ is categorically forbidden.”

In the case of Sunni Islam and Buddhism, both interviewees reported that there is no clear position in this regard, mainly because the obligation to save one’s life is counterweighed by other serious concerns.

Individual and social concerns

Despite the different views reported in relation to the selling and purchasing of organs for transplantation, the interviewees expressed various concerns. These could be grouped in two categories: individual concerns and social concerns.

The individual concerns are mainly related to the notions of responsibility and respect—as discussed above in regard to the conceptions of the human body—as well as to the limited lifespan of human beings and the exploitation of the needy and desperate. Below are some comments that illustrate those three concerns:

- The person should be respected as an image of God.” (Protestant reverend)
- We are not a perfect creation and have a limited length of life.” (Protestant reverend)

- Human beings should live as long as God wants and that is a question of faith…" (Sunni Islam theologian)
- We should ask this question: Are these people [who sell their organs] just desperate because no one could help them and how could we help them otherwise?" (Buddhist teacher)

The second category of concerns regarding the commercialization of organs includes social issues such as the notion of "social equilibrium" mentioned by the Sunni Islam theologian or "social inequalities" as it was named by the Protestant reverend and the Jewish rabbi. The issue of commodifying everything including the human body was very present in the discourses of almost all interviewees, with the exception of the Hindu priest. All interviewees questioned the current culture, ideology, and worldview, which are those of an "economized, industrialized, politicized and moralizing society."

In the words of the Buddhist teacher: "In our society everything has been economized. You even buy the time you talk to someone… that is horrible, and I would like that such process be stopped not only in regard to the human body, which for a long time has not been the end anymore."

Renting wombs and surrogacy

Following the birth of the first “test-tube baby” in the United Kingdom in 1978, in vitro fertilization (IVF) technology began to be used in other countries such as Australia (1980), the United States (1981), France, Sweden, and Austria (1982) (IVF Worldwide 2012). The IVF technique consists of inseminating oocytes in the lab, thus outside the woman’s body, and transferring the resulting embryo (ET), once formed, into the uterus. This technique is generally used in the case of infertile couples and offers various possibilities such as (1) using gametes from the same couple, (2) using the woman’s ovum and donated sperm, (3) using the man’s sperm and donated ova, or (4) using donated sperm and ova. The resulting embryo may be transferred into (A) the woman’s uterus or (B) the uterus of a third-party woman called a “surrogate mother.” All scenarios are grouped under the name of assisted reproductive technology (ART). When there is a monetary transaction between the “commissioning parents” and the “surrogate mother,” the expression “renting wombs” is often used (Guillarme 2003).

Religions on renting wombs

When questioned about “womb rental,” the six interviewees made no distinction in their views concerning being a surrogate mother and paying for a surrogate arrangement. Four categories of positions were identified: A “Yes” position, a “Yes with conditions” position, a “No” position, and a “Yes and No” position.

The Hindu priest expressed a “Yes” position (“It is the same answer as before: if they want to do this they can do it”), adding two key remarks. First, the Hindu religion seems to rely on individuals’ freedom and responsibility to decide for themselves: “It’s up to the individuals to decide if they want to do it or not.” Second, the Hindu religion is based on ancient texts and “old people may not

agree with the way younger people do things." The Hindu priest added, "In the world of new science… this is the way of getting pregnant."

The "Yes with conditions" position is identified within the views of the Jewish rabbi, who affirmed that commercial surrogacy is "a very complex issue due to the considerable importance that Judaism attributes to family, children, and parents." Although "the Jewish religion is not 'passionate' about surrogacy," it is allowed for married couples, provided that the surrogate mother receives fair treatment and fair pay.

Surrogacy is categorically forbidden (the "No" position) in Sunni Islam and in both Catholic and Protestant Christianity. The interviewees agreed, however, that this position held by the religious entities may often not correspond to the reality and individual practices.

In the case of Buddhism, there is no clear "official" position regarding this issue ("Yes and No" position). The Buddhist interviewee showed deep concern with respect to the "whole concept," as he said, of paying money to have a child, going through the process of pregnancy and then giving away the child. He wondered if it is not indeed a question of "too much greed from both sides: commending couples and surrogates."

Individual and social concerns

Beyond the different religious positions about commercial surrogacy, the interviewees expressed similar individual and social concerns.

The individual concerns are mainly related to the notion of "greed" (Buddhism), the welfare (physical and biological) of the mother and child (Buddhism and Sunni Islam), as well as to the notions of family, social, and biological parenthood, which are particularly relevant within the three monotheistic religions as shown in the following statements:

- Human beings are conceived to reproduce, but the notion of '*nassab*' [which can be translated as 'familial descendants or lineage'] is a real issue in Islam." (Sunni Islam theologian)

- The Catholic Church rejects any kind of surrogacy categorically, because it undermines the unity of biological and social parenthood." (Professor of Catholic moral theology)
- Judaism has a special position about the importance of knowing who the father is and who the mother is… Special attention is given to the determination of who should be considered the mother of the child according to Jewish law." (Jewish rabbi)

With respect to the social concerns, both the Buddhist interviewee and the Sunni Islam theologian once again questioned the cultural, social, and economic models of current societies leading to the issues of commodification of children and of women and their reproductive capacities. Commodification issues are also mentioned by the interviewees representing Catholic and Protestant Christianity:

- From a religious viewpoint, the state should take care of its citizens in a way that would not drive them to work with their bodies." (Sunni Islam theologian)
- "[Surrogacy is] usually based on the exploitation of poor women who offer this 'service' only to escape poverty." (Professor of Catholic moral theology)
- It's not looking at the person, but to her possibilities of fertility. So, it's making an object of this woman, and one should respect this woman as a subject." (Protestant reverend)

The human-product banking industry

The most known banks of human products are the banks of blood and blood products (Tissot *et al.*, in this book). In recent years, with the development of sophisticated storage techniques, a wide range of applications and derived medications, private institutions are multiplying in many countries with the aim of collecting, storing and selling human material (e. g., stem cells, tissues, reproductive cells, embryos, etc.). The development of a global trade of these products of human origin raises key issues in the realms of ethics, legislation and international regulation (Pirnay, in this book).

Religions on human-product banking

Regarding the issues related to the procurement, storage, and selling of products of human origin (e.g., blood, tissues, gametes, cells, etc.), three categories of religious positions are identified: “Yes with conditions,” “No Opinion,” and “Yes and No.”

The “Yes with conditions” position was expressed by the interviewees representing the three monotheistic religions, all of whom agreed that such banks are allowed, provided that they not be profit driven, that they serve to save lives or provide therapeutic services, and that there is equal and affordable access for all citizens:

- “If it is to help people—and you would need to find a good way to handle this, with the related costs—then it is okay. *If it is for commerce, then no*.” (Protestant reverend)
- “If the banks are well managed and are there to save lives and help us live in our risk-filled society, then the religion has no objection. *If it is for profit, then it’s another question.*” (Sunni Islam theologian)
- “The Catholic Church considers the establishment of such banks as

> legitimate if they are necessary for therapeutic reasons *and not solely for economic interests*" (Professor of Catholic moral theology).

The Hindu priest expressed a "No Opinion" position, considering that this topic was not a religious issue but an ethical one. However, he pointed out that people would sell their body parts for the sole reason of getting money to survive and "people who are using these products should be stopped… because the people who are giving need the money to live, while the people who are getting have money and don't really need the skin or the hair."

The "Yes and No" position was expressed by the Buddhist interviewee, who confirmed that there is no official position about this issue but expressed major concerns about developments in modern societies: "In the past, one would speak about clean conscience, helping others, etc. Nowadays, one pays time with money and buys body parts from you! That is regrettable. However, I cannot be against it as a whole, since I do not know how many people this really helps or how many people are rescued by it."

Individual and social concerns

The main concerns expressed by the interviewees regarding the human-product banking industry could be summarized in five questions:

1. Could the possibility of commercializing donated material lead to the commodification (and objectification) of human body parts?
2. Would these banks be managed in a way that guarantees equal access and affordability to everyone?
3. What criteria apply for allocation?
4. What are the implications of our current cultural, social and economic models? As the Buddhist teacher commented: “What I find unfortunate is the modern economic approach because its underlying thinking is based on offering people something they do not have while obtaining it from people who have it and that is only possible through the economic system.”
5. What impact will gamete banks have on family unity and biological and sociological parenthood?

The interviewees from Catholic and Sunni Islam religions particularly emphasized this last issue:

- The Catholic Church rejects the sale of gametes categorically because it defends the unity of biological and social parenthood and trade with gametes threatens that unit.” (Catholic theologian)
- These tissues and ova would be there for everyone… and that would be a problem for the whole society, because donating tissues or having elements of one’s own body means the possibility of reproducing indefinitely. What would that mean for the society?” (Sunni Islam theologian)

Looting of brains in the health-care sector

Within the processes of globalization and liberalization, the international circulation of skilled workers, in general, and health-care professionals (namely physicians, nurses, and midwives) in particular, is having great impacts on both rich and poor countries (Serour 2009; Ben Ammar 2005). Disparities in the health workforce between rich and poor countries are illustrated by the ratio numbers of physicians per population, with high-income countries retaining three-fourths of the world's physicians and 89% of the world's migrating physicians, while they have only one-third of the world's population (Serour 2009). According to Dovlo (2003), the situation is even worse with professional nurses.

Among high-income countries, the United States and the United Kingdom are considered as large "consumers" of health-workers from the developing world, while benefiting from the availability of English-speaking physicians and nurses trained abroad (Dovlo 2005; Brush in this book). According to Hagopian *et al.* (2004), "a total of 179,978 (23.3%, of the 771,491 active non-federal physicians in the USA in the year 2002 received their medical qualification in another country" and "the largest portion of these, or 115,835 physicians [64,4%], originate from low and lower-middle income nations." The percentages of nurses from international sources admitted to the United Kingdom national registry were about 45% of the total number of registered nurses in 2001–2002 (Dovlo 2003). All these numbers have been increasing, especially because nurses in the United States are the most highly paid in the world and little provision is made to increase the number of hometrained doctors and nurses (Johnson 2005).

In this context, words such as "slavery" (Dovlo 2005), "looting"—of doctors and nurses—and "commodity"—in reference to health-care professionals (Johnson 2005)—are used. While some countries are actively pursuing policies to export

physicians and nurses by training more than their needs in order to benefit from remittances (Bourassa Forcier *et al.* 2004), other countries suffer from severe shortages with health implications for the local populations (Serour 2009).

This section explores the positions of six selected religions regarding the issue of the international circulation of health professionals from poor countries to wealthy ones as another form of using the bodies of the most vulnerable in order to improve the health of the wealthiest.

Religions on brains theft

When questioned about health sector brain looting, the interviewees representing the six selected religions agreed that on an individual level, medical professionals are free to work in any part of the world.

The protestant reverend said, “I think if you look at the actual person, at the individual medical doctor who gets his medical degree, it is his right to take a job here [in Germany] or in Norway or wherever.”

The Sunni Islam theologian referred to the long tradition of Muslims going abroad to learn and welcoming foreign professionals. However, he considered—like the protestant reverend—that this phenomenon should be encouraged in both directions.

Both the Protestant and Catholic interviewees referred to aid projects of their respective churches. In this sense, the Catholic theologian found it regrettable that a certain proportion of doctors supported through development aid from the Catholic Church emigrate to rich countries, although he also considered this phenomenon as inevitable.

Out of the six interviewees, three expressed no religious opinion about this issue, which was considered as “a complex issue” by the Buddhist interviewee and “a general ethical question rather than a religious one” by both the Hindu priest and the Jewish rabbi.

Individual and social concerns

In this context, the interviewees representing the six selected religions expressed no individual concerns. To the contrary, they acknowledged the right of every person to seek a better life and better working conditions through emigration.

On a social level, the interviewees focused more on suggestions than on concerns, such as the need to examine what reasons other than financial lead to the emigration of professionals in general. The Sunni Islam theologian mentioned, for example, the search for professional and personal dignity, scientific opportunities, and reward.

In regard to the development aid projects underlined by the Catholic and Protestant interviewees, the Protestant reverend suggested that more should be done to strengthen poor countries and “change the whole system of structures.” The Buddhist interviewee expressed, however, lots of reservations regarding such concepts of “aid,” “cooperation,” and “development.”

Conclusions

Based on the issues raised by the four case studies discussed in the symposium about the commodification of the human body, we explored the positions of six religions regarding the commercialization of the human body and body parts. Depending on the issue, we identified some similarities in the religious views expressed by the six interviewees. But, some of them also referred to the controversies and lack of consensus that exist within their religion regarding a particular issue.

However, all interviewees expressed major concerns with respect to the individual and society. Some of those concerns are common to the four case studies, namely the notion of respect to oneself and others. Other concerns shared by almost all interviewees were related to earning money with the body and, thus, commodifying the human body, children, and women.

The interviewees representing Buddhism and Sunni Islam were very concerned with how current societies are evolving. Accordingly, they systematically questioned today's cultural, social, and economic models, basically referring to "modern capitalism" (Cohen 2006).

Finally, some of the interviewees' responses seemed to reflect a certain lack of information with respect to the issues of commercialization of the human body. As the Sunni Islam theologian said, "We have discussed these issues, and theologians find that there are too many questions for religious institutions to answer right now. Such questions could be answered in twenty or maybe fifty years from now."

This lack of information may not be specific to the religious realm, but reflects a rapidly evolving reality with individual and social implications that are yet to be brought to light through research and dissemination of results. Finally, the main issue seems to be: To what extent are the religious scholars and instances

informed about the various aspects of the commercialization of human body parts for medical purposes? To what extent are the health professionals informed about ethical and religious considerations related to this commercialization? In other words, would a religious framework be useful in completing the legal and ethical ones? And how do religious considerations influence—directly or indirectly—secular frameworks?

Bibliography

References

Ahmad, N. 2011. An international view of surgically assisted conception and surrogacy tourism. *The Medico-Legal Journal* 79 (4):135–145.

Benagiano, G., S. Carrara, and V. Filippi. 2011. Robert G. Edwards and the Roman Catholic Church. *Reproductive Biomedicine Online* 22 (7):665–672.

Ben Ammar, M. S. 2005. The skills exodus–being bled dry! *Canadian Journal of Anesthesia* (52) 3:236–237.

—. 2010. *Islam et transplantation d'organes*. Paris: Springer.

Bourassa Forcier, M., S. Simoens, and A. Giuffrida. 2004. Impact, regulation and health policy implications of physician migration in OECD countries. *Human Resources for Health* 2 (1): 12. Accessed at www.human-resources-health.com/content/2/1/12.

Bowker, J., ed. 2000. *The Concise Oxford Dictionary of World Religions*. Oxford: Oxford University Press.

Budiani-Saberi, D., and D. M. Golden. 2009. Advancing organ donation without commercialization: Maintaining the integrity of the national organ transplant act. *American Constitution Society,* June 9.

Cohen, E. 2006. Biotechnology and the spirit of capitalism. *The New Atlantis* 12:9–23.

Dovlo, D. 2003. The brain drain and retention of health professionals in Africa. A case study prepared for a Regional Training Conference on *Improving Tertiary Education in Sub-Saharan Africa: Things That Work!* Accra, September 23–25, 2003.

—. 2005. Taking more than a fair share? The migration of health professionals from poor to rich countries. *PLOS Medicine* 2 (5):e109.

Encyclopædia Britannica, 15th ed., s. v. "Skandha". Viewed on 14 March 2014 at: www.britannica.com.

Fortier, C. 2010. Le droit musulman en pratique: genre, filiation et bioéthique. *Droit et Cultures* 59:15–40. Online since June 1, 2010, accessed on February 7, 2013 at droitcultures. revues. org/1923.

Ghaly, M. 2012. Religio-ethical discussions on organ donation among Muslims in Europe: an example of transnational Islamic bioethics. *Medicine Health-Care and Philosophy* 15 (2):207–220.

Goodwin, M. 2006. Formalism and the legal status of body parts. *University of Chicago Legal Forum* 26:317–388.

Graeb, C., H. Arbogast, M. Guba, K. W. Jauch, and W. Land. 2004. Cyclosporine: 20 years of experience at the University of Munich. *Transplantation Proceedings* 36(2 Supplement):S125–S129.

Guillarme, B. 2003. Louer son ventre. *Raisons politiques* (12):77–83.

Hagopian A., M. J. Thompson, M. Fordyce, K. E. Johnson, and L. G. Hart. 2004. The migration of physicians from sub-Saharan Africa to the United States of America: Measures of the African brain drain. *Human Resources for Health* 2(1):17. doi: 10.1016/j.ejheart.2006.01.001.

Hamdy, S. 2010. The organ transplant debate in Egypt: A social anthropological analysis. *Droit et Cultures* 59:357–365. Online since June 1, 2010, accessed on February 8, 2013 at droitcultures. revues. org/2184.

—. 2013. Can modern medicine locate the human soul? *Contending Modernities* (blog), University of Notre Dame, April 10. Accessed at https://blogs.nd.edu/contendingmodernities/2013/04/10/can-modern-medicine-locate-the-human-soul.

Inhorn, M. C., P. Patrizio, and G. I. Serour. 2010. Third-party reproductive assistance around the Mediterranean: Comparing Sunni Egypt, Catholic Italy and multisectarian Lebanon. *Reproductive Biomedicine Online* 21 (7):848–853.

IVF Worldwide. 2012. The History of IVF—The Milestones. Accessed on January 26, 2013 at www.ivf-worldwide.com/ivf-history.html.

Johnson, J. 2005. Stopping Africa's medical brain drain. The rich countries of the North must stop looting doctors and nurses from developing countries. *British Medical Journal* 331 (7507):2–3.

MOH (Ministry of Health) Malaysia and JAKIM (Malaysia Department of Islamic Development). 2011. Organ transplantation from the Islamic perspective. Accessed at www.moh.gov.my/images/gallery/orga/edu/awam/Organ_TranIsmEN.pdf.

Rubin, R. H., T. Ikonen, J. F. Gummert, and R. E. Morris. 1999. The therapeutic prescription for the organ transplant recipient: The linkage of immunosuppression and antimicrobial strategies. *Transplant Infectious Disease* 1(1):29–39.

Scheper-Hughes, N. 2004. Parts unknown: Undercover ethnography of the organs trafficking underworld. *Ethnography* 5(1):29–73.

Serour, G. I. 2009. Health-care workers and the brain drain. Issues in women's health-care. *International Journal of Gynecology and Obstetrics* (106) 2:175–178.

Shimazono, Y. 2007. The state of the international organ trade: A provisional picture based on integration of available information. *Bulletin of the WHO* 85(12):955–962.

Silber, S. J. 2010. Judaism and reproductive technology. *Cancer Treatment and Research* 156:471–480.

WHO (World Health Organization). 2003. Human organ and tissue transplantation: Report by the Secretariat, WHO. Accessed at www.who.int/ethics/en/EB113_14.pdf.

Notes

1 Priest of the Hindu Temple in Cologne, personal interview conducted on 17 November 2013.

Author

Samira El Boudamoussi

Researcher at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris, and visiting researcher at the Centre of Studies on International Cooperation and Development of the Université libre de Bruxelles (ULB). She earned her PhD in education from the Universitat Rovira i Virgili in Tarragona and conducted various research projects at the ULB and Universitat Autònoma of Barcelona. The overarching theme of her research is science–technology–society: how society relates to scientific knowledge and technical advances, and how these are used in personal and public decision-making.

Part 2. Wombs for Rent

How Do We Balance Risk and Desire?

René Frydman

Surrogacy was practiced as far back as biblical times, although it was rare and clandestine. Slavery was common at the time, and natural sexual intercourse was the only way to finalize the project. Hagar, Sarah and Abraham are the best-known example of this particular transaction.

The development of in vitro fertilization (IVF) techniques, however, has led to a division of motherhood, creating three possible types of mother. A genetic mother provides the oocyte, a gestational mother provides gestation after embryo transfer, and a social mother takes care of the baby. Perhaps one day, we will see a fourth possibility: two genetic mothers, with one providing the nucleus and the other a younger cytoplasm to enhance the development of the embryo.

Although this fragmentation of the female “supply” is now possible, it is still frequently regarded as unacceptable. The existence of new techniques does not mean that we have to use them, particularly when there is some risk of alienation or harm to a person.

Many countries prohibit surrogacy and officially view this practice as an inducement to child abandonment. Many psychoanalysts insist on the need to pay attention to the equilibrium of the baby and the surrogate mother, yet in the majority of the cases, the latter disappears completely after the birth, becoming a foreigner without any role in the child’s story or official parenting.

The idea that “I have a right to have a baby and especially a baby with my own genome” can be dangerous, particularly when commercialization occurs in this field.

In this section, Seema Mohapatra will discuss the situation in the United States, where no uniform federal legislation exists. She focuses on California, a leading

international surrogacy destination. On the topic of fertility tourism, Elisabeth Beck-Gernsheim demonstrates the correlation between the medical profession and a commercial enterprise inside a global market, particularly with Danish sperm and Indian wombs. India as a place of commercial surrogacy is the topic addressed by Sarojini Nadimpally, who reports on the huge commercial market there. She describes surrogate selection, why people enter into surrogacy, and how remuneration and payment are organized. Etti Samama reports on the situation in Israel, where legislation dating from 1996 made Israel the first country in the world to allow surrogacy by explicit law. The country has some of the most quantitative research (655 case files) concerning designated parents, surrogates, children of surrogates, and their families. There is specific focus on the relationships between the parents and surrogates before, during, and after pregnancy.

Commercial surrogacy lies at the intersection of patriarchy, medical power, and market, where the child becomes a simple “product” of the arrangement and the woman’s body a “resource.” In such a context, is it possible to avoid a risk of exploitation as surrogacy is an example of the human body—and particularly the woman’s body—becoming a commodity? Are we allowed to put other human beings at risk—physically, emotionally and/or morally—to satisfy a couple’s desire for genetic continuity without considering the respect of all others involved in the process?

Author

René Frydman

Professor emeritus at the Faculty of Medicine, University Paris V, and Consultant at Foch Hospital (Paris Suresnes). His special areas of interest in gynecology and obstetrics include infertility and high-risk pregnancy. His work in infertility successively led to the first baby born in France as a result of in vitro fertilization in 1982, embryo freezing in 1986, preimplantation genetic diagnosis (PGD) in 2000, in vitro maturation in 2003, oocyte

cryopreservation in 2010, and PGD with human leukocyte antigen (HLA) matching in order to bring about the birth of a savior sibling in January 2011. His other areas of interest are biomedical ethics. His work has led to many invitations to debate the moral issues created by the use of artificial procreation techniques. He actively participated in the preparation on the French law on bioethics. René Frydman is an officer of the French Legion of Honor.

States of Confusion: Regulation of Surrogacy in the United States

Seema Mohapatra

Introduction

Some countries, including Switzerland, Germany, Spain, France, Greece, and Norway, ban commercial surrogacy (Patton 2010, 523). Others, such as India and the Ukraine, have actively tried to be seen as commercial surrogacy destinations (Mohapatra 2012, 412, 432–437, 441–448). Unlike either of these approaches, the United States (US) has no national stance on surrogacy. In fact, there are no national laws or regulations related to surrogacy in the US (Margalit 2014). Instead, each of the fifty states has its own approach to surrogacy, with some states embracing commercial surrogacy and others banning all types of surrogacy (Patton 2010, 507, 528). This chapter provides an overview of surrogacy in the US, focusing particularly on California, which has emerged as an international surrogacy hub due to its permissive laws regarding commercial surrogacy.

Since 1985, the US has had a fluctuating relationship with commercial surrogacy. In 1985, the notorious and controversial Baby M case in New Jersey seemed to signal the death of surrogacy in the US. The Baby M case involved a traditional surrogacy arrangement where the surrogate mother, Mary Beth Whitehead, contracted with a married couple, the Sterns, to become impregnated (with her own egg and Mr. Stern's sperm) for a fee. Mary Beth Whitehead was carrying the baby for the Sterns, and she agreed to give up all parental rights after the baby was born, even though she was biologically related to the baby. Whitehead had a change of heart as the pregnancy progressed and refused to give up the baby to the Sterns. A soap opera of sorts resulted, with Whitehead going into hiding with Baby M. Even after Baby M was found, a protracted legal battle ensued. The Baby M case ended with the Sterns being granted custody of Baby M and Whitehead earning visitation rights. Experts predicted that the case was the beginning of the end of surrogacy. New York and New Jersey banned

commercial surrogacy altogether in the aftermath of this case (Mohapatra 2012).

Although the Baby M case caused an uproar among the public, surrogacy has thrived in recent years in some states due to the rise in gestational surrogacy. In a gestational surrogacy arrangement, the woman formerly known as a "surrogate mother" because her own egg was used, is now typically referred to as the "gestational carrier" (De Vito 2011, 1873). The gestational carrier essentially rents her womb to the intended parents, and her womb is implanted with an embryo (created via in vitro fertilization with the intended parent's sperm and egg or with donor gametes). Some see this commercial surrogacy arrangement as a form of commodification of women's bodies, because the surrogate is charging money to rent out her womb. States with this perspective ban commercial surrogacy.

Surprisingly to many, the US is a hub of surrogacy tourism, especially surrogacy friendly states such as California. When one thinks about international surrogacy, the typically scenario involves a couple from a more wealthy country, such as the US or England, traveling to a less wealthy country, such as India, to have a surrogate bear a child on their behalf for cheaper costs and perceived less regulatory hassle. Although that scenario is common in the rapidly growing surrogacy market, the US has also emerged as an international surrogacy destination (Mohapatra 2012). Currently, no regulatory body tracks exactly how many international parents commission surrogate babies in the US. Recent accounts suggest that this practice represents a growing portion of the surrogacy market in the country. Some agencies in California approximate that half of their recent surrogate births were for international parents (Mohapatra 2012).

There are many reasons why this trend has emerged. First, the US allows for birth citizenship for a baby born in the US, regardless of the baby's parents' country of origin (Price 2013, 443). Therefore, unlike in some countries, such as India, where surrogacy arrangements have created stateless babies such as Baby Manji (Smerdon 2008–2009, 15, 24), babies born in America are citizens of the US. Also, many states allow for commercial surrogacy, and some states allow unmarried or lesbian, gay, bisexual, or transgender (LGBT) individuals to be an

intended parent. Many individuals seek out surrogacy arrangements in the US because such arrangements are illegal in their home countries or they (particularly LGBT individuals) are banned from participating in surrogacy agreements in their home countries. Additionally, some choose the US because they believe that it has a technologically superior health-care system with advanced fertility techniques and high-quality health-care for surrogates, compared with countries such as India.

However, there are also several negative aspects to the surrogacy regime in the US. First, it is one of the most expensive in the world. Surrogacy is costly in the US because typically each of the parties involved in a surrogacy arrangement is paid. The intended parents who are using an egg donor will pay her approximately $10,000 (Hartocollis 2014). The in vitro fertilization (IVF) process is also expensive. Only a few states require infertility coverage to be paid for by insurance. The American Society of Reproductive Medicine (ASRM 2015) estimates that the average price of an IVF cycle is $12,400 in the US. A gestational carrier earns at least $30,000 for her services in being implanted with the embryo, carrying the baby to term, and delivering the baby (Hartocollis 2014). There are numerous agencies that pair gestational carriers with intended parents, and some agencies charge upwards of $20,000 for their services (Surrogacy Source 2014). Attorneys fees can add another $5000. With all the parties involved and paid, a surrogacy arrangement in the US typically costs between $ 75,000 to $120,000 (Hartocollis 2014).

Another problem with surrogacy in the US is the inconsistency of the laws that exist with regard to it—even between states just a few miles from one another. Each state creates its own family law regime, which results in fifty different definitions of who a parent is and what rules there are regarding whether surrogacy is legal or illegal. If there is a conflict of law between states, the law of the state where the surrogate lives and delivers usually governs. Therefore, usually surrogacy agreements contractually dictate that the surrogate cannot travel during her pregnancy to deliver to ensure favorable state law. These types of contractual agreements have been recognized by the courts in many states.

The next section provides an overview of surrogacy regulation in different states.

The legal landscape for surrogacy in the US

The US approach to surrogacy is a mishmash with each state deciding how to view surrogacy and fertility tourists within its borders. Although commercial surrogacy is accepted in many states, some states still hold the practice to be illegal (Morrissey 2011, 609, 671–672). Among those states, some impose criminal sanctions, while others merely refuse to enforce commercial surrogacy arrangements (Palmer 2011, 895–896). For example, New York has ruled all surrogacy agreements void, unenforceable, and contrary to the state's public policy regardless of their commercial or altruistic nature. Six years after the Baby M case, New York outlawed commercial surrogacy in the aftermath of the trial (N.Y. Dom. Rel. Law § 123 [McKinney]). Nevertheless, the New York Supreme Court recently held that a genetic mother who used a gestational carrier could place her own name on her child's birth certificate (Mohapatra 2012). This, combined with recent (and so far unsuccessful) legislative efforts to allow surrogacy, could signal that New York is beginning to soften its prohibition of surrogacy.

Some states ban all types of surrogacy. In addition to New York, these include Delaware, Indiana, Louisiana, Michigan, Nebraska, North Dakota, and Washington DC (Morrissey 2011, 671). Arizona and Indiana invalidate all surrogacy agreements by statute (Arshagouni 2012). The District of Columbia, New York, and Michigan not only declare surrogacy agreements void but also impose criminal and/or civil penalties (Palmer 2011). Some states refuse to enforce surrogacy agreements, even if they were created in states where they are legal. Others, such as Florida, New Hampshire, Tennessee, Texas, Utah, and Virginia, allow for enforcement of gestational surrogacy agreements only if the intended parents are married (Morrissey 2011). California, Nevada, and Illinois have surrogacy statutes that do not require an intended parent to be married

(Morrissey 2011). Some states—Florida, New Hampshire, Texas, Utah, and Virginia—also require that the intended parents have a medical need for surrogacy (Morrissey 2011). Such a requirement does not allow LGBT individuals to seek surrogacy in those states, although that may be changing with gay marriage being recognized in more states. On the national level, “no uniform federal legislation exists that regulates the legality or enforceability of commercial surrogacy contracts”—so…“individual state laws are widely disparate” (Drabiak *et al.* 2007, 300–301).

There are a few other states that are also seen as surrogacy friendly, such as Illinois and Nevada. Nevada has recently passed a new gestational surrogacy statute, A.B. 421 (NV LEGIS 213, 2013). The statute, which pertains only to gestational surrogacy, allows any type of intended parents to be named on the birth certificate. However, Nevada does not allow surrogates to be paid for their services, so it is unlikely that it will become a surrogacy destination.

Additionally, only a few states—California, Georgia, Connecticut, Minnesota, and Arkansas—allow a couple or single person, if not genetically related to the child, to have their names on the birth certificate without a full adoption (Hofman 2009). In addition to this, California has other protections in place for intended parents, which also makes it a favorable state for commercial surrogacy.

California: leading the way in commercial surrogacy

California has the richest case law and history with surrogacy in the US and is often thought of as the country's "surrogacy capitol." California has one of the most legally permissive approaches to surrogacy when compared to other states (Arshagouni 2012). Unlike India and the Ukraine, and other countries competing to attract intended parents as fertility tourists, California's liberal policies do not appear to be aimed at drawing international or intra state intended parents. Instead, the California courts and legislature appear to be more interested in allowing intended parents of all types—whether single, old, gay, straight, or married—to participate in the surrogacy process. However, because California's policies protect intended parents more than many other states, and definitely more than other countries, intended parents from other states and other countries have been seeking out California as a surrogacy destination.

Sir Elton John and his partner, arguably the most famous reproductive tourists, made international headlines by traveling from their native England to California to commission a child using a gestational surrogate (Mohapatra 2012). Presumably, Elton John chose California as his surrogacy destination because England does not allow commercial surrogacy. Despite the high costs for commercial surrogacy in California, many regard the state as "the nation's hub for surrogate pregnancies" because of "its well-established network of sperm banks, fertility clinics, and social workers" and regulations favoring intended parents (Mohapatra 2012). California is also emerging as a leading destination for wealthy Chinese couples who cannot biologically have a second child but can afford the prices in the US, seek US citizenship for their babies, and can afford the one-child penalty (Li 2012).

Within the US, California has a long history with surrogacy. Due to its

developed surrogacy system, it is perceived as an attractive international surrogacy option for those who can afford the high cost of surrogacy in the US. California is known as a surrogacy-friendly state (Scott 2009, 109, 121–123). California's surrogacy regime has been based on its version of the Uniform Parentage Act (UPA), which is codified in Cal. Family. Code § 7600, rich case law interpreting its UPA, and now a surrogacy statute. There are many agencies and surrogates in California so it is also a more popular destination for this reason.

Case law

There have been many published decisions about surrogacy in California. *Johnson v. Calvert*, the most influential surrogacy case in the US, was a California case that, in 1993, established the importance of intent within an agreement of surrogacy. *Johnson v. Calvert* was a case that involved an agreement where the surrogate was to be implanted with an embryo made from the intended parents' sperm and egg (*Johnson v. Calvert*, 851 P.2d 777–778, 1993). The court held that the intent of the parties at the time of the agreement was the deciding factor in determining who the legal parents should be (ibid., 782). The court said, "A woman who enters into a gestational surrogacy arrangement is not exercising her own right to make procreative choices; she is agreeing to provide a necessary and profoundly important service without (by definition) any expectation that she will raise the resulting child as her own" (ibid., 787). This was a seminal case in the history of surrogacy in the US and helped the public feel more comfortable that intended parents would not have their babies taken by a surrogate who changed her mind.

In re Marriage of Buzzanca was another California case that was important because it allowed intended parents to be genetically unrelated to the child (*In re Marriage of Buzzanca*, 61 Cal. App. 4th 1410, 1998). The case involved a couple, Luanne and John Buzzanca, who procured both a sperm and egg donor in order to create an embryo to implant in a gestational surrogate. After implantation, but prior to the child's birth, the Buzzancas separated and John disclaimed any responsibility of the child. The issue before the trial court was who had legal parentage of the child. The court allowed a stipulation stating that the gestational surrogate was not the mother. They then ruled that Luanne was not the mother because she had neither contributed genetically by providing the egg nor given birth. They also found that John was not the father because he had not contributed the sperm, and therefore had no genetic ties to the child. The

court also noted that neither the egg nor the sperm donors were legal parents under the law because they consented to procreate a child for someone else who intended to raise the child. By the trial court's ruling, it looked as if the child had no legal parents. The California Court of Appeal disagreed with the trial court's view. They held that when a woman conceives a child through artificial insemination with semen donated by a man other than her husband, the husband is treated as the child's natural father so long as he consented to the conception. The Court of Appeals ruled that this law was also applicable to IVF using a donor egg and sperm. Therefore, John Buzzanca was determined by the court to be the legal father of the child. Turning to determination of legal maternity, the court noted that this can be determined in multiple ways. First, under the facts in *Buzzanca*, Luanne could be viewed as similar to a husband in an artificial insemination case, and therefore permitted to voluntarily consent to being the mother of a child not biologically related to her. Luanne consented to being the mother of the child, but even if she had not, the court found that maternity can be determined by intent according to *Johnson v. Calvert*. In *Buzzanca*, the child would never have been born if the Buzzancas had not initiated and agreed to the procedure. Luanne intended to be the mother of the child, and John intended to be the father of the child. Therefore, the court ruled that the Buzzancas were the legal parents of the child. The California court held that parents cannot, by agreement, limit or abrogate a child's right to support.

In recent years, the California court has also been presented with the legal and natural parentage question within same sex relationships, establishing that women as well as men cannot waive parental responsibility (*K. M. v. E.G.*, 117 P.3d 673, Cal. 2005). In *K.M. v. E.G.*, the court addressed the parental rights and obligations of a woman with regard to a child born within a lesbian relationship. In this case, K. M. supplied her ova to impregnate her lesbian partner in order to produce children who would be raised in their joint home. K.M. signed a waiver to relinquish her parental rights, but the court did not give this waiver any credence. The court stated that "parents cannot, by agreement, limit or abrogate a child's right to support" (ibid.).

As these cases illustrate, California has had a well-developed body of law in surrogacy for several decades. However, California's surrogacy statute has only been in effect since January 2013, after a notorious incident in which surrogacy attorneys were taking advantage of weaknesses in the surrogacy laws of California (Mohapatra 2012).

In what has been described as a "baby-selling ring," Theresa Erickson and Hillary Neiman, two well-known surrogacy law attorneys, and Carla Chambers, a six-time surrogate, recruited American and Canadian women between the years 2005 and 2011 to purportedly serve as surrogates (Mohapatra 2012). According to Erickson, Chambers, and Neiman's admissions in plea agreements with federal prosecutors, the three women arranged for the surrogates to fly to Ukraine to be implanted with embryos from donor eggs and donor sperm. Erickson, Chambers, and Neiman also promised these recruits between $38,000 and $45,000 for their services, which was a much higher rate than is typical for surrogates in the US. Erickson, Chambers, and Neiman likely picked Ukraine as a destination because of its lax regulations, the availability of white egg and sperm donors, and willingness of local clinics to implant women with embryos without proof of a surrogacy agreement. At the time these embryos were implanted and for months afterward, these so-called "surrogates" carried fetuses for which there were no intended parents or surrogacy agreements. Instead, Erickson, Chambers, and Neiman waited until the women were in their second trimester of pregnancy, when the chance of miscarriage was smaller, and advertised to potential adoptive parents that a "Caucasian" infant was available, with "high expenses" due to a surrogacy arrangement that "fell through." The women told the same story—that the intended parents no longer wanted the baby—to numerous potential adoptive parents over six years. Additionally, they informed prospective parents that the parents would be able to choose their not-yet-born child's gender. This arrangement led to the placement of at least a dozen babies, and potential adoptive parents paid from $100,000 to $150,000 to assume the supposedly failed surrogacy arrangements. Under California law, it is legal to pay a surrogate to carry a child as long as a surrogacy agreement is in

place prior to conception. However, if a woman is carrying a child and wishes to give it up for adoption, it is illegal to pay her beyond her medical expenses. The reason for the distinction is that it is considered human trafficking to seek to adopt a baby for a price after its conception. To avoid these regulations, the women flew the “surrogates” to Ukraine for their implantation. Erickson then pre-dated the surrogacy agreements and falsely represented to the San Diego Superior Court that the infants were the result of surrogacy arrangements in place at the time of conception. Erickson was filing petitions with the local court seeking pre-birth judgments on behalf of the new intended parents, falsely warranting their participation from the beginning.

Although California has a very sophisticated legal system relating to family building via surrogacy and adoption, the women picked California as the place where the surrogates would give birth because of one particularly permissive requirement. Unlike in most US states, in California intended parents of a biologically unrelated baby carried by a surrogate may be listed on a birth certificate without going through a legal adoption. These attorneys capitalized on their knowledge of inconsistencies between adoption and surrogacy laws in two countries to profit from baby-selling transactions. The lack of oversight in Ukraine allowed the implantation to take place. Despite California’s very sophisticated legal system relating to family building via surrogacy and adoption, the permissive birth certificate requirements nevertheless allowed Erickson to defraud the system.

California’s surrogacy statute

In the wake of the scandal, the California legislature felt compelled to act (Daar 2012). A new law, A.B. 1217 (2012), was passed to react to this baby-selling scandal and to thwart the selling of ART offspring. The legislative history of the bill is interesting because it was actually drafted in February 2011 as a comprehensive new law governing assisted reproduction, well before the baby-selling surrogacy scandal was revealed. At that time, it was a thirty-four-page bill that regulated all aspects of assisted reproduction, including requiring intended parents to undergo a mental health evaluation. If that original bill had been passed, it would have been an enormous change in the US, which is often referred to as the Wild West in assisted reproduction, due to the lack of regulation generally compared with other countries. Because the bill was so broad and intrusive, many parties found reason to lobby against the bill and it looked like it was going to die. After Erickson was sentenced to prison in February 2012, A.B. 1217 was rewritten. After this story came to light, there was a legislative push to put something in the books to help prevent this sort of thing, and this reactive statute attempted to restore or preserve California’s position as a surrogacy-protective state. It was pared down from thirty-four pages to a mere two pages. Essentially, the statute codifies existing California law that already recognizes the validity of gestational surrogacy arrangements and the parental relationships that flow from these agreements.

Professor Judith Daar has facetiously referred to the statute as “nothing more than a full-employment act for assisted reproductive technology lawyers” (A.B. 1217, 2012). This is because the bill requires a surrogate mother and the intended parent or parents to be represented by separate independent counsel prior to executing an assisted-reproduction agreement for a gestational carrier (A.B. 1217, 2012). To avoid the Erickson baby-selling situation, the law prohibits any administration of medicines or embryo transfer procedures until

full execution and notarization of the agreement. Under the statute, the parent-child relationship can be established in the agreement before the child's birth. A copy of the agreement must be filed with the court, and the records are sealed to all but the intended parents, surrogate, attorneys, and the state Department of Social Services.

In addition, the legislation clarifies the meaning of "intended parent" (A.B. 1217, 2012). The statute notes that the California Family Code Section 7690(c) provides that an "Intended Parent" is "an individual, married or unmarried, who manifests the intent to be legally bound as the parent of a child resulting from assisted reproduction." Defining "Intended Parent" as an "individual" whether "married or unmarried," alters the traditional conceptions of who is a parent, minimizing the potential for discrimination against single or unmarried intended parents and same-sex domestic partners (Vorzimer and Randall 2013).

Next steps

Although the California statute is well meaning, it does not go far enough to really improve commercial surrogacy arrangements. Unfortunately, although the statute does protect unmarried intended parents, there is no protection for surrogates in the new legislation. Surrogates sign up to carry someone's child for financial reasons. There are no rich surrogates. This can be seen as a situation where poorer women are exploited by richer intended parents for their reproductive capacity. These surrogates need protection to make commercial surrogacy a more morally acceptable practice. There is no financial protection for surrogates in the legislation. For example, if surrogacy agencies go bankrupt, as they have in the past in California, there is no provision that the surrogate would still get paid. The statute could have addressed this with a provision requiring that agencies provide escrow accounts for surrogates in advance with accredited third parties to protect against this situation. Additionally, it would be laudable to have open communication between surrogates and intended parents. If the legislation required that the names of intended parents must not be withheld from the surrogates, it would give additional protection to the surrogates. Also, there are no restrictions in California on the financial resources of surrogates. To avoid coercive decision-making, California could limit the financial incentives from transactions. In keeping with this, women on public assistance should not be allowed to be surrogates. Additionally, unlike Nevada (which has a health restriction for surrogates), California puts no health restrictions on who can be a surrogate. This was a missed opportunity to ensure that women do not endanger their own health for the surrogate payment. Additionally, it would have been helpful if the statute stated that some sort of health insurance must be guaranteed for the surrogate by the intended parents before any embryonic implantation takes place. This would go far in ensuring that the surrogate's health-care needs are being addressed.

Finally, California could have required disclosures to international fertility tourists so they are aware of the uncertainty of the citizenship of their child borne from a surrogate. Some countries, like France, who ban surrogacy, will not issue benefits or a passport to a baby born through a surrogacy arrangement. A conversation about the uncertainties of international surrogacy tourism in California could have been advocated in the statute.

Conclusion

In this chapter, I attempt to provide a snapshot of the legal landscape of surrogacy in the United States, focusing on the leading international surrogacy destination of California. Although California does have a statute about surrogacy that codifies its existing law, it does not have much depth. If legislators really wanted to protect all the parties in a surrogacy arrangement, the legislation would have included provisions addressing protections for surrogates and international fertility tourists. Without such provisions, there is a real concern that the surrogates' reproductive capacities are being sold off to the highest bidder, without protection for the surrogates. Given the imbalance of power and financial capabilities between the parties, such protections are needed to even the playing field.

Bibliography

References

Arshagouni, P. G. 2012. Be fruitful and multiply, by other means, if necessary: the time has come to recognize and enforce gestational surrogacy agreements. *DePaul Law Review* 61(3):799–847.

ASRM (American Society of Reproductive Medicine). 2015. Frequently asked questions about infertility. Accessed on February 11, 2015 from www.asrm.org/awards/index.aspx?id=3012.

Daar, J. 2012. California surrogacy bill reacts to lawyer bad acts. *Harvard Petrie-Flom Center Bill of Health* (blog). September 12. Accessed at blogs.law.harvard.edu/billofhealth/2012/09/17/california-surrogacy-bill-reacts-to-lawyer-bad-acts.

De Vito, A. E. 2011. Establishing and rebutting maternity: why women are at a loss despite the advent of genetic testing. *Albany Law Review* 74:1873–1907.

Drabiak, K., C. Wegner, V. Fredland, and P. R. Helft. 2007. Ethics, law, and commercial surrogacy: a call for uniformity. *The Journal of Law, Medicine and Ethics* 35(2):300–309.

Hartocollis, A. 2014. And surrogacy makes three. *New York Times*, February 19. Accessed at www.nytimes.com/2014/02/20/fashion/In-New-York-Some-Couples-Push-for-Legalization-of-Compen sated-Surrogacy.html?_r=0.

Hofman, D. L. 2009. Mama's baby, daddy's maybe: a state-by-state survey of surrogacy laws and their disparate gender impact. *William Mitchell Law Review* 35(2):449–468.

Li, S.. 2012. Chinese couples come to U.S. to have children through surrogacy. *Los Angeles Times*, February 19. Accessed at articles.latimes.com/2012/feb/19/business/la-fi-china-surrogate-20120219.

Margalit, Y. 2014. In defense of surrogacy agreements: a modern contract law perspective. *William and Mary Journal of Women and the Law* 20(1):423–468.

Mohapatra, S. 2012. Stateless babies & adoption scams: a bioethical analysis of international commercial surrogacy. *Berkeley Journal of International Law* 30(2):412–450.

Morrissey, J. F. 2011. Lochner, Lawrence, and Liberty. *Georgia State University Law Review* 27(3):609–672.

Palmer, T. L. 2011. The winding road to the two-dad family: issues arising in interstate surrogacy for gay couples. *Rutgers Journal of Law and Public Policy* 8(5):895–917.

Patton, B. A. 2010. Buying a newborn: globalization and the lack of federal regulation of commercial surrogacy contracts. *UMKC Law Review* 79(2):507–534.

Price, P. J. 2013. Stateless in the United States: current reality and a future prediction. *Vanderbilt Journal of Transnational Law* 46:443–514.

Scott, E. S. 2009. Surrogacy and the politics of commodification. *Law and Contemporary Problems* 72:109–146.

Smerdon, U. R. 2008–2009. Crossing bodies, crossing borders: international surrogacy between the United States and India. *Cumberland Law Review* 39:15–85.

Surrogacy Source. 2014. Agency fees and surrogate mother costs. Accessed on March 15, 2014 at www.thesurrogacysource.com/ip_fees.htm?type=Intended%20Parent.

Vorzimer, A., and D. Randall. 2013. California passes the most progressive surrogacy bill in the world. *Path 2 Parenthood* (blog), accessed at www.path2parenthood.org/blog/california-passes-the-most-progressive-surrogacy-bill-in-the-world.

Author

Seema Mohapatra

Associate professor at the Barry University School of Law in Orlando, Florida, is an expert in the areas of health-care law, public health law, and bioethics. Her research focuses on the intersection of biosciences and the law, and she has published and presented extensively about international surrogacy, egg freezing, and assisted reproductive technologies. Professor Mohapatra received her JD degree from Northwestern University School of Law. Prior to attending law school, she received her master’s degree in Public Health from Yale University, and her bachelor’s degree in Natural Sciences (with a minor in Women’s Studies) from Johns Hopkins University.

Danish Sperm and Indian Wombs: Fertility Tourism

Elisabeth Beck-Gernsheim

Introduction

In 1978, Louise Brown was born, the world's first test-tube baby. That was a historical turning point. For the first time in the history of mankind, a child was conceived outside its mother's womb. It was a sensation that produced heated debates and endless controversies, among the public and in politics, the media and science. Time and again, the issue was: Should this method be allowed or prohibited? Was it progress or was it a sacrilege?

Today, just a few decades later, in vitro fertilization (IVF) has long since become an everyday occurrence. Meanwhile, we have gotten used to reproductive medicine presenting us with ever more options. We have gotten used to headlines such as: "Indian Surrogate Bears Twins for Norwegian Couple" or "The Market for Human Eggs Goes Global."

In what follows I will focus on the emergence of fertility tourism and a global fertility market. To this aim, I will explore both the "demand side" and the "supply side" of such markets, and I will proceed in three steps:

1. The first part, dealing with the demand side, discusses the changing attitude towards IVF, the question being: How come that the opposition, so widespread in the beginning, gave way to broad acceptance within a few years? Here I will look at the moral debates in respect to IVF, the sound of many divergent voices and widely differing conclusions.
2. The second part, again dealing with the demand side, points to the growing acceptance of diverse forms of personal and family life in recent years. Here I will suggest that with the expanding range of lifestyles came a rapid growth in the number of hopeful parents-to-be.
3. The third part, moving to the supply side, deals with the question: Why did reproductive technologies go global and why do parents-to-be go global? In this context, I will bring in results from a small empirical study I conducted

recently. It explores the websites of fertility clinics worldwide, and it finds that such services are designed in special ways so as to attract clients from abroad.

Moral issues: contested territory

When the biological foundations of mankind become subject to direct intervention, a universe of new options and possibilities opens up. Where previously there was destiny, we are now able increasingly to decide which biological features we want and to shape and select them—for ourselves and for our children.

We can easily see that such options are of major importance. They touch deep into our personal lives, and they shape the future of society. For this reason, within very little time IVF and similar technologies became subject to on-going social battles, a contested territory where widely differing factions asserted their respective interests, ideas, and values. Many states passed laws so as to retain some control over the options offered by reproductive medicine. In a similar vein, the representatives of various religious denominations came up with public statements, issuing decrees on how to use or not to use the new options. Last but not least, representatives of science, lobby groups, and health organizations joined the debate, pronouncing their support or misgivings in respect to reproductive technology.

Old traditions, new options

Yet there is a basic problem common to all debates of this kind. Since medical technology has opened up radically new options, time-honored values, established norms and traditions are ages apart from that technology. There is always a gap, a gulf. Long and complicated interpretations are needed to bridge that gulf. For this reason, most of the debates follow similar lines. Time and again, they are based on rhetoric of highly sophisticated turns and artistic definitions. By many varieties of elaborated reasoning, they try to master the new questions that have come up so suddenly. For instance:

- Is in vitro fertilization a procedure for creating life, a way to counter the suffering of childless couples, and therefore worthy of social support and active promotion?
- Or is it a procedure that offends our notions of human dignity that sanctions risky manipulations, and has unpredictable consequences?
- Is embryo screening a form of eugenics, or is it a legitimate and efficacious way of preventing serious hereditary diseases?
- Or, is it permissible in certain circumstances but not in others, and who defines those circumstances?

One thing is certain: Established authorities will never provide definite and unambiguous answers to these questions, regardless of whether we look at the Koran, the Ten Commandments or the Basic Law for the Federal Republic of Germany. As their fundamental principles come in highly general terms, these institutions leave room for very divergent interpretations. And because of this, the ongoing debates are full of controversial conclusions. For instance:

- When Gerhard Schröder was Chancellor of Germany and uppermost representative of the country’s political power, he spoke out clearly in favor of embryo research, stressing its potential for innovation. At the very same time, Jürgen Habermas, world-famous philosopher and one of the

outstanding intellectuals in Germany, took the opposite view. He warned against an instrumental view of the embryo and any kind of research not recognizing the dignity of human life.

- When Gordon Brown was British Prime Minister, he praised some new lines of stem-cell research as beneficial and indispensable for progress. Yet in Germany these very lines were taboo, forbidden by the Embryo Protection Act.
- In a similar vein, leading representatives of Shiite Muslims have declared that egg donation is permissible, while the most notorious institutions of Sunni Islam have ruled that it is not.

Given these conflicting views, it is not surprising that ordinary people be perplexed. The to-and-fro of argument and counter-argument renders all points of view suspect; each helps to undermine the other. Caught in-between, many people come up with the conclusion, first, that the subject matter is confusing; and second, that no one has a monopoly of the truth. But then, it follows that if all the opposing views seem to be well founded, how can we formulate policies that will be generally accepted?

In sum, the effect of such disagreements is to undermine the law's claim to legitimacy. If you can argue this way or the other, how can the law prescribe which direction to follow? If firm ground is nowhere to be found, shouldn't we be free to choose for ourselves? In this way, legal regulations begin to lose their authority.

The growing diversity of lifestyles

“Love, marriage, baby carriage”—in the nineteen fifties and nineteen sixties that was the proper way for building a family, the dominant model was the so-called “normal family,” consisting of an adult couple with their biological children. Of course the adults would be of different sexes, i.e., man and woman; they were married and would remain married until death did them part. The wife was responsible for looking after the household and for bringing up the children; the husband for bringing in the money and dealing with the outside world.

Those are bygone times. Take the adult couple, for instance. Not that many decades ago, gay and lesbian couples were criminalized and pursued by the law. Today they can have their partnerships officially registered in many countries, and can even marry in some. For heterosexual couples, the trend goes in the opposite direction. Many choose cohabitation and go without the blessing of the state. Or take children: Not so long ago, a child born outside marriage was a “bastard,” a social outcast, and damaging to the mother’s respectability. In contrast today, in Western countries ever more children are born out of wedlock, and increasingly they are treated as equals before the law. In short, within the space of a few years, life patterns have multiplied. Relationships that but a few decades ago were regarded deviant, today are practiced by ever more people. Much of what used to be morally condemned now passes unremarked; it has become one lifestyle among others.

But if more and more ways of life become socially accepted, why should people who live beyond the bounds of the traditional family renounce the right to have children? If others have the right to parenthood, why not them as well? Singles, gay and lesbian couples, women in their sixties who have had their careers and would like a new start as mothers; women who want to have a child by their dead or dying partner; couples who want to choose the sex of their offspring—

all of these people now stand a chance to have their wishes fulfilled, by way of reproductive medicine.

Hans Jonas, the philosopher of technology, wrote some decades ago: “Opportunity breeds appetite.” In field of reproductive medicine we can see this growing of appetites happening today (Jonas 1985, 22). The more new medical options are being offered and the more lifestyles are being accepted, the more people flock to fertility clinics.

And vice versa: the greater the demand, the more options are being offered. The respective clinics offer a variety of services, from IVF as standard procedure right down to the choice of the baby’s sex and to catalogues presenting sperm donors, egg donors, surrogates—complete with snapshots and biographical profile.

Fertility tourism: a global market

When trying to make use of such offers, men and women often find themselves confronted by major obstacles, including legal and financial barriers. But as often said, one person's obstacle is another person's opportunity. Many of the clinics set up to help would-be parents aim at attracting foreign customers. Communication via the Internet is swift and easy; with a few mouse-clicks you are in touch with fertility clinics in Spain, Russia, or India. They have two major advantages to offer: minimal restrictions and low costs. I have studied many of such websites, analyzing the services they provide or promise. For a brief summary, the major characteristics are as follows: [1]

- When discussing legal requirements in the country where they are based, clinics often use positive labels such as "modern," "enlightened," and "liberal." Freely translated this means: "Don't worry about legal restrictions. We know how to deal with these."
- Many clinics offer communication in several major languages. They emphasize the international composition of their team, from multilingual doctors to multilingual nurses and counselors. This is to say, clients need have no fear of language barriers; communication in their native tongue will be available.

Furthermore, the services provided extend beyond medical facilities proper. Clinics frequently offer a variety of additional benefits. For instance:

- They promise comfort and attention. Catch words are "individual treatment and personal attention," "discretion," and "understanding."
- They praise the tourist attractions of the region, for instance: "abundant sunshine, wonderful surroundings and extensive beaches." Sometimes there is also reference to opportunities for great shopping and delicious dining, for arranging excursions and sightseeing.

- Many clinics have a psychologist on the team, or even a psychological department, so as to provide support and relaxation to their clients, and help them to reduce stress.
- Many clinics offer legal assistance, so that their clients don't have to be afraid of legal complications.
- Many clinics have different versions of their services, depending on the financial situation of their clients. At the high end is the luxury service (driver and car will meet you at the airport); then the standard version; and at the bottom the economy version, providing basic service only.

Furthermore, time and again we find services centered on the hopedfor child: All will be done to ensure the baby's health and well-being. In a nutshell: The clients may expect a quality baby. For instance:

- According to what the clinics' websites say, sperm donors, egg donors, and surrogate mothers are chosen with utmost care, and only the best will be accepted. The criteria include the donors' health, medical history, family status; and also psychological stability, intelligence and education, appearance and ethnic origins.
- With surrogates, their health, diet and lifestyle are regularly monitored during pregnancy. Such measures are meant to make sure that the surrogate will provide the optimal prenatal environment for the embryo.

By offering such services, infertility treatment has grown into an international business with high growth rates. Clients follow characteristic paths and destinations, depending on their respective wishes and their financial situation: Germans travel to Turkey, Egyptians to the Lebanon, the Dutch go to Belgium, and Americans to Romania. German women have the eggs of Spanish women implanted in them, American women have eggs sent from Italy or Greece, Lebanese women make use of eggs donated by American women. Lesbians go to Denmark for Danish sperm.

India: “rent a womb” [2]

Last but not least, hopeful parents-to-be travel to India. India is a deeply divided nation, with a tiny group of very rich people at the top, a small but expanding middle class in between, and many millions of poor at the bottom, men and women who have no access to education, decent jobs or adequate health-care. For this reason, ever increasing numbers of women—often illiterate, often from rural areas, often in desperate need of money—are willing to serve the rapidly growing fertility industry, for instance as surrogates. In recent years, India has even been named the world capital of surrogate motherhood, the slogan being: “Rent a Womb.” For the nine months of pregnancy, a surrogate is paid usually $5,000 to $7,000. In exchange, the women have to submit to a strict regime. The contracts frequently stipulate that they should live in clinic dormitories, follow a strict diet, abstain from sexual intercourse with their husband, and leave their own children in the care of others. Corresponding rules for protecting the surrogates’ rights scarcely exist.

To those promoting surrogacy, surrogacy is a fair deal. Indeed, it is a win-win situation: to one woman, the baby; to the other, the money. So both get what they want.

Yet such a view overlooks some fundamental characteristics of surrogacy. It willfully ignores the unbalanced distribution of rights and risks involved (for instance the health risks for the surrogate). It ignores that surrogacy is based on a hierarchy of power, a hierarchy of nation, color, and race. In a nutshell: that it is built on global inequality.

The medical profession and commercial enterprise

When medical practice is turned into a commercial enterprise, its rules change. Priority is not given to the ethics of the medical profession, but to the principles of making money: maximizing profits. Conception, pregnancy, and birth are no more the outcome of a sexual act between a man and a woman, an act that often comes with some emotional bond. Instead, they are now a technical operation, to be performed by experts, suppliers, and contractors.

In the context of this booming new market of fertility tourism, serving the wishes of parents-to-be becomes a carefully calculated deal, a business contract. It is a commercially organized transaction, built on market strategies, and designed by PR agencies. They know the tricks of the trade: how to downplay the risks and inflate the success rates of medical interventions, how to build trust with the parents-to-be and raise their hopes, how to touch their hearts and feed their need for love—for instance by presenting picture galleries of babies, all charming of course, or telling stories praising the bliss and never-ending joys of parenthood.

Furthermore, some contracts come with regulations covering every detail, with special rules in case of unexpected events and outcomes. For instance: if the commissioning couple goes through a divorce or dies, what should be done with the embryos? If the child growing inside the womb should have some physical deficiency, or if there will be triplets instead of one baby, will the commissioning couple then be obliged to follow the deal and accept responsibility for the children? Or could they claim that the outcome is different from what they had ordered, and therefore they have a right to reject it?

The basic problem is obvious. The commercial production of children is no business like other business. Even with high-tech reproductive technology,

nature still plays a major part, and nature cannot be controlled totally. Accidents happen. What then?

Conclusions

In the field of reproductive technology, rapid advancement combines with enormous potential. Time and again, we are heading for major questions and confronting major dilemmas. For instance, how can we do justice to those men and women to whom reproductive technology means the only chance of ever having a child of their own? How can we recognize their pain and their longing, and at the same time recognize the rights of the other parties involved, for instance the future well-being of the child, or the health and autonomy of the surrogate mother? How can we do justice to one group without injuring the rights of the others? And how can we deal with the issue of global inequality, with the hierarchy of color, nation, race that is a hidden part of fertility tourism?

Seen like this, fertility tourism demonstrates a classic feature of modernity, namely: the close intertwining of risks and opportunities. British sociologist Anthony Giddens has outlined the dilemmas lying in wait here: “The ‘end of nature’ opens up many new issues for consideration… The capability of adopting freely chosen lifestyles, a fundamental benefit generated by a post-traditional order, stands in tension… with a variety of moral dilemmas. No one should underestimate how difficult it will be to deal with these” (Giddens 1991, 231).

Bibliography

References

Beck, U., and E. Beck-Gernsheim. 2014. *Distant Love. Personal Life in the Global Age.* Cambridge: Polity Press.

Giddens, A. 1991. *Modernity and Self-Identity. Self and Society in the Late Modern Age*. Palo Alto, CA: Stanford University Press.

Jonas, H. 1985. *Technik, Medizin und Ethik: Zur Praxis des Prinzips Verantwortung*. Frankfurt am Main: Insel.

Nadimpally, S., V. Marwah, and A. Shenoi. 2011. Globalisation of birth markets: a case study of assisted reproductive technologies in India. *Globalization and Health* 7:27. Accessed at www.globalizationandhealth.com/content/7/1/27.

Notes

1 For more information, see Beck and Beck-Gernsheim 2014, 152ff.
2 See for instance Nadimpally *et al.* 2011.

Author

Elisabeth Beck-Gernsheim

Professor of sociology at Hamburg University and Erlangen University, and visiting professor of sociology at the Norwegian University of Science and Technology in Trondheim. At present, she is senior research fellow at Munich University's Institute of Sociology, Institute for Cosmopolitan Studies. Her research focuses on migration, gender, family, and reproductive technology. Her publications include: *Das halbierte Leben* (1980), *Die Kinderfrage* (1988), *Das ganz normale Chaos der Liebe* (1990, with Ulrich Beck), and *Wir und die Anderen. Kopftuch, Zwangsheirat und andere Mißverständnisse* (2007). Her latest book is *Fernliebe. Lebensformen im globalen Zeitalter* (2011, with Ulrich Beck; English edition: *Distant Love*, Polity Press, Cambridge, 2014).

For Motherhood and for Market: Commercial Surrogacy in India

Sarojini Nadimpally

The key features of globalization, such as the crossing of boundaries, convergences, transitional economies, commercial opportunities and the market forces are significant in the context of assisted reproductive technologies (ARTs). [1] Originating in the West, in recent years these technologies have proliferated under neoliberal economic globalization, wherein the ideology of trade without borders is central (Gupta and Richters 2008). A transnationalized fertility market is created wherein reproductive materials like sperm, ova, and uteri are traded like any other commodity to make profit. This justifies that markets, being “indiscriminate [and] promiscuous... reduce everything, including human beings and their sexual and reproductive capacities, to the status of commodities, things [that] can be bought, sold, traded and stolen” (Soros 1998).

Though, commodification of the body is definitely not something new (Sharp 2000), but recently there has been an unprecedented surge in markets for human organs, tissues, and reproductive body parts. Thus, under present condition, bodies have emerged as economic capital to be bought and sold to the highest bidder.

Reproductive materials in this market become commodities in the same way reproductive technologies are. On the one hand, through the process of objectification and commodification, these reproductive materials and organs assume an individual existence and become the sole identity of the person selling them. At the same time the physical, social, and cultural attributes of the donor also enhance the price of the reproductive material through a process of personification. The movement of reproductive material and processes [2] also

follows the “modern routes of capital” flow—from “South to North, from Third to First World, from poor to rich, from black and brown to white, and from female to male” (Scheper-Hughes 2000, 193; Nadimpally *et al.* 2011).

This becomes crucial because although some couples who travel for in vitro fertilization use their own eggs and sperm, most couples and singles utilize the oocytes of women or surrogates of the host country. Hence this becomes murky, as this free flow of people, capital, goods, and services operate within global relations that are characterized by stark economic inequalities. The problems of access to these expensive technologies in home countries thus often have far-reaching implications on the lives of economically vulnerable women in the host countries who participate in ART programs. This unequal power relation is true, however, not only in case of foreign clients, but also when the recipient is from India itself. This scenario often echoes of the market that developed in India in relation to organ trade, where some areas came to be known as the “Kidney District” because of the high number of residents who sold organs. [3]

The entire business of ARTs, whether as part of medical tourism or while providing service to its own clientele, operates in legal and ethical vacuum. The wider ethical question that arises here is: Given that poverty, hunger and lack of basic amenities are the lived reality of most women who offer these services, what are the chances of making an informed choice? Or is it a choice of compulsion, as in a capitalist world one can only choose from those options, which are available to them. This has led Storrow (2006) to claim that fertility tourism has acted in a way to transform public oppression in one country into private oppression in another. This movement of babies, reproductive body parts, and women’s caring and reproductive labor both as nannies, egg donors, and surrogates has led to the “globalization of motherhood” (Browner and Sargent 2007, 236), impacting women who mother and enable others to do so.

Indian context

Over the past few years, the sharp growth in commercial surrogacy—the practice of gestating a child for another couple or individual through the use of ARTs in return for remuneration—in India has drawn much attention and raised several ethical concerns. Surrogacy has become an essential component of the larger fertility industry that one witnesses today. In the absence of any kind of regulatory and monitoring mechanism of ARTs in India (including a national registry), it is difficult to arrive at the exact figures with regard to the existing surrogacy industry. However, the steep rise in media reports and anecdotal evidence related to commercial surrogacy arrangements are a significant indicator for estimating the scale and spread of the commercial surrogacy market. An exponential growth in the industry is evident from the comparative figures over years. In the year 2008, the surrogacy business was reported to be worth $445 million in India (Indo-Asian News Service 2008), while in 2011, it is estimated to be over $20 billion. Considering the acquired status of India as the most favored destination for providing commercial surrogacy, these figures are perhaps not surprising. Surrogacy is boosted by both domestic and international demand, because of the comparatively lower costs in relation to many developed countries (for instance, Canada, the United Kingdom, and the United States), less waiting time, the possibility for commissioning parents to closely monitor surrogates, and the availability of a large pool of women willing to be surrogates (Sama 2010).

The surrogacy industry is functioning through actors and collaborations at various levels, in an environment that lacks binding standards or regulation where these multiple stakeholders stand to profit enormously. ART clinics are not the only players in the business of promoting “reproductive tourism” in India. Other emerging players include a wide array of organizations catering to

clientele both at the national and international levels. These range from ART consultants, medical tour operators, surrogacy agents, the hospitality industry, and tourism departments to other organizations specializing in medical tourism promotion.

To create demand, ART providers argue that with infertility “rampant and rising steadily” today, ARTs have become the “need of the hour.” They cite higher rates of infections and ensuing complications, particularly in the absence of adequate gynecological and obstetric services, as factors that contribute to the high infertility in India. Providers thus claim that they are merely responding to the demand of women “desperate” to become mothers. There is an increasing medicalization and pathologization of the condition of infertility, with the industry pushing for early medical intervention (Sama 2010).

The choice to be a surrogate, like all choices, is not free or absolute; rather, it is made in a context of economic necessity. The practice of commercial surrogacy reminds us that ethical, economic, and political questions are contained in issues commonly regarded as personal. Feminist critiques of surrogacy have highlighted that the ART industry lies at the intersection of patriarchy and market, wherein these technologies meet rather than question the pressure on women to be mothers. The commodification of the body in surrogacy is clear; the child becomes a “product” of the arrangement while the woman’s body becomes a “resource.” Combined with the availability of women’s cheap labor in an unorganized sector that is characteristic of the globalizing Third World economy, the “surrogacy industry” constructs the discourse of a win-win scenario for infertile couples and women struggling with poverty.

Surrogacy lies at the “peculiar intersection of a high reproductive technology and a low-tech work force.” Greater commercialization of women’s labor and body parts is taking place under globalization today, with women finding themselves pushed into more informalized jobs such as export zones and the service sector, where there is a demand for their cheap, “docile,” even sexualized labor. India’s economic policy has shifted away from centralized industries, and towards new industries that operate with minimum controls, including for labor.

As the unorganized sector grows, temporary and contractual jobs for underskilled labor are on the rise (Shah 2009). In the Indian subcontinent today, women who are in professions such as garment work, sex work, migrant domestic work, and surrogacy are engaging in contemporary and commercial forms of sexualized and reproductive labor—an extension of their "care work," which was generally, traditionally considered economically non-productive, apart from being seen as dignified only if domesticated. These jobs are usually inattentive to women's rights and health, but are some of the only "real" options available in a context that is destroying indigenous livelihoods, while rolling back state investments in social sectors. Commercial surrogacy may be best understood as "a new kind of labor—gendered, exploitative and stigmatized labor, but labor nonetheless" (Pande 2010).

However, it is also important to understand that this subversion is located within an industry that is operating in the context of the increasingly liberalizing economic policies of the Indian state, of an established and flourishing privatized health sector, and of the availability of cheap female labor—on one level the subversive potential lies in the fact that child-bearing is considered as a commercial act, for which women are being remunerated. Ketchum (1989) argues that "contract motherhood" is to be seen as selling bodies and babies, the commodification of which is objectionable for three reasons: it turns people into means rather than ends, the consequences for women and children who are bought and sold, and concerns about protecting the mother-child relationship from the potential coerciveness of commercial transactions (Sama 2012).

However, Malm (1989) argues that the payment should be seen as compensation for the surrogate's use of her own body and not for the use of her body in the sense that the customers may acquire a space over which they then have control. In choosing to enter into arrangements to use their bodies in ways that benefit others they reaffirm their status as agents.

Commercialization is seen as an engaging concern, because profitmaking and promotional interests often lead the providers to either present the incumbent health risks and complications as minimal, or justify them in terms of a cost/risk-

benefit analysis. As Nadimpally and Das (2010) assert, “Cost-benefit analysis is invalid for health issues, because the inputs and outputs cannot be quantified. As a result, financial constraints determine public health priorities rather than epidemiological resources. This assumes that technology available is necessary, effective and safe.”

Thus, commercial surrogacy as a practice exists precisely because of the existing political economy, and the transitions that the practice makes from the prescribed dichotomy of family to market are to be seen as intersections of multiple systems of power and institutions. It has become clear by now how and why ARTs have proliferated so quickly in the Indian context, becoming a booming market. It is this private medical market that is the focus of our systematic enquiry, situated as it is within this wider framework.

The study

For over the past nine years Sama, [4] a Delhi-based resource group for women and health, has been engaging with ARTs, at levels ranging from community to policy—raising and addressing concerns around gender and health rights that result from their unchecked proliferation from a pro-regulation standpoint.

This paper relates a part of the research conducted by Sama during the period from October 2011 to December 2012. This research aimed to document the experience of surrogates, to theorize their subject location and situate this within current debates in feminist theory, and to examine the processes followed and use the above evidence to advocate for a comprehensive legal framework to regulate the ART industry, including surrogacy, in India. The study was conducted in two states, Delhi and Punjab, in northern India. Twelve surrogates were interviewed, six from each site. Given the qualitative nature of the research, the focus was on conducting in-depth interviews, with a small sample size. The research team however faced many constraints in accessing respondents, given the general atmosphere of secrecy that surrounds the practice and reluctance of doctors and agents to provide access to surrogates.

Key findings

Profile

The socio-economic background of the surrogates who entered into surrogacy arrangements had a direct bearing upon their choice to enter as well as the terms of the arrangement. The women came from a similar economic working class background: they have a low education level (apart from two who were graduates, the rest were below class ten or had not received any formal education), employed in low-paying, informal, casual work such as piece garment stitching work, domestic work, cooking, or as housewives. Their household monthly income ranged INR3,000 to INR15,000 (from $49 to $245). [5] Similarly, their husbands' occupation in all cases was characterized by informal, low-paying and unstable options such as garment work, cooking, auto-driving, taxi driving, masonry, factory work, and patient care. In two cases where the husbands were employed in service and hotel management, the surrogates were not earning themselves and had the highest monthly income in the sample. All the surrogates in Delhi, barring one, resided away from their homes, in accommodation arranged by agents/agency for the period of surrogacy. In contrast, all the surrogates interviewed in Punjab resided at their own homes during the surrogate pregnancy.

Recruitment

Doctors, agents and commissioning parents placed certain restrictions on women chosen as surrogates. The first selection criterion was "proven" fertility, such that women who had borne children could qualify as surrogates. This qualification was also extended to mean that only married women could enter this work, accepting the prevalent notions of women bearing children once

married. This preference was also voiced out of concern for a successful and safe pregnancy by avoiding possibilities of conflict related to questions raised by a pregnancy in case of a single/separated/widowed woman. Further, women were tested for various diseases and medical conditions to ascertain their “fitness” for the pregnancy. When diagnosed with such a condition, they were either treated or asked to seek treatment and then come again once “healthy.”

Doctors and agents confirmed that commissioning parents set other criteria related to caste or religion, often depending on the identity of the commissioning parents. Preference was also expressed on lines of surrogates’ appearance as healthy, fair, beautiful, and hygienic. The agents came from similar socio-economic backgrounds as the surrogates. They had formal links with the hospitals, being nurses, procuring referrals, or lab technicians. They were also employed for their social skills and having good network in their community.

Hospitals had links with agencies or independent agents. Medical tourism agencies sometimes used independent agents to arrange for surrogates. Agents increasingly depended on word of mouth, often depending on surrogates and egg donors to locate and bring women as potential donors/surrogates to the agents, for which the women are offered a commission. This trend was increasing rapidly. Egg donors were also considered as potential surrogates. Women also heard about surrogacy through local cable TV programs about IVF technology and clinics, or through media reports about IVF/surrogate births at the particular clinics.

Reasons for entry

Surrogates described conditions of unemployment or nature of work available to them as insufficiently paying, casual work, and the struggle to run a household. Some women came from families that faced immediate needs and, along with their husband, they bore the responsibility of paying off debts or buying a house. The appeal lay also in the fact that no other work option would enable them to earn such a large sum of money in a short span of time, and this was the only

way for realizing their aspirations regarding securing their children's future and affording them education or some financial security by creating savings. After finding out about surrogacy, many women had to convince their husbands, who expressed initial reluctance, before entering the arrangement. Some surrogates also considered surrogacy as a better option than the domestic work or factory work available to them. In a couple of cases the surrogates also stated the continued persistence of couples and agents as a factor encouraging them agreeing to take up surrogacy.

Informed consent

Commonly there was no process of informed consent regarding any procedures. Surrogates were given scanty, if any, information about the several tests conducted, procedures, technology, etc. Surrogates were generally excluded from communication that occurred between the commissioning parents, doctors, and agents. The surrogates expressed discomfort and feeling intimidated in the hospital environment, which further weakened their position to ask for information or bargain over the terms of the arrangement.

Medicalization and health risks

It was questionable whether the procedures employed were necessary, whether there was any real "medical indication," given that many technologies were chosen out of concern to secure a healthy birth and smooth relinquishment to accommodate the wishes of the commissioning parents. This was often placed above the possible consequences and concerns for the surrogate's health. Given the low success rate of the technology, multiple embryo transfer was the standard practice, which could in turn lead to fetal reduction depending on the possible number of safe births or based on the preference of the commissioning parents. Selection of "healthy" embryos at the time of transfer was also practiced, leading to concerns about sex-selection as well, even though the doctors denied such a practice. Similarly, caesarean delivery was chosen as a

standard to prevent any risk to the child during delivery. In some cases the time of the delivery and labor were also controlled to accommodate the commissioning parents' presence, as requested by them. The surrogates were given medication to prevent them from lactating; surrogacy arrangements did not allow surrogates to breastfeed the child. This was understood by providers as necessary to prevent building of any bond between the surrogate and the child.

The surrogates were often told that there would be no health risks, and the pregnancy would be just like their previous ones. In the course of the pregnancy and thereafter, the surrogates reported discomfort in having to follow an unanticipated aggressive routine of medication and injections, which they found extremely painful and often causing lumps. They also reported varied effects such as nausea, lack of appetite, swelling in legs, weakness, reduced mobility, weight gain after delivery, or persistent pain related to the caesarean operation. Consequently they had to slow down their pace of work in and outside the house.

There was no responsibility borne by the doctors or the commissioning parents for the health of the surrogates after delivery. Any instance to have medical expenses covered or care offered was contingent on the individual opinions or wishes of the commissioning parents.

Regulation of the lifestyle

Attempts were made to regulate the lifestyle of the surrogates during pregnancy. The surrogates were asked to abstain from having sexual relations with their husbands at least for the first three months and preferably throughout the pregnancy and to control their sexual behavior. Doctors also prescribed a specific diet, sometimes on the behest of the commissioning parents, and the women were asked to eat only home-cooked food. Instructions are also given to keep their physical activity to a minimum and to discontinue work outside and within home. Surrogates expressed that such demands could be contrary to their needs in daily life and could be difficult for them to follow.

Monitoring and surveillance

Agents were seen to be particularly useful in exercising some form of surveillance. Ways of monitoring and ensuring compliance included surprise visits, phone calls and encouraging commissioning parents to check up on the surrogates. The surrogate's husband or children were asked to ensure she does not exert herself and the husband was asked to give up his job and be available at home to take care of her. More recently, agents or agencies arranged accommodation in hostels or separate rooms.

Contract

Lawyers hired by the commissioning parents or doctor drew up the contract, without any negotiation or discussion with the surrogates, while some surrogates expressed their inability to afford any legal aid. The surrogate or her husband did not read the document, which was in English in all cases; nor was it read out to them, and they were told only verbally what it states. The surrogate's husband's signature was a mandatory requirement.

Surrogates and their spouses were informed that the contract states that they agree to give up the child after birth. In one case, there was mention of payment, though the surrogate was unaware of the exact details. The contract was used as a tool to minimize any conflict or contestation against the commissioning parents' rights to the child, leaving out a whole gambit of crucial issues that should have been negotiated and settled as the terms of the arrangement. It served as security for the commissioning parents, while the surrogates had none, with no control or say in the matter.

Counseling services

None of the centers offered counseling services. "Counseling" was limited to the informal interaction that the surrogates had with doctors and agents. They received information and explanations from a standpoint of ensuring that they

would comply with the instructions given and would be ready to give up the child. The object of these interactions was not to provide information or cater to their concerns or their psychological health; it was largely reduced to one-time information giving. “Counseling” for the husbands was carried out to “convince” them and procure their consent for the surrogacy arrangements.

Relinquishment

Attempts were made to create a “distance” between the child and the surrogate, to ensure relinquishment. The preference of using IVF technology and not using the surrogate’s egg were motivated by the concern to establish that she not have a biological link with the child. The fact that the husband did not participate in the child’s conception was also stated to impress upon them that they could not keep the child. Similarly, surrogates were denied breastfeeding and were not permitted to see the child for any length of time after the birth.

After delivery, contact between the surrogates and commissioning parents decreased over time, and in some cases, there was no contact after birth. The commissioning parents alone decided the duration of contact. Surrogates generally expressed the desire to have some contact and keep communication with the commissioning parents through the pregnancy and after birth, though some were skeptical of the possibility given the commissioning parents’ preference of keeping the surrogacy a secret from the child in future. Two of the surrogates expressed the desire to keep one of the twins they were carrying, although the agent and the commissioning parents refused. Surrogates had no right to choose the terms of the baby’s relinquishment; the clinics decided whether the baby was handed over to the intended parents immediately or soon after birth.

Remuneration

In most cases, the commissioning parents or agents decided the surrogate’s remuneration, which ranged from 1 to 4 lakh Indian rupees ($1,633 to $6,532),

[6] the average being higher in Delhi. In addition, the payment could include gifts after the birth, or promises to secure employment for one of the surrogate's children (in one case). In some cases, the surrogates were not aware of the exact amount promised by the couple, with the agent/agency paying on their behalf. In Punjab, an agent reported that for surrogates of "high" caste, the commissioning parents paid up to 1 lakh Indian rupees ($1,633) more than the usual amount.

Payment was usually made in installments, but there was variation in the frequency and amount disbursed, while the bulk leftover of the promised amount was paid after birth. In some cases the expenditure on travel for appointments at the clinic was included in the monthly expenditure, while in some the reimbursement was additional. Where agents had arranged for accommodation, they bore the expenses for travel or arranged for conveyance. There was also variation in the allowance provided for hiring domestic help or diet consumption across cases.

Surrogates were unaware of the amount agents and doctors charged, but some reported having observed that the doctors were paid significantly more. The agents reported that they had a fixed commission rate. In Delhi, the agent deducted the commission fee from the surrogate fee as well; the rate increased consistently over the years. In Punjab, the agent reported she claimed a flexible percentage, depending on how much the commissioning parents could afford to pay. In one case, a surrogate reported that the agent had taken gifts the commissioning parents had given to the surrogate.

Stigma

Surrogates were apprehensive about how others perceived this work is and how it would/could affect them. They surmised that they would encounter responses that would equate surrogacy to sex work or baby selling. Due to lack of information, there were prevalent misconceptions that becoming a surrogate required having sexual relations and that a child was given in exchange of money, both ideas sources of stigma.

Surrogates very often chose not to tell people in their families, neighborhood, and workplace that they were part of such an arrangement. While some were more open than others, a number chose to move out of their own residence or cities to hide the pregnancy (Delhi). Surrogates who stayed in their own homes lied to their families and neighbors that it was their child, reporting a stillbirth after giving the child away, or that they were giving the child away to someone in the family (Punjab). Surrogates reported that commissioning parents also expressed concern or exerted pressure to hide the pregnancy, given the stigma attached to infertility, in addition to attempting to keep the records in their name or faking pregnancy.

The surrogates in some cases reported feeling isolated, distanced from families and communities for months and having no one to talk to. The relationship with their husbands was impacted in varied ways, some reporting a greater closeness, or alternately less communication. Hostility from other members of family was also mentioned. One surrogate also chose to go to Delhi in the interest of keeping the arrangement hidden, even though she was offered a lesser amount than that in her hometown.

In the face of stigma and social disapproval, or health risks and separation from family and a dissatisfactory experience of surrogacy, some women chose not to enter the arrangement again, although three surrogates decided on repeated surrogacies. One surrogate justified her choice as a means to achieve a respectable and equal status to others in society, escaping the suffering of a life ridden with insecurity; this choice became imperative for her despite the risks. Others justified it by referring to its altruistic dimension or that it was “not sex work”. In contemplating entering an arrangement again, however, surrogates expressed their wish to voice their demands the next time, wanting better pay, health insurance or communication with commissioning parents after relinquishing the child.

Conclusion

There is enough anecdotal evidence to suggest that surrogates have limited autonomy over their contract pregnancies (Sama 2012; Nadimpally and Marwah 2013; Saravanan 2010). Surrogates are often chosen based on their submissiveness to the demands of doctors and intended parents. Processes such as recruitment, contracts and counseling create the perfect surrogate—cheap, docile, selfless, and nurturing (Pande 2010). These women are often poor and poorly educated, and once selected, have to submit to several rules. Some clinics make it mandatory for women to stay at surrogate homes, while others provide them with separate family accommodation away from their permanent residences. They have little or no say in decisions, including decisions about their own bodies.

It is important to understand that this subversion is located within an industry that is operating in the context of the increasingly liberalizing economic policies of the Indian state, of an established and flourishing privatized health sector, and of the availability of cheap female labor. On one level, the subversive potential lies in the fact that childbearing is considered a commercial act, for which women are being remunerated.

Currently, the terms “trafficking”, “donation,” and “trade” are used interchangeably, and it is not clear if what is being advocated is a ban/prohibition or regulation. There is an urgent need to revisit the issue of commercial surrogacy, with all its uncomfortable questions and contradictions. In India, even among feminists there are many discussions, and nothing definitive has been articulated regarding trafficking. There is no doubt that traffic in eggs and other human tissues without the knowledge and consent of women is unacceptable, but can we call all surrogacy arrangements trafficking?

The question of commercial surrogacy, which has been the subject of much

attention of late, especially in the media, is one directly related to reproductive rights and justice. While surrogacy arrangements that are motivated by altruism have been far less critiqued, commercial surrogacy arrangements, which are done for financial or material gain, have led to many polarized debates within feminist thought. This easy distinction between altruistic and commercial surrogacy is also problematic. Altruistic surrogacy is often represented as the more acceptable and less exploitative or coercive option. However, notwithstanding the impossible question of how the "altruistic" feeling in any relationship can be assessed, altruistic surrogacy is unlikely to be completely benevolent and without its own power dynamic. It may even render women more vulnerable, particularly in a patriarchal society like India, than commercial arrangements that carry the same health risks, as in India mainly gestational surrogacy is in practice.

It is important to examine closely the nature of discomfort with trade in women's reproductive parts and "labor," especially at a time when women, particularly in low-resource settings, negotiate complex notions of the commoditized body as a "*resource*," and deploy the gendered body for access in a patriarchal and heteronormative world, in ways that are both fluid and contextual. In fact, Sama's interviews with surrogates illustrate that many women do opt for surrogacy arrangements voluntarily; the interviews also clearly illustrate that poverty and children's education appear to be the two main driving forces behind transactions in reproductive body parts, including surrogacy. Yet it remains, as Jyotsna Agnihotri Gupta (2012) reminds us, that the decision to sell body parts or rent a uterus is seldom made on the basis of full information regarding health hazards, or in absolute freedom. It is made "in a context of limited possibilities for self-expression, rising unemployment, lack of financial resources and in circumstances not always self-created. As such, we should avoid framing this debate in binary terms; donation or trafficking, ethical or unethical, agent or victim etc."

The intersection of patriarchy and market should be explored further as there exists a hegemonic and violent systematization of motherhood under

heteropatriarchy that is pushing women towards ARTs. The lure of big and fast money that comes with surrogacy may well be impossible to resist for economically marginalized women, coming as they do from positions that offer little or nothing by way of better alternatives. As such, the stage is set for a flourishing market based on capitalist principles of profiteering, deployed to cash in on patriarchal values. In the scenario of growing commercial interests and profit seeking in providing these techniques including surrogacy, the role of the state and regulatory bodies becomes important. Though regulation often provides a framework that enables the market to operate or to safeguard the interests of the industry, there is still a great need for a comprehensive regulatory mechanism, for legislation that safeguards the health, human-rights, and autonomy of women who act as surrogates and the children who are born through surrogacy.

However, if women's long-term interests are to be represented in determining the future direction of reproductive technology, women will need to participate collectively in shaping public policy. Un-fortunately, there has been too little discussion among women about either the fundamental values at stake or the social goals that would best promote women's well-being. Our debates and efforts must bring the voices of the community into these discussions, and particularly those of the women we claim/seek to represent and protect.

Acknowledgments

This article emerged from Sama's work on the issue of ARTs and commercial surrogacy. For more information please visit www.samawomenshealth.org. The author acknowledges Tarang Mahajan and Vrinda Marwah, who coordinated the study on surrogacy described in this paper; and Deepa Venkachalam, Preeti Nayak, Anjali Shenoi, Aastha Sharma, Vrinda Marwah, Susheela, Manjeer Mukherjee, Dharashree Das, Beenu Rawat for their immense contribution to Sama's research work on ARTs over the past nine years. Special thanks goes to Beenu for helping with references.

Bibliography

References

BBC. 2002. Indians selling human organs. *BBC News Online*, October 15. Accessed at news.bbc.co.uk/2/hi/health/2331341.stm.

Browner, C. H., and C. F. Sargent. 2007. Engendering medical anthropology. In *Medical Anthropology: Regional Perspectives and Shared Concerns*. Edited by F. Saillant and S. Genest. Oxford: Blackwell.

Chengappa, R. 1990. The organs bazaar. *India Today.* July 31:30–37.

Goodman, A. H. 2005. "Im" pure biology: the deadly synergy of racialization and geneticization. In *Making Threats: Biofears and Environmental Anxieties*. Edited by B. Hartmann, B. Subramaniam and C. Zerner, 149–156. Lanham, MD: Rowman & Littlifield Publishers.

Gupta, J. A. 2012. Reproductive biocrossing: Indian egg donors and surrogates in the globalized fertility market. *International Journal of Feminist Approaches to Bioethics* 5(1):25–51.

Gupta, J. A., and A. Richters. 2008. Embodied subjects and fragmented objects: women's bodies, assisted reproduction technologies and the right to self-determination. *Journal of Bioethical Inquiry* 5(4):239–249. Accessed on May 6, 2015 at link.springer.com/article/10.1007/s11673-008-9112-7/fulltext.html.

Indo-Asian News Service. 2008. Surrogacy: a $445mn business in India. *The Economic Times*, Mumbai. August 25. Accessed on May 6, 2015 at indiatoday.intoday.in/story/%27Surrogacy+a+$445+mn+business+in+India%27/1/13810.html.

Ketchum, S. A. 1989. Selling babies and selling bodies. *Hypatia* 4(3):116–127.

Kohli, N. 2011. Moms Market. *Hindustan Times.* March 12.

Malm, H. 1989. Paid surrogacy: arguments and responses. *Public Affairs Quarterly* 3(2).

Nadimpally, S., and D. Das. 2010. ARTs: Voices from Progressive Movements. In *Making Babies: Birth Markets and Assisted Reproductive Technologies in India*. Edited by S. Srinivasan and Sama: Resource Centre for Women and Health. New Delhi: Zubaan.

Nadimpally, S., and V. Marwah. 2013. Shake her, she is like the tree that grows money! In *Of Mothers and Others: Stories, Essays Poems*. Edited by J. Mishra. New Delhi: Zubaan.

Nadimpally, S., V. Marwah, and A. Shenoi. 2011. Globalisation of birth markets: a case study

of assisted reproductive technologies in India. *Globalization and Health 7:27.* Accessed at www.globalizationandhealth.com/content/7/1/27.

Pande, A. 2010. Commercial surrogacy in India: manufacturing a perfect “mother-worker”. *Signs: Journal of Women in Culture and Society* 35(4):969–992.

Sama: Resource Group for Women and Health. 2010. Constructing conceptions: the mapping of assisted reproductive technologies in India. New Delhi.

—. 2012. Birthing a market: a study on commercial surrogacy. New Delhi.

Saravanan, S. 2010. Transnational surrogacy and objectification of gestational mothers. *Economic and Political Weekly* 45(16):26–29.

Shah, C. 2009. Surrogate motherhood and women’s sexual and reproductive rights. Paper presented at the Consultation, My Body, My Life, My Rights: Addressing Violations of Women’s Sexual and Reproductive Rights, Asia Pacific Forum on Women, Law and Development. Thailand.

Sharp, L. A. 2000. The commodification of the body and its parts. *Annual Review of Anthropology* 29:287–328. Accessded at lchc.ucsd.edu/cogn_150/Readings/sharp.pdf.

Soros, G. 1998. quoted in N. Scheper-Hughes. 2001. Commodity fetishism in organs trafficking. *Body and Society* (7)2: 43.

Storrow, R. F. 2006. Quests for conception: fertility tourists, globalization and feminist legal theory. *Hastings Law Journal* 57:295–330. Accessed at papers.ssrn.com/sol3/papers.cfm?abstract_id=879072.

Notes

1 Assisted reproductive technologies (ARTs) are a group of technologies that assist conception and pregnancy. These techniques are designed to increase the number of eggs and/or sperms, or bring them closer together, resulting in improved “probability” of conception/pregnancy not otherwise possible. These technologies used for assisting reproduction range from simple or “low-tech” methods like intrauterine insemination (IUI) to “high-tech” methods such as in vitro fertilization (IVF) in all its variations. Though surrogacy is an arrangement, it has been included in ARTs.

2 In case of kidney donation, slums of Mumbai, Kolkata, and Chennai have been referred to as “organ bazaars” (Chengappa 1990). The same can soon be said to be true of sale in reproductive substance and labor.

3 One poor woman earned $750 for a kidney. The ultimate recipient, a Singaporean, paid

$37,000 for it, most of which went to a middleman. This reflects the vulnerability and irony of the trade in human organs (BBC 2002).

4 Sama Resource Group for Women and Health is a Delhi-based organization that has been working on the issue of ARTs for the past nine years through research and advocacy. Sama looks at issues of women and health through caste, gender, class and rights perspectives. More details can be found at www.samawomenshealth.org; Blog: samawomenshealth.wordpress.com.

5 Currency conversion done on February 2, 2015, atwww.xe.com.

6 One lakh equals 100,000 rupees. Currency exchange calculated on February 2, 2015, atwww.xe.com.

Author

Sarojini Nadimpally

Women's health and rights issues for over eighteen years and is one of the founder members of Sama–Resource Group for Women and Health. She was involved in the coordination of two national-level studies on assisted reproductive technologies and their implications on women. Nadimpally has co-coordinated "Reproductive Tourism in India: actors, agencies and contemporary transnational networks", a joint project of Centre for Social Medicine and Community Health, Jawaharlal Nehru University, Sama and Kings' College London. She has coordinated two multisite studies on participant's perspectives in clinical trials in India, and has contributed several articles/papers to national as well as international journals. She was the Social Justice Practitioner-in-Residence in 2013 at University of Massachusetts.

Within Me, But Not Mine: Surrogacy in Israel

Etti Samama

In the realm of reproductive technology aimed to address fertility problems, the process of surrogacy, in which one woman carries a baby for another, is highly controversial (Shalev 1996a; Shalev 1996b). Surrogacy has awakened public debate concerning the ethical, social, legal, medical, and psychological aspects of the process (Blyth 1994; Van den Akker 1999; Shalev 1996a; Benshushan and Schenker 1997; Schenker 1997; Kirk 1998; Warnke 1994; Ragoné 1994).

Israeli society sanctifies the value of family and attaches considerable importance to procreation. Fertility as an uppermost priority is distinctively expressed in the policies related to fertility treatments in Israel (Landau 2003). Social peer pressure to procreate may explain the motivations and readiness of designated parents to embark on a process of surrogacy as their last chance to achieve biologic-genetic parenthood (Blyth and Landau 2004). Both the option to defer parenthood, and even alternative solutions such as adoption, are rejected on account of the "decree" of genetic parenthood (Hashiloni-Dolev 2006). It is no surprise, therefore, that this unique enterprise of making rules to regulate agreements for embryo carrying initiated in Israel (Shalev 1998).

In 1996 the Israeli Embryo Carrying Agreement (Authorization Agreement & Status of the Newborn Child) (heretofore referred to as "the law") was legislated (Ministry of Justice 1996). The essence of the law is institutionalization of an official mechanism that approves agreements made between parents "ordering" a baby and the surrogate woman who is willing to carry the embryo(s) for them and deliver the baby/babies to them upon birth. This legislation made Israel the first country in the world to allow surrogacy by explicit law (Shalev 1996a;

Shalev 1996b).

The law in Israel is influenced by the necessity to respond to problems raised by Jewish religious law (Shalev 1998; Shalev 1996a).

The type of surrogacy allowed under Israeli law is only full genetic surrogacy, i.e., the ovum belongs to the designated mother and/or a donor, and it is fertilized by her husband's sperm via in vitro fertilization (IVF). Legally, surrogacy in Israel combined with sperm donation is prohibited. In the allowed type of surrogacy, there is no genetic relationship between the fetus and the surrogate (Ministry of Justice 1996).

The Embryo Carrying Agreement

The Israeli surrogacy law was the first in the world to allow a surrogacy process by explicit law, while involving the state at its crucial stages: signing the contract, which requires confirmation by a statutory committee, and delivering the baby to its designated parents, which requires a parenting order by court, subject to a social services review (Samama 2012).

The Israeli law, in fact, allows a "womb for rent," supplied by the surrogate. The sensitivity of a topic involving pregnancy and a baby led to a law with provisions aimed to ensure solutions of potential problems, specifically related to the weaker links in the process: the surrogate, the baby, and its delivery to the designated parents.

Several years after the Israeli law was constituted, other countries followed suit: Greece (Hatzis 2010), Ukraine (Family Code of Ukraine 2003), Australia (Surrogacy Act 2010), the United States (Goldfarb *et al.* 2000; Jones and Cohen 1999; Gugucheva 2010), India (Gentleman 2008; Pande 2009), Finland (Söderström-Anttila *et al.* 2002), and others. The laws passed are unique to each individual country. In Finland for example, prior to September 1, 2007, when the Act on Assisted Fertility Treatments entered into force, a gap in legislation allowed fertility clinics to provide non-commercial IVF surrogacy. Since 2007, IVF-assisted surrogacy is forbidden, even for altruistic reasons (Silvola 2007).

Surrogacy takes place in other European countries, taking advantage of the fact that there is no explicit law forbidding it. The countries allowing surrogacy take different approaches regarding issues such as the status of the designated parents, the status of the surrogate, enforcement of the agreements, attribution of the baby to its parents/surrogate, the type of surrogacy permitted, use of gametes (sperm cells, ova) and embryos, and the right to retract the agreement (Ben-Or and Vylon 2004).

Methodology

The research detailed in this article describes surrogacy processes in Israel and their outcomes from 1996 to 2009 (Figure 1). It is based on information from all of the cases opened with the Surrogacy Approval Committee (655 cases), details regarding designated parents and surrogates from a sampling of these cases (275 cases), information retrieved via interviews with designated parents and surrogates regarding those surrogacy processes in which they were involved, and a description of their experiences (87 interviewees about 110 surrogacy processes).

Figure 1. Number of cases, births, and babies during the study period.

The research includes both quantitative findings and qualitative data. The quantitative aspect came from cases submitted to the Commission for the Surrogacy Process and examined socio-economic, psychological, and medical aspects of the participants, as well as the results of the surrogacy process. Additionally, the qualitative aspect was based on expressed positions, approaches, quotes, and emotions from all of the parties in the process through in-depth interviews that were conducted with dozens of intended parents and surrogate mothers (Samama 2012).

Findings

The research findings indicate a gap between the recommendations provided for developing the legislation and the law that was eventually legislated and implemented in Israel. Although respondents expressed satisfaction regarding the fact that there is an explicit law allowing surrogacy, many of them (76% of the parents and 58% of the surrogates) recommended changes and improvements to the law (Samama 2012).

The family status of designated parents and surrogates

The surrogate

The data on the surrogates comes from a sample of 275 surrogate mothers (out of 655 cases). All Israeli surrogates at the time of this research were unmarried (single, divorced, or widowed), as required by law.

The average age of the Israeli surrogate was thirty-one, and she was a single mother of between one to six children whose average age was eight. Some 60% of the surrogates had completed a high school education, 17% had ten years of schooling, and only a few held an academic degree. Approximately one-quarter of the surrogates were unemployed when they began the process, while a third were employed in temporary jobs as service providers.

Most research on surrogacy and surrogates deals with women who were pregnant and gave birth after a process of surrogacy and delivered the child to its designated parents. This is puzzling, as reports of pregnancies obtained via surrogacy never exceed 50% under optimal conditions (due to the young age of the donor and “fresh” embryos). The present study confirms this finding, since fewer than 40% of the surrogates actually gave birth.

Nevertheless, in all the research reviewed, there was no mention of surrogates who did not get pregnant and therefore did not complete the process. This constitutes a significant group of surrogates who go through a long and demanding process, invest a great deal of time and some money, receive a number of fertility treatments and IVF cycles, but do not succeed in achieving a pregnancy or delivery. In Israel, the surrogate does not receive a significant amount of money and does not gain any benefits from taking part in the process. These “unfulfilled” surrogates are not represented in the current research or in the consequences of the process, and are, in fact, “invisible.” Neither do the media present their stories. This study reveals that if the process does not result

in the birth of a baby, it can become very detrimental to the surrogate. She may find herself in a more difficult state than that in which she was at the outset, for example suffering injury to her self-esteem as a woman who can get pregnant and carry a pregnancy to full term. In these cases, the women blamed themselves, and were often manifestly blamed by the parents for not succeeding to achieve a pregnancy.

Furthermore, many of the surrogates reported a history of abortions, and some explained in the interviews that the surrogacy was a kind of an “amendment” or “atonement” for terminated pregnancies, which in cases of unachieved pregnancies increased the magnitude of vulnerability.

Findings regarding the motivation of surrogates in Israel, from this study and others, are very clear and unequivocal. Prior to obtaining permission and in interviews, the surrogates stated to members of the committee that their main motivation was financial (Samama 2002; Samama 2012). Only 10% claimed their motivations to be altruistic; only few stated that the motivation was tied to the aspiration for self-fulfillment, adventurism, and the enjoyment of pregnancy. Not one wealthy surrogate was found in the entire research. It seems as if the right to perform altruistic and heroic acts is reserved for poor women.

Although the main motivation of the surrogate was financial, most surrogates only conducted short and lenient negotiations with the intended parents, thus waiving their economic rights and giving a “discount” price. Surrogates were not likely to take into account the time period before getting pregnant, and some did not receive appropriate compensation for their time and physical suffering associated with obtaining approval to act as surrogates, diagnostic procedures and medical tests, mental diagnosis, and fertility treatments before pregnancy. Some surrogates were compelled to pay out of their own money for travel and babysitters during this period. The findings from the research and the literature suggest that this behavior could be associated with a low income level and limited economic understanding of many of the surrogates. The fact that these women were not receiving support and advice emphasizes the social inequities found in the process, in which the human body of the most vulnerable is used to

benefit health needs of the “better-off.”

These findings are similar to those in other countries where commercial surrogacy is available (Gugucheva 2010; Ragoné 1994; Pande 2009; Blyth and Potter 2003); however in countries that allow altruistic surrogacy among family members, the common motivation is a will to help barren couples (Söderström-Anttila *et al.* 2002).

Regarding the surrogates’ chances to fulfill their financial goal via surrogacy, this research found that payment to the surrogate averaged 120,000 NIS (about $30,000). Since the process lasts 21 months (if birth occurs), the surrogate’s fee per hour is 8 NIS ($2.0). In comparison, a surrogate in the United States earns from $0.50 to $3 per hour (Gugucheva 2010).

The contract does not protect the surrogate against damages resulting from pregnancy and birth so that there is no insurance or financial compensation of any sort. At least one of the surrogates interviewed in the research said that she went through abortion by scraping due to a defect that was discovered in the fetus, which caused an irreversible damage to her womb, and after the medical procedure it was made clear to her that she wouldn’t be able to conceive anymore. According to the surrogate, the agreement she signed did not entitle her to any financial compensation.

This is another example of the exploitation of human health, that is perceived as inferior, in favor of those with means, thus increasing social inequality that already exists.

The designated parents

Legally, designated parents in Israel are a man and woman who are joined in marriage or in a marriage agreement (Ministry of Justice 1996, Chapter A, Section 1). The findings of this study show that their average age is “fertility age” (36 to 39 years old), although in a few cases they were over 50 years old. Their socio-economic indicators are higher than those of the surrogates in the following realms: education (over 50% academics), profession, and area of

residence. Some have previous children (11%), and very few (1%) had three children before turning to surrogacy.

The relationships between the parents and surrogates

Usually, the relationship between parents and surrogates in Israel is one between strangers who made contact only for the specific process.

This study indicates that the process was challenging in terms of relationships between the two sides. Moreover, there were similar stages in the process that most of the participants experienced, including a positive and somewhat superficial relationship at the beginning, which deepened as it proceeded. In “good” cases, the relationship became warm and close, while in others there was increased tension and distance. The period of fertility treatments and pregnancy generated the most tension. Yet it allowed a deepening of the relationship between the sides, until the birth, which was the peak of the relationship. Almost immediately following the birth, the reports of a warm relationship diminished, and in most cases there was detachment, a crisis, or simply a distant friendship.

The respondents reported that the most challenging aspect of the relationship occurred during fertility treatments or when the fertilization failed. In addition, there were many difficulties within relationships between the parents and surrogates during the pregnancy. Another period described by surrogates as difficult was after the birth, when things returned to normal and the surrogate and parents separated. At this point, the surrogate had to face the consequences of the process physically, emotionally, and financially, as well as having to deal with her children’s response to the experience and their separation from the baby she had carried.

It seems that there is no regulation or supervision by law regarding these extended periods described as extraordinarily difficult by the interviewees. In fact, after they sign the contract, the various sides embark upon a long and complex process without any escort, guidance, or support. The only time that there is interaction with the authorities is for a very short period after the delivery when the baby is formally transferred to its parents. When the process

does not end in a birth, there are no meetings with any official or supervisory entity after signing the contract.

From the literature reviewed and the current findings, it can be concluded that there are those who view surrogacy as a medical process intended to provide a solution for infertility on the one hand, while reducing possible damages and protecting the other side (the surrogate). Others view surrogacy as a legal contractual matter, and hold that this should be regulated by state authorities, which should examine the way this contract can be fulfilled. The interviews in this research showed that it was primarily a process involving a relationship between two sides that were committed to developing and maintaining a relationship over a long period of time. This perception of surrogacy would be better for channeling the choice, confirmation, supervision and follow-up, so that everyone involved would benefit from the process, while diminishing the level of risk that can ensue. Acknowledging the relationship between the sides would require a different approach, one that is considerate, respectful and perhaps one that avoids the very abrupt cut-off at the final stage, for the good of all parties (Samama 2012; Teman 2010).

Separation from the baby and hand-over to designated parents

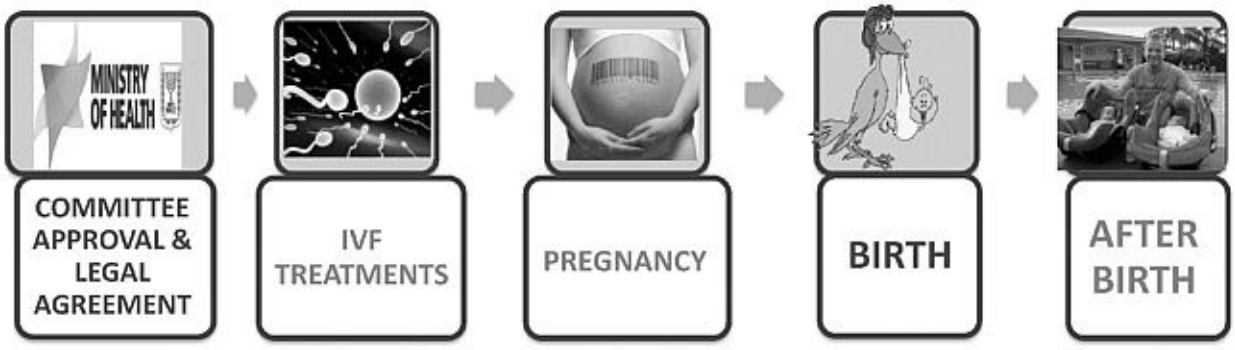
The preconceptions related to separation make it one of the most complex parts of the process, rife with mental distress that may result in psychological problems for the surrogate who becomes attached to the baby and must face the anguish of giving him or her up (Markens 2007). This study suggests that surrogates distance themselves from the baby prior to birth, convincing themselves that it is not really theirs and thus easing the transfer to the "legal owners." All the professional disciplines deal with the natural attachment between a woman to her fetus and the artificiality and danger of separating them. In existing publications regarding the surrogates, the assumptions are theoretical and not based on empirical research.

Taking into consideration the findings from literature (Teman 2010) and those of the current study it is possible to conclude that the "prophecy of gloom" regarding the disastrous outcome of the surrogate giving up the baby did not materialize. Even if surrogates felt close to the baby, they were cognizant of the fact that he or she didn't belong to them and were able to separate, even if it involved an emotional effort (Samama 2012; Teman 2010).

Children of the surrogates

According to the committee rules, an Israeli surrogate must be mother to at least one child in her custody prior to surrogacy (rules of the Committee for Approval of Embryo Carrying Agreements, www.health.gov.il/DocLib/pon-Info.pdf). The findings of this study indicate that most of the surrogates in Israel (74%) had one or two children, at an average age of eight years. Over half of their children were five to eleven years old, an age at which it is hard to comprehend a complex process such as surrogacy (Figure 2). This means that a large population of young children was exposed to the process that their mothers underwent, without anyone either examining the implications for them or providing any psychological guidance. In interviews, some of the surrogates described complex situations that influenced their children negatively: the pain of parting from the baby, pleas that their mother have a baby for their family "too," experiencing abandonment at young ages due to long hospitalizations of the surrogate, disappointment in the designated parents who only stayed in touch while their mother was carrying the baby, and a fear that they too would be given away, like their "sibling."

Figure 2. Surrogacy process stages. IVF treatments, pregnancy and after the birth are the most problematic steps.



The outcome of surrogacy

Surrogacy in Israel takes place mostly in the framework of private medicine, with no regulated follow-ups or reports regarding the number of treatments, how they occurred, or their outcome. Private medicine networks are not accustomed to regulated data collection or scientific exposure to the process of their work.

Only one medical center in Israel summarized the results of a relatively small number of surrogacy processes (19 couples in 60 treatment cycles), and the results regarding the birth rate were a bit low compared to regular IVF cycles—15% (Raziel *et al.* 2005). The findings of this study are innovative, in that they gather information about a large group of parents and surrogates, while mapping out the medical conditions of the designated mother, the surrogate's obstetric background, and the various stages of the in vitro fertilization processes.

In this study, out of all 655 case files submitted to the committee, 207 (32%) births were reported. In more than 60% of signed agreements, the process did not end with childbirth. These findings correspond with the familiar results of IVF in Israel in general (Ministry of Health 2014), and specifically with worldwide surrogacy (Haklai 2013; Goldfarb *et al.* 2000; Meniru and Craft 1997; Corson *et al.* 1998).

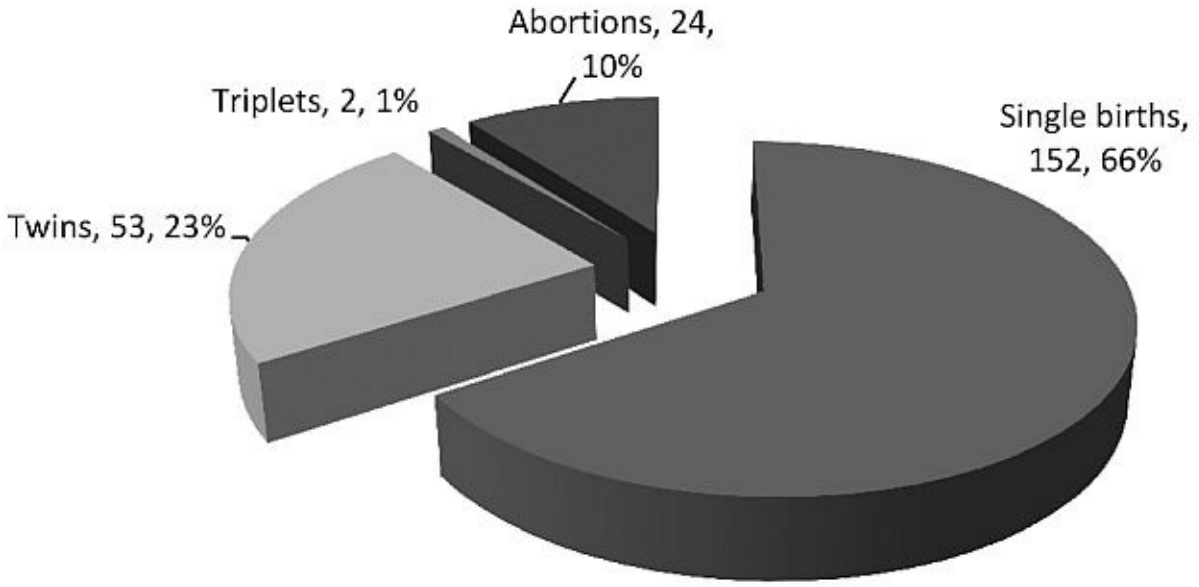
On top of that, the emotional toll surrogates paid in the case of failure of the procedure should be considered. Surrogates reported that tension during this period influenced their attitude to their children, and stirred up feelings of failure and self-doubt about their fertility.

Ignoring most of women who are "surrogacy candidates" and do not "succeed" in completing the process and receiving financial compensation and emotional satisfaction demonstrates the severity of the exploitation of body and mind use of surrogates who are treated as if they were "damaged goods."

A quarter of the "successful outcomes" were multiple births, two of which were

triplets. In these births, 264 babies were born, one-third of the deliveries were caesarian, though most of the surrogates had previously given birth naturally. One-fourth of the processes used an egg donor (Figure 3).

Figure 3. Results of pregnancies.



Implementation of the law

This study's findings indicate that contrary to the estimation of the legislator, signing a contract—in such way that does not hurt the surrogate and protects her rights—and giving up the baby are not the problematic stages of the process.

The agreements often included restrictions on the surrogate's personal freedom. For example, the surrogate could have been forbidden to eat certain foods. Usually the agreements included restrictions on having sexual intercourse throughout the treatment period and pregnancy. The agreements also included an obligation not to smoke, and in some contracts, an obligation to undergo blood tests to ensure that the surrogate did not violate her commitment not to smoke. A surrogate who smoked during pregnancy would risk a lawsuit. Some of the agreements also included restrictions on freedom of movement. Sometimes there was a clause stipulating the surrogate must obtain permission from the intended parents in order to leave the country during the treatment period through to the birth (Lipkin and Samama 2010).

Some of the intended parents assumed that since they were paying for surrogacy, and because the surrogate's behavior affected "their" child found in her body, they had the right to place far-reaching demands on the surrogate's lifestyle during treatment and pregnancy.

It is hard to avoid a characterization of surrogacy as a modern version of slavery, a situation that we could not accept.

It seems that Israeli surrogates, even if their income, education, and employment status are lower than those of the designated parents, choose to become surrogates out of their own free will. In Israel, not a single surrogate has refused to hand over the baby or even expressed any desire to keep him/her. There has been no report of any legal suit or deliberation regarding the transfer of the child to its designated parents. When the surrogates were asked to pinpoint the most

difficult part of surrogacy, none mentioned giving up the baby. However, different stages of surrogacy were noted as problematic, for example, the fertility treatments, specifically when they failed; the pregnancy; and the post-partum period. These were noted as times of challenges and crises, forcing the sides to independently confront the issues without any involvement of professional services on behalf of the law.

Those taking advantage of this law appreciate its existence, but they reported that gaining committee consent was a long and cumbersome bureaucratic process, without any follow-up or supervision, even in cases where social services or psychosocial assistance were a condition of the committee's approval. There was no follow-up or supervision program, and no sanctions have been determined for those who breach the conditions of the agreement.

Conclusions and recommendations

In Israel, the law regarding surrogacy is perfectly implemented. There is full accord between the legal requirements regarding the surrogate's family status and the parents' status (married couple). No cases were found in which the surrogate reneged on the agreement. In all cases, the committee confirmed that the baby was handed over to his or her parents via the social services. Most of the applications filed with the committee received confirmation (82%).

The scope of surrogacy has grown over the years, and it is greater than originally estimated, due to growing awareness and an expanding target population. As a result, there is a gap between the supply of surrogates in relation to demand, and the cost of the process has increased. This increase has implications for the choice of surrogates, their motivation to start the process, and their self-esteem as they embark on the process.

Due to the fact that some 60% of the surrogates do not complete the process, and that the law has not defined any mechanism that requires a meeting between them and the professional services (committee, social services, or hospital staff), there is a need to institutionalize a way to locate the surrogates who do not complete the process and provide them and their children with professional counseling. Moreover, a fair way to assess payment should be determined, so that they receive adequate remuneration for the time, energy, suffering, and the disruption of their daily lives, even if they did not give birth.

The difficult stages in the process of surrogacy are the long wait to locate a surrogate, to receive the committee's consent, the fertility treatments until pregnancy is achieved, the period of pregnancy, and the point after birth when the surrogates and parents part. These were the stages at which the respondents reported emotional difficulties, stress, and in many cases conflicts and crises. Surprisingly, handing the baby over to the parents was not found to be a

problematic or difficult stage for the surrogate.

There is an incompatibility between the needed response and the response determined by law to accompany and protect the participants in this process. The committee supervises the signed agreement and protects the surrogate, who is considered to be the weaker link. Upon signing the agreement, the committee has no legal requirement to supervise. The social services are only involved in transferring the baby to its designated parents and having the surrogate sign her renunciation before they deliver their report to the court in order to obtain a parenting order. These services do not provide adequate response to the stages in the process that were found to be more challenging and prone to difficulties. The complex relationship between the parents and surrogates over the long period of time taken by the process is not supervised or professionally accompanied.

There is a need for ongoing supervision over the course of the process, which in Israel is not fully supervised. There should be support for both sides throughout IVF treatments, the pregnancy and after the baby is handed over. It is also necessary to determine criteria for licensing agencies and monitoring their work. There is no justification for the expansion of those eligible to use the law, and there is no need to determine professional procedures to diagnose the applicants, as over the years the committee set up procedures as required. There is a need to increase the psychological intake for the surrogates, so that it also includes an assessment of their potential emotional risks or benefits from the process and their chances of achieving them. Further, the intake should include reference to the surrogate’s children and the need for professional help and supervision. Psychological preparation for all parties should be a requirement prior to the process. There is a need to regulate the rights of an association between the surrogate and baby over the initial period following the birth according to her wishes, and to allow her and her children the benefit of appropriate separation.

Those working in this field should be required to report their activities and supervise/collect information regarding the processes of surrogacy, their results and the implications for the participants.

A long-range follow-up is required regarding the various aspects of surrogacy,

specifically the children, those who are born from surrogacy and the surrogate's biological children, the most vulnerable and passive link in this process.

Theoretically, surrogacy is an institution that has a built-in contradiction by definition: the parents are interested in ordering a child without sharing him or her with another person, whereas the surrogacy process requires the involvement of another woman and necessarily involves engagement of deep physical and emotional processes, with identity aspects. Surrogacy is a type of medical fertility treatment, not a process to which an ordinary commercial agreement can apply, but one involving social order that necessarily includes another person. The basic interests of the people involved in surrogacy contrast each other: the intended parents have no real interest in the surrogate's human involvement. For them, it is a medical constraint, as they would prefer not to grow "their" baby in another person's body. In contrast, for the surrogate, the human relationship with and gratitude from the intended parents are the main source of the feeling that the process of surrogacy is a heroic act, not an act of exploitation.

Objectification of identity aspects of the human body is in contradiction with basic moral values, and therein, by its very nature, lies the greatest potential of exploitation and degradation. Therefore, surrogacy is a procedure that can potentially cause great damage, especially if it becomes an acceptable and common practice. The distance between giving a uniquely human and heroic gift to an unfruitful couple and staying in fertility production farms is not that great, and the ability to keep that distance will diminish as surrogacy becomes a routine and profitable procedure.

Bibliography

References

Ben-Or, G., and A. Vylon. 2004. Comparative study on surrogacy. Israel: Department of Counseling and Legislation, Ministry of Justice. Handed to the public committee for examining the subject of entering into an agreement of embryo carrying. [Hebrew.]

Benshushan, A., and J. G. Schenker. 1997. Legitimizing surrogacy in Israel. *Human Reproduction* 12(8):1832–1834.

Blyth, E. 1994. “I wanted to be interesting. I wanted to be able to say ‘I’ve done something interesting with my life’”: Interviews with surrogate mothers in Britain. *Journal of Reproductive and Infant Psychology* 12(3):189–198.

Blyth, E., and R. Landau. 2004. *Third Party Assisted Conception across Cultures, Social, Legal and Ethical Perspectives*. London and New York, NY: Jessica Kingley Publishers.

Blyth, E., and C. Potter. 2003. Paying for it? Surrogacy, market forces, assisted conception. In *Surrogate Motherhood. International Perspectives*. Edited by R. Cook, S. D. Sclater, and F. Kaganas. Portland, OR: Hart.

Corson, S. L., M. Kelly, and A. M. Braverman. 1998. Gestational carrier pregnancy. *Fertility and Sterility* 69(4):670–674.

Family Code of Ukraine. 2003. Accessed at biotexcom.com/wp-content/uploads/2013/04/Family-Code-of-Ukraine.pdf.

Gentleman, A. 2008. India nurtures business of surrogate motherhood. *The New York Times*. March 10. Accessed at www.nytimes.com/2008/03/10/world/asia/10surrogate.html?pagewanted=all&_r=0.

Goldfarb, J. M., C. Austin, B. Peskin, H. Lisbona, N. Desai, and J. R. de Mola. 2000. Fifteen years experience with an in vitro fertilization surrogate gestational pregnancy programme. *Human Reproduction* 15(5):1075–1078.

Gugucheva, M. 2010. Surrogacy in America. Cambridge, MA: Council for Responsible Genetics. Accessed at www.councilforresponsiblegenetics.org/pagedocuments/kaevej0a1m.pdf.

Haklai, Z. 2013. IVF treatments in Israel 1986–2012: Absolute numbers and percentages. Israel: Health Information Division, Ministry of Health. [Hebrew.] Accessed at www.health.gov.il/PublicationsFiles/IVF1986_2012.pdf.

Hashiloni-Dolev, Y. 2006. Between mothers, fetuses and society: Reproductive genetics in the

Israeli-Jewish context. In Special Issue: Women's Health, Reproduction, and Body Politics. *Nashim: A Journal of Jewish Women's Studies and Gender Issues* (12):129–150.

Hatzis, A. N. 2010. The regulation of surrogate motherhood in Greece. Accessed at ssrn.com/abstract=1689774.

Jones, H. W., and J. Cohen. 1999. IFFS surveillance IVF surrogacy. *Fertility and Sterility* 71:25S.

Kirk, M. 1998. Relative concerns associated with genetics and surrogacy. *British Journal of Nursing* 7(12):717–722.

Landau, R. 2003. Religiosity, nationalism and human reproduction: The case of Israel. *International Journal of Sociology and Social Policy* 23(12):64–80.

Lipkin, N., and E. Samama. 2010. Surrogacy in Israel: Status Report 2010 and Proposals for Legislative Amendment. Isha L'Isha – Haifa Feminist Center. Accessed at isha.org.il/wp-content/uploads/2014/08/surrogacy_Eng001.pdf.

Markens, S. 2007. *Surrogate Motherhood and the Politics of Reproduction*. Berkeley, CA: University of California Press.

Meniru, G. I., and I. L. Craft. 1997. Experience with gestational surrogacy as a treatment for sterility resulting from hysterectomy. *Human Reproduction* 12(1):51–54.

Ministry of Health. 2014. In Vitro Fertilization 1986-2012. Jerusalem, Israel.

Ministry of Justice. 1996. Agreements for the Carriage of Fetuses (Approval of Agreement and Status of the New Born). The Book of Laws, 1577:176. March 17. Jerusalem, Israel. [Hebrew.]

Pande, A. 2009. Not an "angel," not a "whore": Surrogates as "Dirty" workers in India. *Indian Journal of Gender Studies* 16(2):141–173.

Ragoné, H. 1994. *Surrogate Motherhood: Conception in the Heart*. Boulder, CO, and Oxford: Westview Press/Basic Books.

Raziel, R., M. Schachter, D. Strassburger, D. Komarovsky, R. Ron-El, and S. Friedler. 2005. Eight years' experience with an IVF surrogate gestational pregnancy programme. *Reproductive BioMedicine Online* 11(2):254–258. Accessed on June 23, 2005 at Reproductive BioMedicine Online: www.rbmonline.com/Article1815.

Samama, E. 2002. My womb, her baby: The motives for surrogacy as reflected in stories of surrogate mothers in Israel. Unpublished MA thesis, Paul Baerwald School of Social Work, The Hebrew University of Jerusalem, under the supervision of Prof. Ruth Landau. [Hebrew.]

—. 2011. Embryo Carrying Agreement (Surrogacy): Vision, policy and reality. Doctoral dissertation (submitted), the Department for Health Systems Management, Ben-Gurion

University of the Negev, under the supervision of Prof. Haim Reuveni and Prof. Liat Lerner. [Hebrew.]

Schenker, J. G. 1997. Assisted reproduction practice in Europe: Legal and ethical aspects. *Human Reproduction Update* 3(2):173–184.

Shalev, C. 1996a. Surrogate motherhood: the commerce in reproductive services. *Bitachon Sotziali* (Social security) 46(47):87–100. [Hebrew.]

—. 1996b. The Embryo Carrying Agreement: a legal and ethical view. In *Pregnancy of Another Kind: A Multi-disciplinary Study of In Vitro Fertilization*. Edited by A. Ben-Ze'ev and S. Almog. Tel Aviv: HaKibbutz Hame'uhad, 191-215. [Hebrew]

—. 1998. Halakha and patriachal motherhood: An anatomy of the new Israeli surrogacy law. *Israel Law Review* 32(1):51.

Silvola, S. 2007. A legal overview of the Nordic countries. Finland: Ministry of Justice. Accessed at ncbio.org/nordisk/arkiv/Salla-ppt.pdf.

Söderström-Anttila, V., T. Blomqvist, T. Foudila, M. Hippeläinen, H. Kurunmäki, R. Siegberg, M. Tulppala, M. Tuomi-Nikula, S. Vilska, and O. Hovatta. 2002. Experience of in vitro fertilization surrogacy in Finland. *Acta Obstetricia et Genecologica Scandinavica* 81(8):747–752.

Surrogacy Act. 2010. Queensland. Accessed at www.legislation.qld.gov.au/LEGISLTN/ACTS/2010/10AC002.pdf.

Surrogacy Arrangements Act. 1985. Accessed at www.legislation.gov.uk/ukpga/1985/49.

Teman, E. 2010. *Birthing a Mother. The Surrogate Body and the Pregnant Self*. Berkeley, CA: University of California Press.

Van den Akker, O. B. 1999. Organizational selection and assessment of women entering a surrogacy agreement in the UK. *Human Reproduction* 14(1):262–266.

Warnke, G. 1994. Surrogate mothering and the meaning of family. *Dissent* 41(4):466–473.

Author

Etti Samama

The director of the Division of Medical Technology Policy at the Israeli Ministry of Health and teaches medical policy at Haifa and Tel Aviv Universities. She holds a BA in nursing, an MA in social work—both from The Hebrew University of Jerusalem—and a PhD in health systems

management from Ben-Gurion University of the Negev. Her master's thesis as well as her doctoral dissertation researched the topic of surrogacy in Israel over 15 years. She coauthored a report on the state of surrogacy in Israel, published by the Woman to Woman (Isha L'Isha) feminist organization in 2011.

Part 3. Brain Theft

Is Brain Drain Cannibalism?

Alex Mauron

The notion of a cannibal market seems most clearly relevant when discussing the circulation of human organs and materials of human origin. The commodification of parts and derivatives of the human body is the prerequisite for the existence of such a market, which today is increasingly globalized, and as a result, subject to global inequalities. Yet to apply the metaphor of cannibalism to the worldwide brain drain of skilled health-care personnel would seem rather far-fetched. After all, the “brains” in question are not literally human organs to be transplanted, as in a science-fiction film. These brains sit atop real human beings, who have thoughts, aspirations, public and private commitments, as well as a self-understanding of their professional role and responsibilities. Nevertheless, the language of commodification comes naturally when describing the migration of health-workers from (absolutely or relatively) resource-poor to resource-rich areas. Health-care personnel are “produced,” exported, and imported; in short, traded in an expanding worldwide market that is increasingly a matter of specialist business operations and of explicit commercial and political arrangements. This part presents a wealth of data about health-worker migration in various parts of the world, its significance in terms of economics and health-care provision, and the ethical implications of this largely unequal trade.

The hemorrhage of doctors and nurses from sub-Saharan Africa described by Delanyo Dovlo and Sheila Mburu provides an impressive example of how low-income countries lose many skilled health-care workers to rich countries. The discrepancy between health-care needs and the availability of health-care personnel is most severe in this region of the world, which nevertheless serves a “perverse subsidy” to wealthier countries through the emigration of doctors and

nurses. As worldwide demand increases, “buyers” of this precious commodity will dig deeper into the precarious capabilities of low-income countries to provide educated health-workers. Although voluntary restraints have been in place for some time, they have showed limited effectiveness.

The picture in Southeast Asia, as presented by Nicola Suyin Pocock, is more complicated, if only because several countries in the region train nurses for the explicit purpose of emigration. In addition, medical tourism, either from nearby countries or from farther afield, provides additional working opportunities for health professionals but may also cause a potential drain away from domestic health needs, especially in underserved rural areas. The pros and cons of health-worker migration hinge upon complex equilibria, where expanding health coverage for the local population, cashing in the economic benefits of health-personnel exports and of medical tourism, preventing the depletion of public health-care systems of needed personnel, and protecting the more vulnerable populations all play an important role. The predicament of the poorest countries in Southeast Asia is still a combination of low health-worker density, low uptake of health services, and low quality of training. As these countries see their economic prospects improve, the question of health-worker migration may arise for them too.

In the third contribution to this part, Barbara Brush provides an in-depth analysis of the international migration of nurses. The starting point of her analysis is the import of foreign-trained nurses into the United States, a practice that was stable at a relatively low level for a long time, but that has undergone an upswing in recent years. This trend is part of a global increase in nurse migration that evinces more complex patterns (several countries are both at the sending and receiving end of these movements, and new countries such as India are getting into the act), as well as increasingly sophisticated business ventures. The growth of these commercial operations proceeds unfettered, and there are few coordinated efforts to regulate nurse migration across the globe.

To come to terms with these issues, public oversight is needed. This requires political will and ingenuity, as well as a sound knowledge and appreciation of

medical workers’ aspirations. If health-care personnel emigrate, it is for complex reasons that go well beyond better income: they include housing, educational opportunities for their families and themselves, fair career prospects, and sound governance as opposed to favoritism and corruption. Health-care workers are not mere pawns to be shifted about by authoritarian policies, however well-intentioned: that would be the ultimate commodification. Therefore, tackling these issues responsibly is the duty of governments everywhere, no matter where they stand in the international circulation of highly needed skilled professionals.

Author

Alex Mauron

Professor of bioethics at the University of Geneva Faculty of Medicine and director of the Institute for Ethics, History, and the Humanities. He initially trained as a molecular biologist. He moved to the field of bioethics during the late nineteen-eighties and initiated the bioethics program at the University of Geneva. He has worked and taught on a wide range of bioethical issues and has been a member of the Swiss National Advisory Commission on Biomedical Ethics

An Unfair Trade? Mobility of Africa's Health Professionals

Delanyo Dovlo and Sheila Mburu

Africa has the lowest density of health professionals per population and yet has lost and continues to lose a significant portion of its health-workers to wealthier countries. It has 24% of the global disease burden but only 3% of global health workforce, compared to the Americas with 37% of health-workers and 10% of the disease burden, and Europe with 35% and 10% respectively (WHO 2006). The supply in sub-Saharan African countries is not improving, and these countries have only 7.5% of the global supply of medical schools and an annual production of 10,000 graduates, which is extremely low given the disease burden (Kasper and Bajunirwe 2012). Of the 49 countries identified by the World Bank as being low-income countries, 36 are in sub-Saharan Africa and only five meet the health-worker threshold required to achieve minimum health-care (WHO 2010).

For many of the high-income destinations attracting health professionals from low-income countries (LIC), the influx of LIC health professionals probably constitutes a relatively small percentage of their workforce. However, for the source countries, it can be a devastating loss.

In this context, can health "labor" or skills be considered a commodity? More specifically, are trained health professionals simply selling a service and therefore not a commodity? We suggest that since the skills that provide the service are indivisible from the person/body, health professionals, having been trained along internationally defined standards and norms, by definition can be considered a global commodity subject to trade practices. However, the brain drain or trade in health professionals from sub-Saharan Africa is not a simple

labor market issue, but has many ethical, moral, and socio-economic aspects that have a negative impact on the source countries.

This paper reviews the status and trends in migration of health professionals from sub-Saharan African countries, along with the health, social, and economic impacts these migrations may cause and the ethical and moral issues resulting from entrenched trade and economic inequalities and power relations between source and destination countries.

Our view is that this is a trade that has clear winners and losers, and any gains for source countries such as remittances and return with improved skills may not adequately match the full extent of the losses.

Advocacy for free trade often includes arguments for free labor mobility and health professionals' rights to choose where to live and work. Such rights-based arguments are undermined by destination countries selectively and unevenly applying these rights to less well educated/lower-skilled migrants. Sub-Saharan African countries may therefore be denuded (or looted) of health professionals, while barriers are created to bar their likely patients who seek to exercise these same rights. A 2013 joint report by the United Nations Department of Economic and Social Affairs (UN-DESA) and the Organisation for Economic Co-operation and Development (OECD) estimated that one in nine African graduates live in an OECD country. In many sub-Saharan African (SSA) countries, the skilled-worker emigration rate was much higher than for the population as a whole.

However, it must be noted that the issues of ethics and morality in transforming health professionals into commodities are important to both destination and source countries. This is because major push factors include not only income and economics, but leadership, governance, and accountability challenges in poor countries.

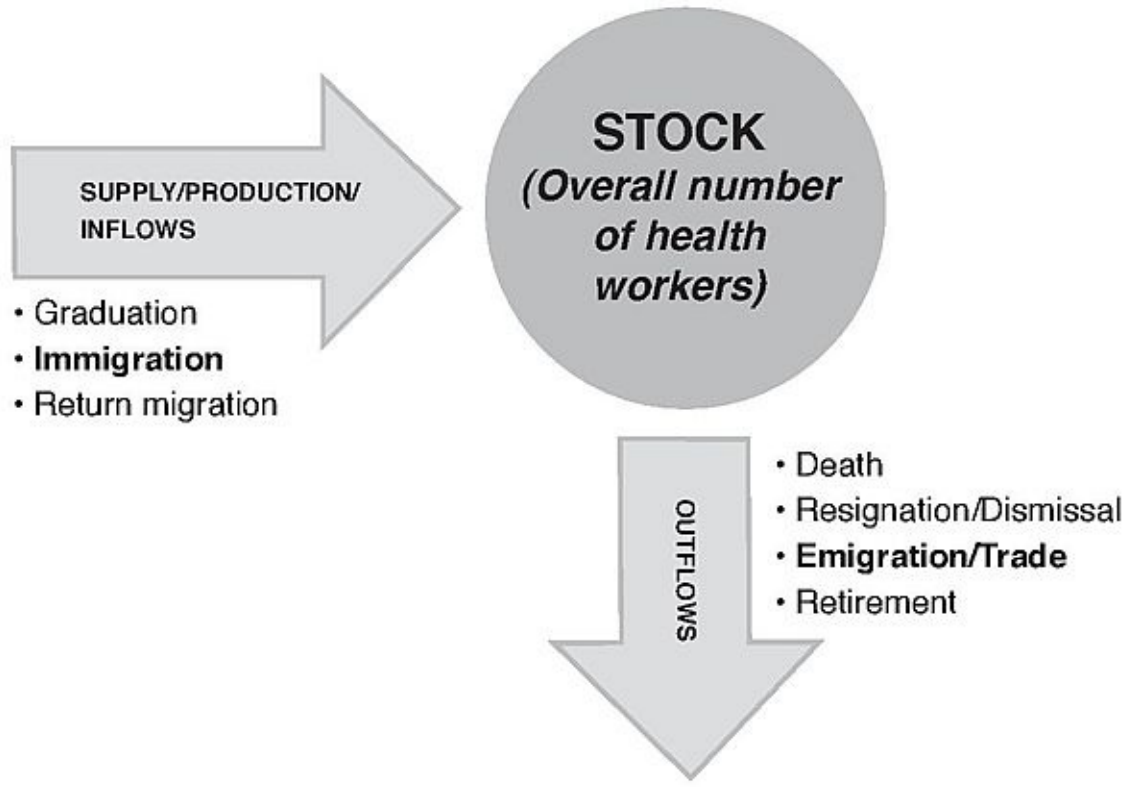
In destination countries, the European Commission found that the domestic physician workforce is comprised of 23% to 28% international medical graduates (IMGs), and 40% to 75% of these IMGs are from low-income countries (European Commission 2012).

Overall, the problem is likely to continue given the global shortage of health

professionals. In 2000, the global health-worker shortage was estimated at 9 million doctors and 15 million nurses and midwives (Joint Learning Initiative 2004).

The basic dynamics of health-worker flows depend on both inflow and outflow (see Figure 1). Clearly, the production of health professionals is low in sub-Saharan African countries, and the stock of health-workers is generally lower than the numbers expected to provide minimum services to their populations. This is further exacerbated by both active and passive losses to migration, for which the recompense is unclear. At a glance, these significant outflows can only deplete this resource, which is both an inert commodity and one that does contribute to the development of good health services and better living standards while the health-worker is still a resident in the source country.

Figure 1. Dynamics of health-worker flows. (Adapted from *Human Resources for Health: Overcoming the crisis*. Joint Learning Initiative, 2004.)



The labor market for sub-Saharan African health professionals

Conventional wisdom dictates that the loss of health professionals from some of the least developed countries is devastating for their health and development efforts, and while there is a demand and supply situation underlying any analysis of this market, we argue that if we aim to find comprehensive and coherent solutions, a discussion of ethics and morality must also be part of the analysis, as is the case with tissue and organ movements.

The demand for health professionals is high worldwide as the ageing population expands in developed countries—this phenomenon is nascent in LICs as well—and health patterns change, resulting in increasing need for care of chronic non-communicable diseases over an ever-increasing life expectancy. The number of elderly persons aged 65 and over in the European Union (EU) is projected to almost double over the next 50 years, from 87 million in 2010 to 152.7 million in 2060 (European Commission 2012). This also affects health professionals and, in 2009, it was estimated that some 30% of doctors in the EU were over 55 years old and that by 2020, 60,000 doctors would retire annually (Mills *et al.* 2008). The average age of nurses currently employed in the EU is 45 to 50 years old! Despite these well-documented shortfalls in the rich countries, supply/production of health professionals has not been adequately increased, leaving room for recruitment from poorer countries to fill a significant part of that demand.

The migration phenomenon is perhaps greatest in countries that share a colonial history and therefore some level of linguistic and professional compatibility and where often qualifications can be accepted with moderate retraining or orientation.

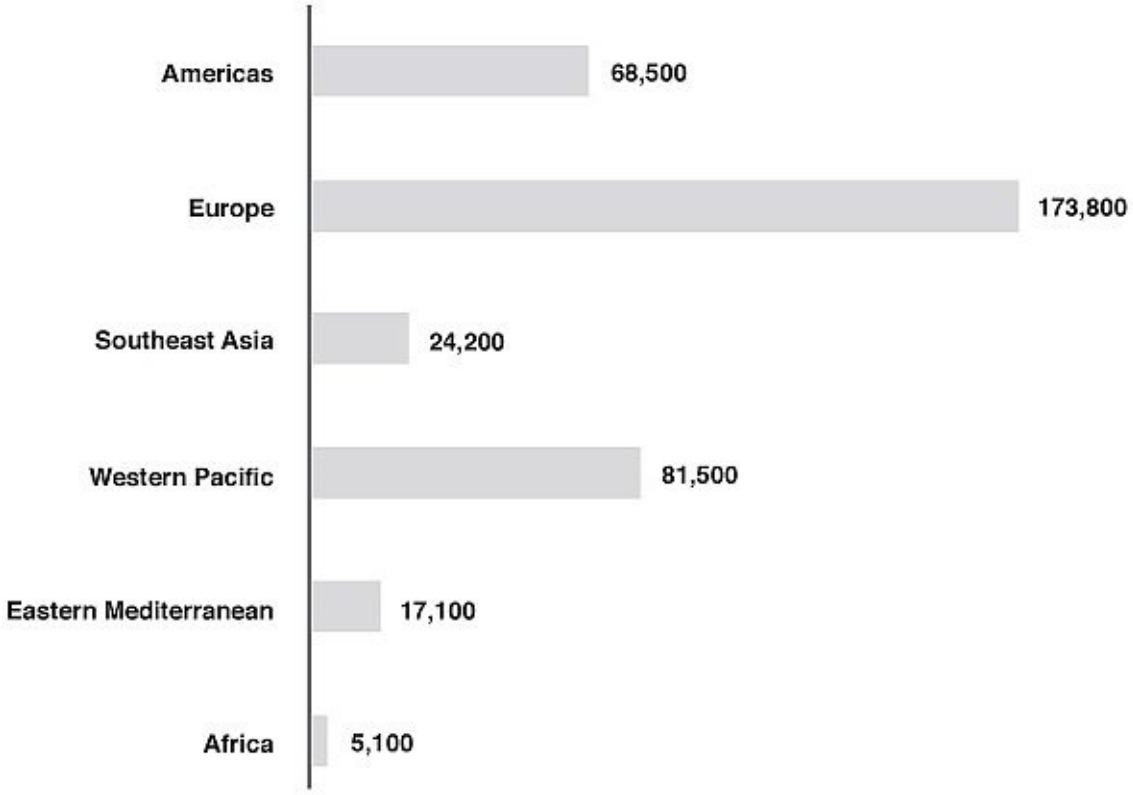
In this paper, we consider health professionals to be a commodity because the

definition of the main frameworks that apply to doctors, nurses, and midwives are nearly universal. There are global standards and generic core functions that can arguably be similarly utilized anywhere. An example of a commodity-driven approach to health-care professionals is that of Cuba "trading" health-worker services for oil with Venezuela. Cuban medical brigades in SSA countries are also sources of official foreign exchange, traded for goods needed in Cuba.

Indeed some countries in Asia, such as the Philippines and India, have followed an "export" model, producing excess health-workers and encouraging migration to gain from their remittances (Dimaya *et al.* 2012). But is this fair trade when the trade is an unwilling exchange, yields negative consequences for the vendor, and the market is overwhelmingly unbalanced in favor of the economically powerful?

The supply situation of health professionals is dire in sub-Saharan Africa and many low-income countries but is also inadequate in countries that could afford to increase supply comfortably. For example, the annual supply of doctors is still significantly higher in Europe and the Americas (see Figure 2), but as demand remains higher and is increasing in these countries, the supply remains significantly inadequate to begin to satisfy needs.

Figure 2. Health-worker Inflow per World Health Organization (WHO) region. Yearly production of medical graduates (Adapted from *Human Resources for Health: Overcoming the crisis*. Joint Learning Initiative, 2004).



The European Commission estimates a potential shortfall of around one million health-care workers by 2020 (Table 1), rising up to two million if long-term care and ancillary professions are taken into account. This means around 15% of total care will not be covered.

Table 1. Health-worker shortage in the European Union by 2020 (European Commission 2012).

Health-workers	**Estimated shortage**	**Estimated% of care not covered**
Physicians	230,000	13.5%
Dentists, pharmacists and physiotherapists	150,000	13.5%
Nurses	590,000	14.0%
Total	970,000	13.8%

Health-worker shortage estimates from selected EU countries
(European Commission 2012)

Italy—13,500 nurses were due to retire in 2010, but only 8,500 were trained in 2008–2009. Competition for graduates is high, and many end up in different higher paid sectors

Finland—Shortages specifically in rural areas, and health-worker shortage predicted to reach over 200,000 by 2020.

Germany—There was a shortage of 17,000 doctors in 2010. This is projected to rise to 45,000 doctors in 2020 and 135,000 in 2030. Also shortage of elderly-care nurses.

Hungary—19% of public health physician positions were vacant and 13% of physicians in 2008.

Spain—Forecasted shortfall by 25% of health workforce by 2025. Persistent shortages of specialists.

United Kingdom—Severe shortages of 35 specific health-related professions. Unless training posts are revised, the shortage of general practitioners and medical specialists could be greater than 6,000.

Global demand outstrips the global supply, but clearly the trade advantage in health professionals shall continue to rest with the richer countries on account of the strong pull factors of better income and living standards and the obverse push factors in source countries.

In effect, Sub-Saharan African countries participate in a “perverse subsidy” by investing their scarce resources to train health professionals that are then used by rich countries not ready or willing to make their own such investments. The loss of the investment in health professionals training in sub-Saharan Africa is estimated to be $2.1 billion and the gain to destination countries from avoiding training and other investments at $4.54 billion (Mills *et al.* 2012). Table 2 presents the estimated loss of investment in some sub-Saharan African countries and the estimated gains in training and investment costs in destination countries.

Table 2. Estimated loss of investment in some sub-Saharan African countries and the estimated

gains in training and investment costs in destination countries (Mills et al. 2012).

Losses in investments		Gains in training and investment costs	
South Africa	$1.21 billion	United Kingdom	$2.7 billion
Nigeria	$654.27 million	United States	$846 million
Zimbabwe	$39.61 million	Australia	$612 million
Ethiopia	$24.63 million	Canada	$384 million
Kenya	$16.75 million		
Uganda	$13.61 million		
Zambia	$12.14 million		
Malawi	$2.16 million		

While individual health-workers and their families may gain substantially from migration, the lost cost to society comes from investments made in their training and the loss of their likely contribution to the economy.

A 2008 World Bank study found that higher-skilled health-workers tend to remit a smaller proportion of their wages compared to less-educated migrants (Niimi *et al.* 2008). The generic numbers also hide a number of negative externalities. Often a higher proportion of educators and specialists are lost, and this further undermines the source countries' ability to sustain or even begin to increase the supply of new health-workers and to replace losses. The loss of well-trained health professionals and health service may undermine the establishment of a middle class and/or reduce the attractiveness of the source country as a destination for investment and development growth. Furthermore, a recent study of the United States job market showed that immigrants with a bachelor's degree from 7 out of 15 African countries surveyed had less than 40% chance of ending up in a skilled job (Ratha *et al.* 2011).

It is also documented that at times qualified physicians from LICs may have to retrain as nurses or take on lower jobs inconsistent with their qualifications or specialties in order to remain employed (Runnels *et al.* 2011).

The rights of movement of natural persons and services is well documented under the General Agreement on Trade in Services (GATS), Mode 4 (WTO 1995). However the rights of poor countries, populations, and communities to expect dividends from their investments remain unclear and under-debated. Would it be ethical to remove two kidneys from a poor donor who needs the money? Is it fair for already struggling countries to be undermined further? What will be a good and fair recompense for a kidney or for a health professional? Is it trafficking when a human "commodity" is moved between countries without firm rules and agreements; especially when third parties and agents are often involved (sometimes to shield the direct involvement of government agencies)?

Notwithstanding the foregoing discussions, there are indeed gains for source countries, but do these gains offset the core costs of brain drain?

Remittances were found to be the highest source of foreign income in many African countries equaling some $60 billion in 2012, which is much more than obtained from aid or foreign direct investment (World Bank 2013). For example, in Lesotho, Senegal, and Togo, remittances accounted for 30.2%, 10.8%, and 10.2% of their GDP respectively, measured between 2008 and 2011 (Ncube and Brixiova 2013).

Whether such remittances adequately cover the loss source countries suffer is arguable for a number of reasons. Remittances are interpersonal transfers that are relatively unstable and difficult for source countries to document effectively. The irregular flow of remittances makes it an ineffective source of resources that, for example, countries could mobilize for securitization of bonds or for long term investment planning. Individuals often use remittances for simple basic consumption, medication, or building private homes, and rarely as an investment in core human capital. Taxes on remittances are estimated to be highest on flows to Sub-Saharan Africa at 12% compared to a global average of 8% to 9% (AIR and World Bank 2013), therefore earnings by migrants are perhaps taxed twice by destination countries. Again, World Bank studies in 2008 (Niimi *et al.* 2008) indicate that on average highly skilled migrants (such as health professionals) remit less than lower-qualified migrants, who perhaps did not benefit as much

from national investments in training. Skilled and wealthier migrants tended to migrate with the entire family and often come from the richer families in source countries, that do not require as much support to be remitted home.

The financial gains for destination countries estimated by Mills *et al.* (2012) illustrate the so-called “perverse subsidy” of developed country health-care costs by very poor countries. In addition to the financial loss of training costs, the loss of key professionals impacts on their roles as local employers and users of local commerce and services, but even more important is the loss of specialists and trainers that are required to produce the next generation it represents. For example, in Ghana, the average age of medical school lecturers was said to have risen from 36 to 55 over a decade, likely due to the migration of younger lecturers (Martineau *et al.* 2002).

However, other researchers talk of a “brain circulation” as a gain, with returning migrants offering their homelands improved knowledge, skills, and technology.

In general, the global labor market in health professionals can be argued to be an unfair one, made up of an unwilling trade by poor countries of a commodity or persons that are vital to their populations’ well-being, much in the same way as the loss of a kidney may not be adequately compensated for and may eventually be detrimental to the “donor.”

Ethics and morality, and the motivation to behave well

The issues of ethics and morality and commodification do cut both ways, requiring leaders in both poor and rich countries—sources and destinations—to modify economics and markets with common sense morality. Much migration of health professionals is motivated by significant “push” factors in the source countries as well as the pulls from the destinations.

Since the early to mid-2000 a variety of efforts have been made to create an ethical dimension to the management of health professionals’ migration and brain drain. The latest was the voluntary code developed by the World Health Organization and endorsed by the World Health Assembly in 2011 (WHO 2010). A variety of international professional groups have also developed sets of guidelines on “ethical recruitment” from countries with limited human resources. The more common codes are described in Table 3. South Africa has since implemented a policy of non-recruitment of health professionals from neighboring countries as a principle (South African Department of Health 2002) and in cognizance of the effects that such recruitment has on populations in the source countries. It also tightened post-graduate training arrangements in order to restrict retention of foreign graduates.

With the economic crises in many developed (and developing) countries, the increasing demands for more care and the shortage of health-workers, the ethical suasion measures have been restricted to voluntary “guidance” that clearly has not made much impact to date. These guidelines perhaps provide a moral cover without giving stronger incentives for effective implementation. Many appear to have been weakened as part of the negotiations in order to get the buy-in of powerful destination countries.

The example of South Africa’s bilateral agreement and the law barring

recruitment from SSA appears to be the sole successful mechanism, reducing South African health-worker registration in the United Kingdom from 3,206 in 2003 to 4 in 2004 (Blacklock *et al.* 2012).

Similar issues of need and demand found in the case of tissue and organ reception from less-resourced persons provide perhaps a more dramatic sense of morality as well as a clearer definition of trafficking. However, in both cases—migrants and organ donors—the source is willing due to poverty and the information gap rather than free choice.

Table 3. Ethical recruitment guidelines and codes.

WHO code for international recruitment of health-workers (WHO 2010)	The rights and obligations of source countries, destination countries, and health-workers themselves. Implemented by very few countries. Its voluntary nature gave little incentive for implementation.
National Health Service code (UK Dept. of Health 2000)	Provided a list of 151 countries that recruiters are prohibited from recruiting from. Initially only targeted National Health Service and the private sector could still recruit. In 2003, recruited African health-workers rose by 174% to 4,626.
World Organization of Family Doctors (WONCA 2002)	Focus is on sufficient training of domestic health-workers to prevent international recruitment.
International Council of Nurses–Ethical Nurse Recruitment (ICN 2007)	Code focuses on the treatment of nurses during the recruitment process, whilst in destination countries, and their individual rights as migrant workers.
Commonwealth Code (Commonwealth	Commonwealth ministers of health agreed that a consensus would be reached regarding the problem of international recruitment of health-workers from resource poor countries. Some countries (including the

Health Ministers 2003)	United Kingdom—one of the largest health-worker recruiters) refused to sign due to the compensation clause.
South African Recruitment Policy (South African Dept. of Health 2002)	South Africa successfully implemented a law to stop recruitment of health-workers from neighboring resource-poor countries. An unrelated bilateral agreement between the United Kingdom and South Africa reduced health-worker migration from South Africa drastically (from 3,206 registered in 2003 to 4 in 2004).

Summary and conclusions

Migration of health-workers remains an important issue for sub-Saharan Africa where 36 of 57 “human resources for health (HRH) crisis” countries are located (WHO 2006). A number of initiatives have been launched to improve medical and nursing education and output, such as the US President’s Emergency Plan for AIDS Relief (PEPFAR) and supported Medical and Nursing Education Partnership Initiatives (Mullan *et al.* 2012). However, the key issue is to ensure that the cosmopolitan/standard graduates graduating from such initiatives do not become even more attractive to destination labor markets.

The discussion around compensation has been a muted and difficult one, as destination countries are reluctant to consider it and in many cases, it is unclear how this would be computed in terms of who should be compensated, exactly what they should be compensated for, and how source governments could be obligated to utilize such funds effectively and transparently. The increasing number of private and fee-paying health training schools also undermine the rationale for compensation to governments.

In the calculation as it stands, countries of the sub-Saharan Africa are losers in this trade, and the destination European countries (especially those with colonial and linguistic links to source countries) and the United States appear to be the big winners in what can only be a very lopsided market.

The movement of health-workers can indeed be likened to that of a commodity, which has similar global “specifications” and is used around the world. Global health organizations continue to promote the core designations and typologies that can readily be moved between countries, through standardized curricula and education approaches and cross-border professional associations that may encourage global equivalences for health work.

Not much donor investment nor many education initiatives appear to have gone

into the development and expansions of more locally relevant and non-internationally reciprocated cadres such as medical assistants and clinical officers in SSA countries, who tend to migrate much less. Furthermore, there is no indication that OECD countries are likely to rapidly and significantly increase health-worker training to address the serious shortages in EU countries.

There are of course great benefits to individual health-professional migrants and their families, and even perhaps indirectly to their countries, but the summation of effects is likely to continue to be to the detriment of vulnerable and poor populations in source countries.

International professional organizations such as the International Council of Nurses (ICN) and the World Organization of Family Doctors (WONCA) have pushed for ethics and fairness in the working conditions of migrant professionals, but no group seems to speak for the communities and populations forced to continually find dwindling resources to invest in yet another health-worker in order to meet critical health needs.

Bibliography

References

AIR (African Institute for Remittances) Project and World Bank. 2013. Send Money Africa. Accessed at sendmoneyafrica.worldbank.org/sites/default/files/SendMoney_Africa_Remittances_Report_20

Blacklock, C., C. Heneghan, D. Mant, and A. M. Ward. 2012. Effect of UK policy on medical emigration: a time series analysis of physician registration data. *Human Resources for Health* 10:35–43.

Commonwealth Health Ministers. 2003. Commonwealth code of practice for the international recruitment of health-workers. Geneva, Switzerland.

Dimaya, R. M., M. K. McEwen, L. A. Curry, and E. H. Bradley. 2012. Managing health-worker migration: a quantitative study of the Philippine response to nurse brain drain. *Human Resources for Health* 10:47–54.

European Commission. 2012. Commission staff working document on an action plan for the EU health workforce. Accessed at ec.europa.eu/dgs/health_consumer/docs/swd_ap_eu_healthcare_workforce_en.pdf.

ICN (International Council of Nurses). 2007. ICN position statement: Ethical nurse recruitment. Accessed atwww.icn.ch/images/stories/documents/publications/position_statements/C03_Ethical_Nurse_

Joint Learning Initiative. 2004. Human resources for health: Overcoming the crisis. Accessed at www.who.int/hrh/documents/JLi_hrh_report.pdf.

Kasper, J., and F. Bajunirwe. 2012. Brain drain in sub-Saharan Africa: Contributing factors, potential remedies and the role of academic medical centres. *Archives of Disease in Childhood* 97(11):973–979.

Martineau, T., K. Decker, P. Bundred. 2002. Briefing note on the international migration of health professionals: Levelling the playing field for developing country health systems. Liverpool School of Tropical Medicine. Accessed at www.aspeninstitute.org/sites/default/files/content/images/martineau_0.pdf.

Mills, E. J., S. Kanters, A. Hagopian, N. Bansbak, J. Nachega, A. Alberton, C. G. Gau-yeung*et al.* 2011. The financial cost of doctors emigrating from sub-Saharan Africa: Human capital analysis. *British Medical Journal* 343 (7835): 1191.

Mills, E. J., W. A. Schabas, J. Volmink, R. Walker, N. Ford, E. Katabira, A. Anema, M.

Joffres, P. Cahn, and J. Montaner. 2008. Should active recruitment of health-workers from sub-Saharan Africa be viewed as a crime? *The Lancet* 371(9613):685–688.

Mullan, F., S. Frehywot, F. Omaswa, N. Sewankambo, Z. Talib, C. Chen, J. Kiarie, and E. Kiguli-Malwadde. 2012. The Medical Education Partnership Initiative: PEPFAR's effort to boost healthworker education to strengthen health systems. *Health Affairs* 31(7):1561–1572.

Ncube, M., and Z. Brixiova. 2013. Remittances and their macroeconomic impact: Evidence from Africa. African Development Bank Group Working Paper 188. Accessed at www.afdb.org/documents/document/working-paper-188-remittances-and-their-macroeconomic-impact-evidence-from-africa-34861/.

Niimi, Y., Ç. Özden, and M. Schiff. 2008. Remittances and the brain drain: skilled migrants do remit less. World Bank Discussion Paper 3393.

Ratha, D., S. Mohapatra, Ç. öZden, S. Plaza, W. Shaw, and A. Shimeles. 2011. Leveraging migration for Africa: Remittances, skills and investment. Washington, DC: World Bank. Accessed at siteresources.worldbank.org/EXTDECPROSPECTS/Resources/476882-1157133580628/AfricaStudyEntireBook.pdf.

Runnels, V., R. Labonté, and C. Packer. 2011. Reflections on the ethics of recruiting foreign-trained human resources for health. *Human Resources for Health* 9:2.

South African Department of Health. 2002. Policy on recruitment, employment and support of foreign health professionals in the Republic of South Africa. Pretoria: Department of Health.

United Kingdom Department of Health. 2000. United Kingdom National Health Service Code of Practice for international recruitment. Accessed at www.nhsemployers.org/your-workforce/recruit/employer-led-recruitment/international-recruitment/uk-code-of-practice-for-international-recruitment.

UN-DESA (United Nations Department of Economic and Social Affairs) and OECD (Organisation for Economic Co-operation and Development). 2013. World migration in figures. New York: United Nations. Accessed at www.oecd.org/els/mig/World-Migration-in-Figures.pdf.

World Bank. 2013. Remittances create safety net for African households. Accessed at www.worldbank.org/en/news/feature/2013/06/26/remittances-create-safety-net-for-african-households.

WHO (World Health Organization). 2006. The World Health Report 2006. Working together for Health. Geneva: World Health Organization Accessed at www.who.int/whr/2006/en.

—. 2010. Achieving the health-related MDGs. It takes a workforce! Accessed at www.who.int/hrh/workforce_mdgs/en/.

WHO. WHA 63.16. 2010. WHO Global Code of Practice on the International Recruitment of Health Personnel.

WONCA World Rural Health Conference. 2002. A code of practice for the international recruitment of health-care professionals: the Melbourne manifesto. Accessed at www.acrrm.org.au/files/uploads/pdf/advocacy/melbourne-manifesto_wonca.pdf.

WTO (World Trade Organization) Secretariat. 1995. The General Agreement on Trade in Services (GATS). Accessed at www.wto.org/english/docs_e/legal_e/26-gats.pdf.

Authors

Delanyo Dovlo

The WHO Representative to Rwanda until July 2014. Prior to this, he was Health Systems Adviser at WHO-HQ in Geneva. He trained as a general practice physician and public health specialist in Ghana, UK and USA, and has had over thirty years clinical and public health practice experience and is an expert in Human Resources for Health issues. He was a former director of Human Resources for the Ministry of Health of Ghana and has consulted widely on this subject and on health-sector reforms. In July 2014, he was appointed to his current position as director of the Health Systems and Services Cluster, at the WHO Regional Office for Africa in Brazzaville, Congo.

Sheila Mburu

Currently an MSc candidate at the London School of Hygiene and Tropical Medicine. Prior to this, Sheila worked as a consultant in the WHO Rwanda Country Office. During this time she co-wrote and edited WHO’s biennial report, supported national nutrition programs, managed WHO’s online communications and participated in implementation of the UN Communications Strategy. Sheila graduated from the University of Nottingham, with an MSci degree in biochemistry and genetics.

Double Movement: Health Professionals and Patients in Southeast Asia

Nicola Suyin Pocock

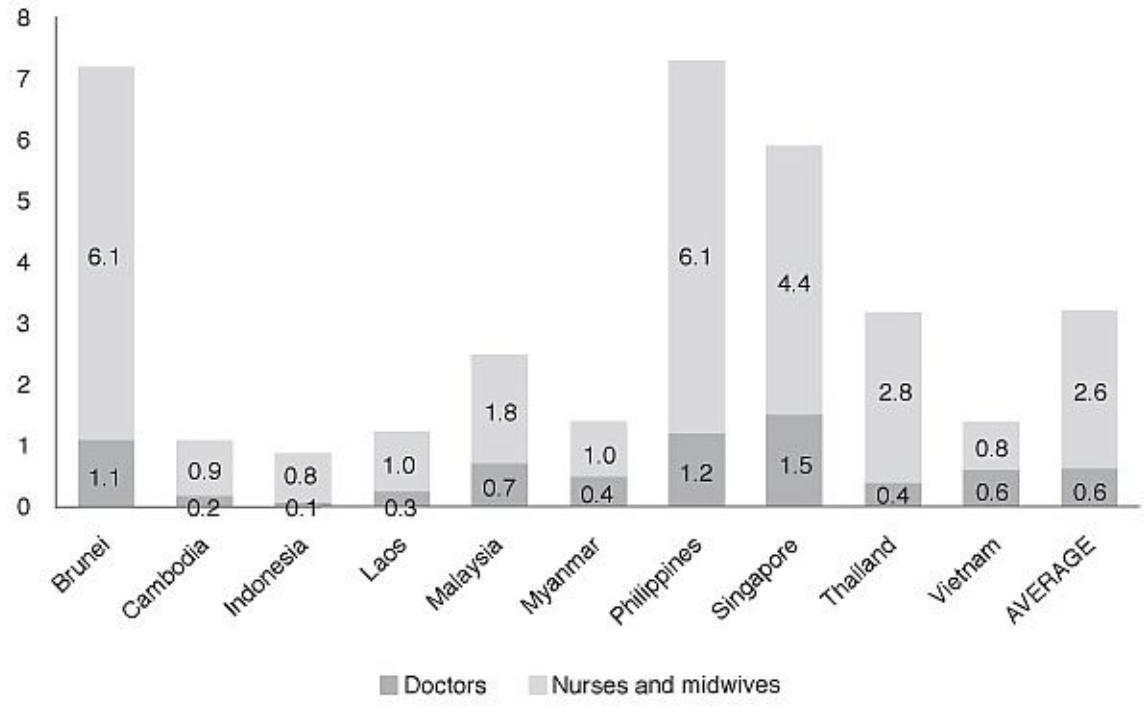
Against a backdrop of widespread privatization of health systems, medical tourism and health-worker migration, commonly referred to as medical brain drain (MBD), are highly contested phenomena globally. Countries in Southeast Asia have been at the forefront of developing medical tourism as an industry, whilst dually restructuring their health systems and expanding health coverage to their own citizens. Simultaneously, thousands of health-workers trained in the region are migrating across borders to seek opportunities in Southeast Asia and beyond. Conceptually the links between these interrelated trends are not well understood. In this paper, I draw on descriptive data, prior conceptual work, and ecological studies to assess where medical tourism, health coverage, and health-worker migration converge, and outline the implications for health equity among local health-care users, particularly those who rely on public health systems.

Introduction

A core concern at the nexus of medical tourism (MT), health coverage, and health-worker migration (HWM) is ensuring that citizens, especially users of public systems, are not disadvantaged by these trends. Arguably before MT becomes entrenched in a health system, as we observe in Thailand, Singapore, and Malaysia, universal coverage for the population should be achieved. A second concern is the satisfaction and well-being of health-workers themselves, including those that choose to emigrate. Ultimately, we care about better health status in origin countries, with our main research question focused on whether MT, and/or HWM, adversely affects health status.

Southeast Asia, like many regions, faces challenges of shortages of skilled health-workers, maldistribution within countries, skill mix imbalances and, for some countries, high levels of out-migration without adequate in-migration to compensate. Reasons for low health-worker densities include inadequate production capacity for medical staff, restricted capacity for employment of graduates, and low pay in the public sector (Kanchanachitra *et al.* 2011). Figure 1 shows health-worker densities in the region.

Figure 1. Health-worker density per 1,000 population, 2000–2007 (latest year) (data from WHO 2009, first published in Pocock and Phua 2011b).



Although the total number of health-workers (doctors, nurses, and midwives) in the region is 1.6 million, with an average density of 3.2 doctors, nurses, and midwives per 1,000 population, above the World Health Organization (WHO) minimum threshold of 2.28 health-workers per 1,000 population, intraregional inequalities are severe. Five countries record health-worker densities below the WHO threshold, including Myanmar, Vietnam (1.4), Laos (1.3), Cambodia (1.1), and Indonesia (0.9) (WHO 2006; WHO 2009). Importantly, the differing ratios above likely reflect policy choices, e. g., Cambodia and Thailand focus on nurse-based primary care (Kanchanachitra *et al.* 2011). Dual practice is common in the region.

Health-workers are concentrated in urban areas in most countries, resulting in inequitable national distribution. According to a recent analysis, however, the distribution of doctors in the Philippines, Thailand, and Vietnam over time is becoming more equitable between regions, and nurse distribution is becoming more equal in Thailand and Vietnam, but more unequal in the Philippines (Kanchanachitra *et al.* 2011).

There is a clear relationship between poor human resources for health (HRH) policies and low use of health services, especially in the public sector. Potential

users are deterred because of poor quality services and training of medical staff, financial barriers, and cultural factors (Kanchanachitra *et al.* 2011). Precisely because of poor quality services and training of health-workers, outmigration of health-workers is not an issue for lower-income countries, yet. As noted in migration research on general skills shortages in developing countries, “low demand and low supply reinforce each other, and educational quality is often very low” (Clemens 2013, 3). At heart of the problem is improving the supply side, including health-worker training and health infrastructure.

Health-worker migration

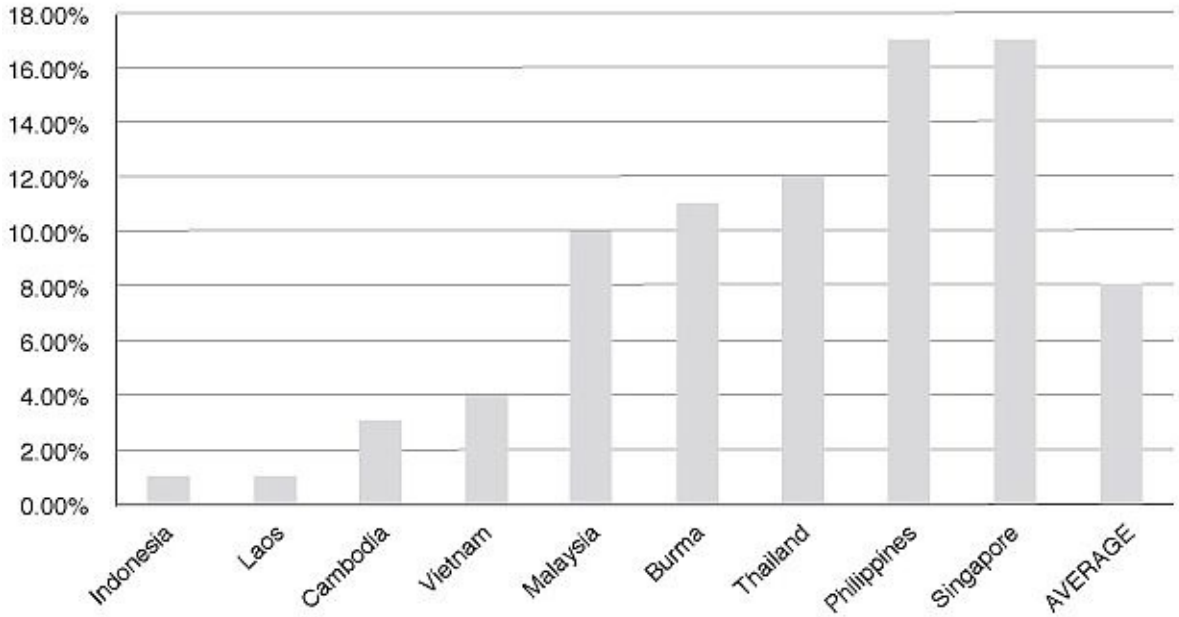
Physician emigration

The medical brain drain (MBD) dataset provides estimates of physician emigration from 191 source countries to Organisation for Economic Co-operation and Development (OECD) countries between 1991 to 2004 (Bhargava, Docquier, and Moullan 2010). Physician emigration from Association of Southeast Asian Nations (ASEAN) to OECD countries (defined as the percentage of doctors trained in country who migrated that year), remained relatively consistent between 1996 to 2004, although there is a slight upward trend for Singapore and Thailand. Globally, Southeast Asian countries have far less MBD than countries in Africa and the Caribbean, and other small countries.

In 2004, the latest year for which data are available, we see that Singapore and the Philippines have the highest rates of physician emigration (17% of physicians trained in country migrated), followed by Thailand (12%), Burma (11%), and Malaysia (10%) (Figure 2). Since then, government strategies to increase medical tourism have proliferated in Singapore, Malaysia, and Thailand and, to an extent, the Philippines (Pocock and Phua 2011a). Developing the MT industry can be seen as a tactic to reduce international emigration of health-workers, particularly of specialists. Anecdotal research from Thailand indicates that medical graduates, having acquired specialized medical degrees abroad, are finding it lucrative and more satisfying to stay in their home country (UNESCAP 2007). Politicians in Singapore have reasoned that, in order to recruit and retain specialists in a country with a small local population, the country must attract a high volume of medical tourists. However, within countries, the growth of medical tourism may exacerbate public to private sector brain drain, notably of specialists who provide elective surgeries demanded by foreign patients (Pocock

and Phua 2011a).

Figure 2. Physician emigration rates from ASEAN countries, 2004 (Bhargava, Docquier, and Moullan 2010).



Among Thai emigrating physicians, 97% opted for the United States (US), along with 94% of Filipino doctors, and 52% of Burmese doctors, whilst 74% of Malaysian doctors opted to migrate to Australia. This may be linked to country of training. Eligibility of medical qualifications and English as the main language likely play a role in choice of destination country. Language has been shown to be a key determinant in the migration decision, with emigration rates higher amongst countries whose languages are more similar (Adsera and Pytlikova 2012).

What induces doctors to leave or to stay?

Health-workers leave for well-known reasons, including higher wages, better training opportunities and better working conditions, as well as for personal reasons including family ties abroad and better education for children (Henderson and Tulloch 2008). In source countries, inadequate supplies/equipment, mismatch between skills and tasks, and poor supervision and management can provide incentives to migrate. Political instability and risk of violence can also be push factors for migration, in a sector where skills are highly portable (Henderson and Tulloch 2008). Higher HIV prevalence rates may prompt doctors to migrate (via the mechanism of increased transmission risk) (Bhargava and Docquier 2008). This is corroborated in studies whereby doctors are also not compensated for this additional risk (Bhargava and Docquier 2008).

A longitudinal analysis of MBD from 31 sub-Saharan African (SSA) countries to the United Kingdom (UK) and US found economic conditions in source countries to be a determinant of physician emigration. A 1% decline in GDP per capita increased MBD by 0.3% in the next period (Okeke 2013). In a cross-sectional study of physician emigration from 141 countries to the US, Canada, Australia, and the UK, better-endowed origin countries with more health-workers, more economic and developmental progress, and better health status lost proportionately more physicians than more disadvantaged countries (Arah, Ogbu, and Okeke 2008). Singapore, the Philippines, Thailand, and Malaysia, as relatively better-endowed ASEAN countries, do appear to have higher MBD rates, as shown in Figure 2. As countries become richer, retention strategies for physicians become much more important, whereas poorer countries should focus on training policies (Arah, Ogbu, and Okeke 2008).

The finding that better-endowed countries lose more doctors is less surprising when we consider macro migration trends. Using World Bank and United

Nations (UN) data between 2005 and 2013, the Pew Research Center finds that international migrants are increasingly living in high-income countries (57% in 2005 to 69% in 2013), but were born in middle-income countries (48% in 2005 to 58% in 2013), whilst the share of migrants born in low-income countries (18% to 15%) and high-income countries (31% to 24%) has declined (Pew Research Center 2013).

In a longitudinal analysis of health development assistance (health ODA) and physician emigration from 50 countries to OECD countries, changes in the physician emigration rate were negatively related to health ODA—that is, higher health ODA reduced growth in physician emigration rates in the long term, through the likely improvement in working conditions (facilities, equipment, technical expertise) (Moullan 2013, 12). Surprisingly, wages in destination country had a small, insignificant effect (3.8%) on physician emigration—corroborating prior findings that wages are not the most important factor in the migration decision for doctors or for the highly skilled overall (Gibson and McKenzie 2011b; Vujicic, Zurn, Diallo, Adams, and Dal Poz 2004). Consistent with studies on overall skilled migration, Moullan (2013) found that smaller countries (<2.5 million population) have higher physician emigration rates than larger countries (Docquier, Lohest, and Marfouk 2007; Moullan 2013). Smaller population sizes may indicate fewer opportunities for career progression or greater competition for such opportunities, especially among surgeons with highly specialized skills.

What do we know from studies of migration of the highly skilled?

A rich literature on the migration of the highly skilled contradicts conventional thinking on causes and consequences of outmigration. As Clemens (2013) points out, “skill shortages in developing countries are the result of a complex mix of structural factors, which persist whether workers stay or emigrate.” These factors are numerous and include: low returns to education in an impoverished economy, the effect of poor nutrition on cognition, cronyism in school placements, inadequate tax revenue for good quality public education, corruption in public training systems, and other barriers to private education. In most cases, preventing the movement of skilled workers will not address these problems (Clemens 2013, 3).

Furthermore, Clemens contends that the financial effects of highskilled emigration are exaggerated—he finds that the costs of training a skilled worker are far outweighed by ODA flows to developing countries (Clemens 2013). Besides development assistance, a study of Tongan and Samoan nurses in Australia found that remittances more than compensated for the cost of their training (Connell and Brown 2004). However, besides overall development needs, ODA flows must be funneled into the appropriate direction in the health sector also—by training health-workers, raising salaries in the public sector, funding essential health infrastructure and medicines—in order to compensate for MBD. Whilst it makes sense that overall development in a country may induce the highly skilled (and lesser skilled) to stay, health-sector-specific funding must also be mobilized to improve human resources for health.

Further benefits accrue from skilled migration. Empirical studies find that there are three brain gain mechanisms: increased investment in education in source countries from remittances, the return migration of skilled migrants (Gibson and

McKenzie 2011a), and the “incentive effect”—those in home countries will opt to improve their education levels in response to potential gains via migration, but not all will actually migrate, leaving a net brain gain effect (Collier 2013).

Gibson and Mackenzie find a significant role of non-financial incentives in emigration and return migration decisions of the highest skilled in Pacific Island countries—specifically related to opportunities for progression—to be working amongst leaders in the profession, over and above financial incentives (Gibson and McKenzie 2011b).

With better health status as the ultimate concern, whether stopping health-workers from emigrating will improve health status in source countries, as much as rises in incomes, better housing and schooling, and well-run institutions becomes a central research question demanding further study (Clemens 2013). This article cannot answer this question, but instead outlines the implications for health equity among health-care users when MT, health coverage, and HWM converge.

Consequences of physician emigration

There are several possible consequences of physician emigration. The incentive effect posits that more individuals enter medical school in countries with a higher physician emigration rate, such as in the Philippines (Bhargava, Docquier, and Moullan 2011). In a sample of health professionals and policymakers in six African countries, respondents observed a link between HWM and deterioration of teaching quality in medical schools (Awases, Gbary, Nyoni, and Chatora 2004). In Thailand, medical faculty in public teaching hospitals have been observed to shift to the private sector, associated with medical tourism (Phyu and Chotbenjakul 2010).

There have been mixed results on how physician emigration affects health status, likely due to the explanatory and dependent variables used. One study finds that MBD did not significantly hamper vaccination rates nor affect child mortality—two important indicators of health coverage (Bhargava *et al.* 2011). Yet, another finds that a 1% increase in MBD led to a 0.5% increase for child and infant mortality respectively (Chauvet, Gubert, and Mesplé-Somps 2008). However, when considering AIDs mortality, a third study found that, when HIV prevalence was above 3%, a doubling of MBD implied a 20% increase in the number of adult deaths from AIDs (Bhargava and Docquier 2008). Given the mixed evidence, we can at least conclude that MBD does not have positive effects on health status—it is at best neutral (when countries have sufficient HRH already) or negative (when countries have severe health-worker shortages).

Health-workers and health coverage

In studies of health-worker densities and health coverage, nurse density was found to positively impact measles, diphtheria, and polio vaccination rates, whereas doctor density has no effect. Health-workers not only provide vaccination services directly—the presence of health-workers can increase demand for health services by educating potential users about the benefits of vaccination and by training unskilled volunteers to perform vaccinations (Anand and Bärnighausen 2007, 1283). Health-worker densities have been found to have a positive impact on mortality rates, particularly via doctor densities, with the greatest impacts on maternal mortality compared to child mortality. This may be because qualified health-workers "are able to address a larger proportion of conditions that put mothers at immediate risk of death compared with infants or children" (Anand and Bärnighausen 2004, 1607). These findings are corroborated elsewhere, with healthworker density significantly and positively associated with skilled birth attendance, as well as measles immunization (Kruk, Prescott, de Pinho, and Galea 2009, 5).

High health-worker densities have clear positive impacts on health service coverage. So where does HWM fit into the equation? In theory, if a country trains sufficient health-workers for its domestic needs, with additional health-workers trained to compensate for those that migrate, health status may not be adversely affected (although intracountry differences may persist, owing to rural-urban migration and health inequities that may result from public to private brain drain). However, the main question for health equity arises when a country has a shortage of health-workers for domestic needs, but medium to high levels of MBD. This dynamic requires policies that may involve expanding training opportunities, recruitment, and retention strategies.

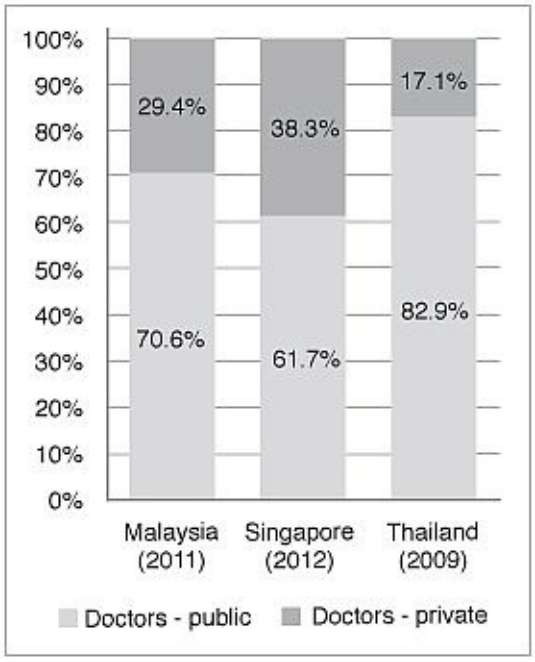
Private sector—unclear role in health outcomes and physician emigration

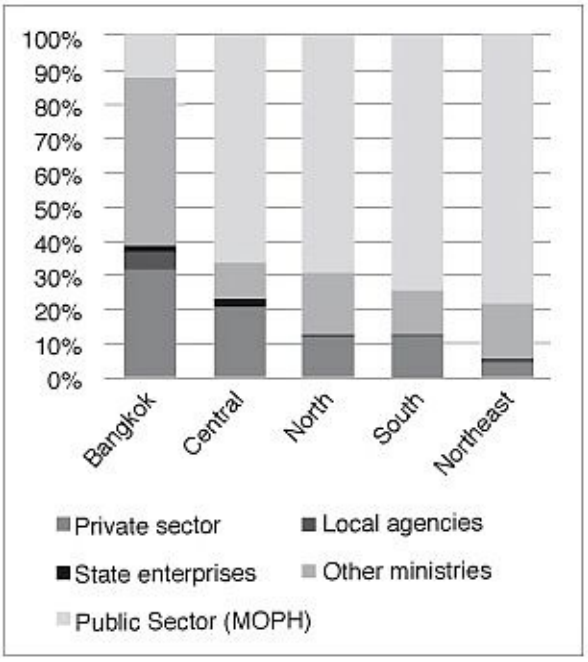
As none of the analyses examining health outcomes and health-worker densities control for the proportion of health-workers in the private sector, we have little idea about how the public/private split affects health outcomes. Case studies of physician emigration and health systems in India, Ghana, and Peru found that private health-care delivery and financing per capita appeared to decrease physician emigration (Loh, Ugarte-Gil, and Darko 2013).

Generally, little is known about the role of private-sector health-workers in providing essential public services. A recent literature review found that non-profit private-sector workers can contribute to immunization provision in low-income countries, whilst for-profit providers facilitated the adoption of new vaccines before mass public sector roll out (Levin and Kaddar 2011). Beyond this, the author found no further studies on the private sector's role in health coverage.

Of the three countries where medical tourism is most popular, Thailand retains the largest share of health-workers in the public system, as seen in Figure 3 (the proportion for nurses is similar across the three countries). But as Figure 3 also shows, the internal distribution of Thai doctors varies considerably, with public sector doctors most concentrated in provinces outside of Bangkok. In general, wealthier patients in cities can afford private health services, whereas those in rural areas may not be able to, the public sector being a positive leveling force for health equity. However, health-worker densities in less urban areas must also be sufficient to have positive effects for health equity.

Figure 3. Proportion of doctors in public/private sector, latest year—Proportion of doctors by agency and region in Thailand, 2008 (MOH Malaysia 2012; MOPH Thailand 2010; Singstat 2012; adapted with some data from MOPH Thailand 2010).





A key issue in Southeast Asia is regulating dual practice (DP). In Indonesia, reportedly nearly all public-sector specialists engage in DP (Meliala, Hort, and Trisnantoro 2013). In the Philippines, doctors are legally permitted to treat private patients in an effort to retain them in the public sector (Kanchanachitra *et al.* 2011). This is also the case in Thailand, where an estimated 55% of doctors'total earnings come from private practice (García-Prado and González 2011). A recent review of dual practice in East and South Asia finds a lack of research in this area despite the rise of dual practice in line with increasing demand for private health-care. Rapid private sector growth and weak regulation in the region raises the risk that dual practitioners will ignore the poor. However, the authors suggest that DP can improve health service access and the range of services offered and increase doctors' satisfaction when it is appropriately regulated (Hipgrave and Hort 2013).

Retention strategies for the public sector—Thailand's experience

To retain health-workers in the public sector in understaffed rural areas, Thailand has implemented various policy measures including public service bonds, a specialized rural track recruitment program for medical schools, rural service prerequisites for specialized training, founding of medical schools in rural areas, special salary rates for rural physicians, and general shifting of resources from urban to rural areas (Wanchaijiraboon 2012; Wiwanitkit 2011).

Unlike other countries in Southeast Asia, Thailand has restricted the entry of private, for-profit medical schools, instead permitting only non-profit private medical schools. Private school graduates must pass the national licensing exam, compared to automatic licensing in public schools (Wibulpolprasert and Pengpaibon 2003). To date, there is only one private institution (Rangsit University) among 21 public medical schools (Saereeporncharenkul 2011).

A new round of internal drain to the private sector in Thailand is observed as partly attributed to medical tourism—however, Wibulpolprasert and Pachanee (2008) note that increased demand from the wealthy urban Thai population for private health services is a bigger driver, along with rising social and income inequality. Emigration of health professionals in Thailand has not been a major problem, partly due to decent income, good working conditions and opportunities for progression, and limited English language skills (Wibulpolprasert and Pachanee 2008). Approval by the Medical Council to one of the public universities to introduce an English language medical school program was met with staunch criticism from the National Health Personnel Committee, due to concerns that this would exacerbate public to private brain drain within Thailand, despite assurances that graduates would still be bonded for three years or have to pay compensation (*Bangkok Post* 2010). Language has

also been a determinant of incoming HWM, as all doctors who wish to practice in Thailand must pass the medical exam in Thai. Some private, MT-driven hospitals have been excluded from this policy, if they are only serving foreign patients.

Growth in medical tourism in Southeast Asia

Medical tourism has been defined to involve “the organized travel outside one’s natural health-care jurisdiction for the enhancement or restoration of the individual’s health through medical intervention,” using but not limited to invasive technology (Carrera and Bridges 2006, 1). This definition takes into account the territorially bounded nature of health systems, where service access is often but not always limited to national boundaries (Pocock and Phua 2011a). Medical tourism is growing rapidly in Southeast Asia—Malaysia alone saw a doubling of medical tourism revenue, from 254 million ringgit in 2007 to 511 million ringgit in 2011 (Chee 2010).

Anecdotally, many medical tourists in Southeast Asia appear to be from neighboring countries, reflecting inequities in service provision at home, either via unavailability of quality services or underinsurance (Pocock and Phua 2011a). For example, in Singapore and Malaysia, it is claimed that most medical tourists are from ASEAN countries, whilst Thailand’s consumers are often from outside the region, with the Japanese accounting for the largest share of foreign patients (UNESCAP 2007). In 2011, 47.2% of Singapore’s and 57% of Malaysia’s medical tourists were Indonesians (Pocock and Phua 2011a). Low-quality public and private health provision at home forces those who can afford it to undergo treatment overseas, with Malaysian, Singaporean, and Thai hospitals offering specialized services unavailable in other, especially poorer, ASEAN countries (Arunanondchai and Fink 2007; UNESCAP 2007).

Yet, a recent Gallup poll with a sample of over 17,000 adults aged 15 and above in selected Asian countries found that most people travel domestically for health-care, rather than regionally or internationally. For example, 12% of Malaysians had traveled within the country to seek treatment, with just 1% traveling overseas for treatment. Among respondents from Cambodia, Indonesia, Malaysia, the Philippines, Singapore, and Vietnam, between 0–2% had traveled

internationally for health-care (Gallup 2010). Even though anecdotally ASEAN countries are well represented as medical tourists according to Singapore and Malaysia, it may be that those who travel for health-care are wealthier groups from poorer countries who overall comprise a much smaller percentage of their domestic population.

Potential costs of medical tourism to health systems

The policy implications of medical tourism reach beyond the potential to crowd out consumption by locals. As Chee (2010) points out, when middle-class fee-paying patients decide to undertake treatment abroad, their domestic health systems lose out, not only financially but in terms of the political pressure that these potential consumers could exert to improve the health system that poorer consumers rely upon (Chee 2010). The possibility to "exit" low-quality health systems gives the middle class little incentive to exert pressure for quality improvement (Hirschman 1970). This equally applies to domestic users of private health services—as noted in Thailand, demand from wealthy urbanites is likely the largest driver of internal public to private brain drain (Wibulpolprasert and Pachanee 2008).

Although driven by the private for-profit sector, the public sector is accommodating medical tourists by constructing private wings in hospitals, as is evident in Singapore's corporatized public hospitals. At least when hospitals are publicly owned, revenues from medical tourism are taxable and thus can be reinvested back into the public sector by the government, which is not necessarily the case for private hospitals, depending on tax incentives offered (Pocock and Phua 2011a).

Is medical tourism a retention strategy for emigration of health-workers?

A recent study on medical tourism in Singapore, Thailand, and Malaysia compared private hospitals and their role in medical tourism. The authors found that excess capacity in private hospitals could be used for the population at large, and that private-sector stakeholders seemed interested in contributing to medical education, which could help ease present HRH shortages (Herberholz and Supakankunti 2013). This raises the question of whether private-sector capacity could be leveraged for the public good, and coupled with DP regulation, whether international HWM and public-to-private flight could be discouraged.

To date, hampered by a paucity of data on MT and data quality issues such as double counting of medical tourists, there are no studies examining how an increase in MT or DP regulation might retain health-workers within a country, or within the public system. Herberholz and Supakankunti's (2013) study alludes to the possibility that growth of MT could be leveraged for wider gains to the public health system, but there has been no documentation of specific policies to that broad end.

Discussion

This paper has charted the intersection of health-worker migration, health coverage, and medical tourism in Southeast Asia, where a rapidly growing private sector and public-to-private flight without regulatory oversight has emerged. The implications for health equity at home are not straightforward. At the nexus of these phenomena, we can conclude that health-worker densities are important for health-service coverage, and that geographic and public/private distribution of health-workers also affects health equity at home. Retention strategies in the public sector matter for health equity, as demonstrated in the case of Thailand. MBD is not a positive force for better health status, although it may be neutral in instances where a country already has sufficient health-worker densities (with adequate staffing in the public sector). Yet when a country experiences health-worker shortages, MBD is likely to be a negative force to leveling health inequities domestically. There is a dearth of research on the private sector's role in health coverage, with no studies evaluating its effects on equity. Finally, doctors are induced to leave based on a variety of reasons, including those related to the health sector (e.g., poor hospital infrastructure, lack of career progression opportunities) as well as broader development challenges (e.g., education of children). But this does not reveal the full picture of the nexus.

Key questions and knowledge gaps remain beyond the Southeast Asian context. These include:

- How do HWM and MT affect health status?
- How do HWM and MT affect health coverage?
- Does MT discourage international HWM?
- Could DP regulation discourage public-to-private flight?
- Are lower HWM rates associated with improved health status?

- What is the role of the private sector in providing essential health services (if any)?

An overarching question is whether public-private, rural-urban HWM, in the face of increased demand, is the bigger issue, rather than international HWM or MT. It is clear that we need more and better evidence of MT's impact. As elaborated elsewhere:

> "Access to health-care in developing countries, the main destinations of medical tourists, is notoriously uneven, and often becoming more so. Medical tourism, urban bias and privatisation have combined to exacerbate this trend. This is exemplified in both Thailand and India, where regional areas have been disadvantaged by the migration of health-care workers to hospitals focusing on medical tourism, neoliberal national financial provision for medical tourism (and related tourism campaigns) and evidence of trickle-down gains is lacking." (Connell 2011)

To ensure affordability and equity between medical tourists (or private fee-paying users generally) and local citizens, policies are needed to ensure that public services are readily available and subsidized—i. e., there needs to be a redistribution mechanism in financing regardless of the levels of MT or private health provision in an economy. Dual practice has policy potential—coupled with excess capacity in private hospitals—to ensure that citizens' access to health services is safeguarded, particularly access to specialists, who from observation are more likely to be lost to the private sector. Finally, perhaps governments should consider restrictions on private hospital building—after years of tax breaks and financial incentives, slowing private-sector growth would enable health authorities to work on regulation of this sector.

As for HWM, we might consider emerging empirical work considering the benefits of emigration of the highly skilled, a.k.a. "skill flow." Before jumping to the conclusion that HWM is inherently bad for health systems, we may need a more constructive approach that includes mobility of health-workers as a reality, and recognition that the broader challenges of development may affect health status more than HWM might.

As the Thai case illustrates, policy responses to public-to-private flight of health-workers are likely to be more effective when targeted to potential health-workers

in provinces with critical HRH shortages. Having a package of tailored retention policies is increasingly important for low-and middle-income countries which, as they grow richer, may lose proportionately more health-workers than less well-endowed countries. Policymakers must heed the message “health is wealth” and invest in health systems that are socially equitable and of benefit to the entire population.

Bibliography

References

Adsera, A., and M. Pytlikova. 2012. The role of language in shaping international migration (Norface Discussion Paper Series No. 2012-14). Norface Research Programme on Migration, Department of Economics, University College London. Accessed at ideas.repec.org/p/nor/wpaper/2012014.html.

Anand, S., and T. Bärnighausen. 2004. Human resources and health outcomes: cross-country econometric study. *The Lancet* 364 (9445): 1603–1609. doi:10.1016/S0140-6736 (04) 17313-3.

—. 2007. Health-workers and vaccination coverage in developing countries: an econometric analysis. *The Lancet* 369 (9569): 1277–1285. doi: 10.1016/S0140-6736 (07) 60599-6.

Arah, O. A., U. C. Ogbu, and C. E. Okeke. 2008. Too poor to leave, too rich to stay: developmental and global health correlates of physician migration to the United States, Canada, Australia, and the United Kingdom. *American Journal of Public Health* 98(1):148–154. doi:10.2105/AJPH.2006.095844.

Arunanondchai, J., and C. Fink. 2007. Trade in health services in the ASEAN region. World Bank Policy Research Working Paper 4147.

Awases, M., A. Gbary, J. Nyoni, and R. Chatora. 2004. Migration of health professionals in six countries: A synthesis report. World Regional Office for Africa. Accessed at info.worldbank.org/etools/docs/library/206860/Migration%20study%20AFRO.pdf.

Bangkok Post. 2010. English medical school programmes under fire. February 15. Accessed on May 21, 2015 at r0ck-and-rosses.blogspot.fr/2010/02/english-medical-school-programmes-under.html

Bhargava, A., and F. Docquier. 2008. HIV pandemic, medical brain drain, and economic development in Sub-Saharan Africa. *World Bank Economic Review* 22(2):345–366.

Bhargava, A., F. Docquier, and Y. Moullan. 2010. Revised panel data set on physician emigration 1991–2004. February. Washington, DC: World Bank.

—. 2011. Modeling the effects of physician emigration on human development. *Economics and Human Biology* 9(2):172–183.

Carrera, P. M., and J. F. Bridges. 2006. Globalization and healthcare: understanding health and medical tourism. *Expert Review of Pharmacoeconomics and Outcomes Research* 6(4):447–454. doi:10.1586/14737167.6.4.447.

Chauvet, L., F. Gubert, and S. Mesplé-Somps. 2008. Are remittances more effective than aid to

improve child health? An empirical assessment using inter and intra-country data. Presented at the Paper prepared for the ABCDE Conference, Cape Town, South Africa.

Chee, H. L. 2010. Medical tourism and the state in Malaysia and Singapore. *Global Social Policy* 10(3):336–357.

Clemens, M. A. 2013. What do we know about skilled migration and development? Migration Policy Institute Policy Brief (3).

Collier, P. 2013. *Exodus: Immigration and Mulitculturalism in the 21st Century*. London: Penguin Books.

Connell, J. 2011. A new inequality? Privatisation, urban bias, migration and medical tourism. *Asia Pacific Viewpoint* 52(3):260–271. doi:10.1111/j.1467-8373.2011.01454.x.

Connell, J., and R. P. Brown. 2004. The remittances of migrant Tongan and Samoan nurses from Australia. *Human Resources for Health* 2(1):2. doi:10.1186/1478-4491-2-2.

Connor, P., D. Cohn, A. Gonzalez-barrerra, and R. Oates. 2013. Changing Patterns of Global Migration and Remittances: More migrants in U. S. and other wealthy countries; more money to middle-income countries. Pew Research Center. Accessed at www.pewsocialtrends.org/files/2013/12/global-migration-final_12-2013.pdf.

Department of Statistics, Singapore. 2012. *Yearbook of Statistics*. Singapore: Singapore Department of Statistics.

Docquier, F., O. Lohest, and A. Marfouk. 2007. Brain drain in developing countries. The *World Bank Economic Review* 21(2):193–218.

Gallup. 2010. Many in Asia travel domestically for medical care: Households seek care inside and outside their home countries. Accessed at www.gallup.com/poll/143048/asia-travel-domestically-medical-care.aspx.

García-prado, A., and P. González. 2011. Whom do physicians work for? An analysis of dual practice in the health sector. *Journal of Health Politics, Policy and Law* 36(2):265–294. doi:10.1215/03616878-1222721.

Gibson, J., and D. Mckenzie. 2011a. Eight Questions about Brain Drain. *Journal of Economic Perspectives* 25(3):107–128.

—. 2011b. The microeconomic determinants of emigration and return migration of the best and brightest: Evidence from the Pacific. *Journal of Development Economics* 95(1):18–29. doi:10.1016/j.jdeveco.2009.11.002.

Henderson, L. N., and J. Tulloch. 2008. Incentives for retaining and motivating health-workers in Pacific and Asian countries. *Human Resources for Health* 6:18. doi:10.1186/1478-4491-6-

Herberholz, C., and S. Supakankunti. 2013. *Medical tourism in Malaysia, Singapore and Thailand*. Centre for Health Economics, Faculty of Economics, Chulalongkorn University.

Hipgrave, D. B., and K. Hort. 2013. Dual practice by doctors working in South and East Asia: A review of its origins, scope and impact, and the options for regulation. *Health Policy and Planning* doi:10.1093/heapol/czt053.

Hirschman, A. O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.

Kanchanachitra, C., M. Lindelow, T. Johnston, P. Hanvoravongchai, F. M. Lorenzo, N. L. Huong, S. A. Wilopo, and J. F. Dela Rosa. 2011. Human resources for health in Southeast Asia: Shortages, distributional challenges, and international trade in health services. *The Lancet* 377(9767):769–781. doi:10.1016/S0140-6736(10)62035-1.

Kruk, M. E., M. R. Prescott, H. de Pinho, and S. Galea. 2009. Are doctors and nurses associated with coverage of essential health services in developing countries? A cross-sectional study. *Human R esources for Health* 7:27. doi:10.1186/1478-4491-7-27.

Levin, A., and M. Kaddar. 2011. Role of the private sector in the provision of immunization services in low-and middle-income countries. *Health Policy and Planning* 26 (suppl. 1):i4–i12. doi:10.1093/heapol/czr037.

Loh, L. C., C. Ugarte-gil, and K. Darko. 2013. Private sector contributions and their effect on physician emigration in the developing world. *Bulletin of the WHO* 91(3):227–233. doi:10.2471/BLT.12.110791.

Meliala, A., K. Hort, and L. Trisnantoro. 2013. Addressing the unequal geographic distribution of specialist doctors in Indonesia: The role of the private sector and effectiveness of current regulations. *Social Science and Medicine* 82:30–34. doi:10.1016/j.socscimed.2013.01.029.

MOH (Ministry of Health) Malaysia. 2012. *Health Facts 2012*. Health Informatics Centre, Planning and Development Division.

MOPH (Ministry of Public Health) Thailand. 2010. Chapter 6.1: Health workforce. In Thai Health Profile 2008-10. Thailand: MOPH Thailand.

Moullan, Y. 2013. Can Foreign Health Assistance Reduce the Medical Brain Drain? Journal of Development Studies 49(10):1436–1452. doi:10.1080/00220388.2013.794261.

Okeke, E. N. 2013. Brain drain: Do economic conditions “push” doctors out of developing countries? Social Science and Medicine 98:169–178. doi:10.1016/j.socscimed.2013.09.010.

Phyu, Y. M., and W. Chotbenjakul. 2010. Medical tourism in Thailand and its impact on the

internal brain drain of doctors. Submitted masters thesis. Singapore: Lee Kuan Yew School of Public Policy, National University of Singapore.

Pocock, N. S., and K. H. Phua. 2011a. Medical tourism and policy implications for health systems: a conceptual framework from a comparative study of Thailand, Singapore and Malaysia. Globalization and Health 7(1):12–23. doi:10.1186/1744-8603-7-12.

—. 2011b. Trading health for wealth? *Asian Trends Monitoring Bulletin* 9. Singapore: Lee Kuan Yew School of Public Policy, National University of Singapore.

Saereeporncharenkul, K. 2011. Comparison of academic achievement between medical students recruited by state's medical school entrance selection and by Rangsit University's own examination. *Journal of the Medical Association of Thailand (Chotmaihet Thangphaet)* 94(Suppl. 2):S113–S118.

UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific). 2007. *Medical travel in Asia and the Pacific: challenges and opportunities*. Bangkok: UNESCAP.

Vujicic, M., P. Zurn, K. Diallo, O. Adams, and M. R. Dal Poz. 2004. The role of wages in the migration of health-care professionals from developing countries. *Human Resources for Health* 2(1):3. doi:10.1186/1478-4491-2-3.

Wanchaijiraboon, P. 2012. *Rural retention policy analysis: Thailand's 40 years experience*. Pullman Hotel, Thailand. December 6.

WHO (World Health Organization). 2006. *The World Health Report. Working together for Health*. Geneva: WHO.

—. 2009. *World Health Statistics*.

Wibulpolprasert, S., and C.-A. Pachanee. 2008. Addressing the internal brain drain of medical doctors in Thailand: The story and lesson learned. *Global Social Policy* 8(1):12–15. doi:10.1177/14680181080 080010104.

Wibulpolprasert, S., and P. Pengpaibon. 2003. Integrated strategies to tackle the inequitable distribution of doctors in Thailand: four decades of experience. *Human Resources for Health* 1(1):12. doi:10.1186/1478-4491-1-12.

Wiwanitkit, V. 2011. Mandatory rural service for health-care workers in Thailand. *Rural and Remote Health* 11(1):1583.

Author

Nicola Suyin Pocock

Doctoral student at the Gender Violence and Health Centre at the London School of Hygiene and Tropical Medicine (LSHTM). Her thesis explores the health needs of men trafficked for commercial fishing in Thailand. Prior to her studies at LSHTM, Nicola was the health systems researcher at the *Asian Trends Monitoring Bulletin*, a Rockefeller-foundation-funded project on pro-poor development based at the Lee Kuan Yew School of Public Policy, National University of Singapore.

Selective Immigration: Nurse Importation by Developed Countries

Barbara L. Brush

For over six decades, health-care institutions in the United States (US), particularly hospitals in large urban communities, have recruited internationally educated nurses to fill staff nurse vacancies. In more recent years, this practice has intensified in both scope and magnitude in the US and around the world. Nurses' international mobility, once a oneway exchange between a handful of developed nations and developing countries, has become a more complicated and circuitous stream, with global health-workers moving in new directions and creating new patterns (Kingma 2006). Greater competition for nurse migrants among a broader array of recruiting countries has created a market demand that translates into big business (Brush, Sochalski, and Berger 2004), and with it, more change, more competition, and more consequences.

In this paper, I examine current trends in global nurse migration, highlighting its effect on nurse workforce planning and development efforts in the US as well as select donor and recipient countries. As will be shown, the shortage of nurses is affecting every nation; many countries both send and receive nurses, while others are becoming increasingly reliant on internationally educated nurses or are experiencing nurse shortages of critical proportions themselves. There is increasing evidence, moreover, that measures to resolve local and national nurse shortages are interfering with international nurse workforce goals, including those set forth by the World Health Organization (WHO), the International Council of Nurses (ICN), and other international bodies. In many countries that provide nurses for export, demand for migrant nurses is exceeding their available supply and threatening their own population's health. Other nations, meanwhile,

have gained a foothold in the lucrative nurse migration enterprise and continue to import nurses to satisfy their staffing needs.

Changing US Nurse-Importation Patterns

The US has long recruited abroad to fill staff nurse vacancies, although the proportion of international to domestic nurses has been low. Findings from the 2008 National Sample Survey of Registered Nurses (NSSRN), for example, estimated that only 3.5% (or about 100,000) of all registered nurses (RNs) practicing in the US received their basic nursing education in another country (HRSA 2010). This number rose slightly to 5.4% in 2013 (Chen, Auerbach, Muench, Curry, and Bradley 2013) with nurses from the Philippines, Canada, India, and the United Kingdom (UK) leading in numbers. As has been true for decades, internationally educated nurses entering the US are also located unevenly across the nation; in 2008, nearly half worked in urban communities in three US states alone: 26% in California; 12% in New York; and 10% in Texas (HRSA 2010).

Newer trends, however, show that many hospitals across the US are importing nurses to meet their staffing needs, some for the first time. A 2007 analysis of international nurse trends showed that foreigntrained nurses represented 15.2% of new entrants to the US RN labor force in 2000 (Polsky, Ross, Brush, and Sochalski 2007) and appeared to be rising. Rural community hospitals, where nursing deficits are reaching crisis proportions, are demonstrating a sharp rise in foreign nurse use, as are long-term care (LTC) facilities and home-care agencies across the nation. Today, 28% of all internationally educated RNs and 74% of internationally educated licensed practical nurses (LPNs) work *outside* hospital settings, percentages that far exceed the proportion of US nurses in those settings (Pittman, Folsom, and Bass 2010).

Recruitment agencies in the US have capitalized on the nation’s continued reliance on internationally educated nurses, although, because there is no central registry of recruiters, one cannot accurately estimate the size of the industry or

the number of institutions who utilize their services. Of the 273 active recruitment agencies that were located by Pittman, Folsom and Bass in 2010, however, slightly more than half use a “placement” business model that charges health-care organizations a flat fee per recruited nurse (typically between $5,000 to $15,000). Others use a more lucrative “staffing” business model that essentially “leases” nurses to health-care organizations for short terms and then renegotiates new, and usually higher, fee contracts for longer periods. Of the 273 firms cited, 147 recruited broadly across the world but focused mainly on higher-resource countries or countries such as the Philippines, India, and China, which support nurse emigration. More concerning were that 74 (27%) companies admitted to active recruitment in 11 of the 57 countries identified by the World Health Organization (2006) as experiencing critical shortages of health-workers, 36 of which are located in Africa.

New Markets, New Competition

Along with the US, Ireland, New Zealand, Australia, the UK, Canada, and Saudi Arabia are the world's heaviest nurse recruiters (England and Henry 2013; Humphries, Brugha, and McGee 2012). The Philippines, long the world's leading nurse exporter, is now competing with other countries that are increasingly preparing nurses for the international marketplace. Over the past decade, for example, India significantly stepped up nurse exportation such that in 2004, it surpassed the Philippines in nurses admitted to the UK's Nurse Register for the first time (Nursing & Midwifery Council 2005). Indian nurses sitting for the US licensure examination rose twelve fold between 1996 and 2006 (from 1,981 to 24,242) (CGFNS 2005). [1] Today, while nurses from the Philippines still predominate in the US market, Indian, Caribbean, and sub-Saharan African nurses have inched up in numbers. South Korean nurses, currently the second highest number passing RN licensure examinations in the US (HRSA 2010), and Chinese nurses, discussed as "possible" or "potential" nurse migrants less than a decade ago, are now migrating abroad in such large numbers that there are concerns about the effect of the nurse brain drain on Taiwan's public health (Fang 2007).

The shift in countries sending nurses abroad also reflects a departure from nurse recruitment that previously focused primarily on countries with colonial linkages, i.e., the US and the Philippines and the UK and South Africa and Australia, as well as that traditional suppliers of nurses are experiencing their own nurse shortfall. As a consequence, recruiting countries that relied on familiar labor pipelines are looking elsewhere, and donor nations are themselves recruiting. Improved salaries remain the driving force for migration although nurses cite other motivations for accepting overseas positions, such as unsafe work conditions and limited career prospects at home (Kingma 2006).

Consequences of Change: India and the Philippines as Case Studies

To underscore today's shifting international nurse market and its cannibalistic tendency to feed richer nations with the resources of low-and middle-income countries, let us shift our lens to a closer examination of the Philippines—as the world's largest nurse exporter—and India, a rising competitor in the nurse exportation business.

The Philippines provides an important example of how international nurses' mobility affects local balances of health workforce and public health needs. The Philippines case study also highlights the commodification of human resources as a key national economic strategy. For example, over the past five years, in an effort to maintain its prominence in the global nurse marketplace, the Philippines has implemented new tactics for easing nurse exportation and ensuring employment of its migrating nurses, such as the creation of testing sites in Manila to facilitate nurses' preparation for practice in the United States. Efforts to manage migration to neighboring, as well as new, countries have also been instituted in the form of bilateral economic agreements. The 2006 Japanese-Philippines Economic Partnership Agreement (JPEPA), which promoted the flow of goods, services, and capital between Japan and the Philippines, also contained unique provisions allowing Filipino nurses to work in Japan. The idea was that the inflow of several thousand Filipino nurses would satisfy the need for more health-care workers for Japan's aging population and, in return, advance economic development between the two nations (JPEPA 2006). After five years, however, few nurses availed themselves of the opportunity, likely because numerous other and more lucrative offers awaited them. Not to be dissuaded, however, the Philippines and Germany entered into a bilateral agreement in December 2013; with four Filipino nurses entering the German

labor market for the first time. Pre-screened nurse applicants are required to complete German language training and pass the German nurse licensure examination. The four new applicants are currently working as nurse assistants until completion of all requirements, and another group was expected to arrive in January 2014.

In recent years, the Philippines has struggled to determine how best to lose nurses, gain remittances, and maintain the public's health. Filipino nurses have been sought after worldwide, yet find it difficult to find fulfilling and well-paying positions at home (Dimaya, McEwen, Curry, and Bradley 2012). Inadequate wages and reports of high patientto-nurse ratios have led most of the top graduates of the Philippines' nursing programs, as well as the country's most seasoned nurses, to migrate, creating anxiety that care rendered to the local populace, especially those in rural communities, is in the hands of less experienced, less qualified personnel. A further complication is the country's perennially low national pass rate on the Philippines' nurse licensure examination, thought to be related to the unfettered growth in nursing programs, whose large student numbers outpace available nurse faculty supply and whose educational standards are questionable. That only 16,908 (34%) of 49,000 exam takers passed in 2012 (Republic of the Philippines Professional Commission 2012) suggests that the problem continues, and, if most of that third then migrate, a considerably thin pool of licensed nurses will remain at home. Thus, while Filipino nurses working abroad remit wages that may improve the Philippines' economic health, there is a potential cost to the nation's public health.

Underlying the surge in Indian nurse emigration is the creation of new businesses focusing on global nurse staffing. The largest, the Apollo Institute of Health Sciences, represents a network of Indian hospitals that developed a for-profit Global Nurse Program to prepare hundreds of nurses specifically for export to the US, the UK, and Australia (Evans 2006). Max India's three-year international nursing program also prepares nurses for the global market, while World Health Resources and Athma Healthcare partner independently with

Arizona-based United Staff Solutions to bring Indian nurses to their hospitals. The latter program, essentially a private bilateral agreement between health-care entities, mandates that its nurses participate in a 30-day orientation to American culture along with speech therapy for accent reduction (Evans 2006).

A 2006 multisite survey of 448 hospital-based nurses practicing across India revealed that 63% intended to emigrate, citing as motivating factors dissatisfaction with work conditions and the low esteem placed on nurse's work (Thomas 2006). Better income prospects and professional development opportunities have also been cited as common reasons for accepting overseas positions. In a one-year period between 2004 and 2005, 189 nurses resigned from Holy Family Hospital in New Delhi to take nursing positions in Saudi Arabia, the UK, Ireland, and the US (David 2005). While the hospital rapidly replaced them because of New Delhi's urban appeal and the hospital's ability to attract new nurses readying for export, the depletion of the country's more qualified nurses is concerning (Hawkes, Kolenko, Shockness, and Diwaker 2009). There is already evidence of disparate childhood immunization rates across the country along with rising rates of non-communicable disease (e. g., heart disease) in rural communities, pointing to the need for policies to address adequate health system support—including health-worker planning—to avoid a crisis in health-care.

“Managing” Global Nurse-Workforce Imbalance

As the international trade in nurses grows virtually unabated, international organizations have designed initiatives and created policies to address nurse workforce development and retention. In 2001, the International Council of Nurses published its position statement governing nurse mobility and the ethical recruitment of nurses internationally (ICN 2001). In 2006, WHO issued “Working Together for Health,” calling for collective strategies to improve nurse education and employment to promote retention and lessen national nurse shortages. The Organization for Security and Co-operation in Europe and the International Organization for Migration (2006) urge countries to practice managed migration to meet the needs and preserve the rights of key players involved in the global nurse market, while other stakeholders support labor migration policies that maintain healthy systems of care for local populations.

These efforts, aimed largely at national policymakers and directors of care delivery and provider education systems, are hardly new. Nearly 30 years ago, at the 1986 Acapulco Council for International Organizations of Medical Sciences (CIOMS) meeting, WHO Director Dr. H. Mahler argued that adequate health professions planning, production, and management depended on the collaboration between educators, employers, policymakers, and society and that, without such collaboration, national health-for-all strategies would be implausible (Bańkowski and Fülöp 1987). Today, many of the global health-manpower problems discussed in Acapulco persist or have escalated in three key areas: maldistribution (especially between rural and urban communities), inequalities in health-care access and provider-to-patient ratios, and inadequate resource allocation for training and remuneration.

Recruiting countries too are facing internal pressures while attempting to balance nurse demand with an international supply of nurses. In August 2006, the UK

limited its nurse recruitment to European Union (EU) countries, granting work permits only to nurses from non-EU countries if National Health Services' institutions demonstrated that jobs could not be filled by UK or EU applicants (Depasupil 2006). The American Nurses' Association, vocal about escalating nurse migration and its opposition to US immigration policies that lift visa caps for importing nurses, call for "homegrown solutions" rather than reliance on foreign nurses to fill nurse shortfall (Doheny 2006, 39). If institutions do hire from abroad, however, the US's Voluntary Code of Ethical Conduct for the Recruitment of Foreign Nurses lays out clear guidelines for ethical hiring and employment practices (Cho, Masselink, Jones, and Mark 2011).

Conclusion

Despite ongoing debate about how best to manage nurses' international mobility, nurse migration remains relatively unchecked, uncoordinated, and individualized, such that some countries suffer from its effects while others benefit. This is not surprising given the varied nature of nurse migration between countries, inconsistent approaches to nurse-migration management, and the proliferation of independent for-profit recruitment agencies.

It has been previously argued that strategies to manage nurse migration can only achieve success if all stakeholders are involved (Schmid 2004). Others contend that policies which remain largely directed at the symptoms of the problem rather than the cause create further workforce inequities. Still others suggest that more data is needed to develop and finance an international framework that creates equitable migration pathways. In any case, to be effective, nurse-migration policy and guidelines for ethical recruitment must consider the specific needs and motivations of various stakeholders as well as ways to more carefully regulate the private business interests of recruiters and others actively recruiting nurses.

At the most basic level, global policies to manage nurse migration fail because neither developed or developing countries are creating sustainable professional nurse workforces that meet their own needs. Bilateral agreements between some countries and efforts by others to manage international nurse recruitment are a beginning but fail to address fundamental deficiencies in the systems that created the need for such strategies in the first place. Whether losing nurses through migration or attrition, countries lower their capacity to provide adequate quality health-care to their constituents when they underinvest in nursing. National policies must first consider how to maximize human resources to build nursing capacity without looking outward for solutions. This includes improving nurses'

work conditions, educational capacity, salaries, professional growth and development, and broader roles in public health policy and practice. When nurses choose to migrate, they should be uniformly regulated through governments rather than through independent agencies so that their paths to employment are fair, visible, and measurable. Unless these efforts are coordinated between nations and consideration is given to who will implement, regulate, and measure their effectiveness, they are bound to fail again and again.

Bibliography

References

Bańkowski, Z., and T. Fülöp. 1987. *Health Manpower Out of Balance: Conflicts and Prospects. Highlights of the Acapulco Conference*. XXth CIOMS Conference, Acapulco, Mexico, 7–12 September 1986.

Geneva: Council for International Organizations of Medical Sciences.

Brush, B. L., J. Sochalski, and A. M. Berger. 2004. Imported care: Recruiting foreign nurses to U. S. health-care facilities. *Health Affairs* 23(3):78–87.

CGFNS (Commission on Graduates of Foreign Nursing Schools). 2005. Credentialing verification service for New York state data 2005.

Chen, P. G., D. I. Auerbach, U. Muench, L. A. Curry, and E. H. Bradley. 2013. Policy solutions to address the foreign-educated and foreign-born health-care workforce in the United States. *Health Affairs* 32(11):1906–1913.

Cho, S. H., L. E. Masselink, C. B. Jones, and B. A. Mark. 2011. Internationally educated nurse hiring: Geographic distribution, community, and hospital characteristics. *Nursing Economics* 29(6):308–316.

David, E. 2005. India is losing its nurses to the West. *Health Progress* 86(6):36–36 Catholic Health Association of the United States. Retrieved January 3, 2014, at www.chausa.org/publications/health-progress/article/november-december-2005/india-is-losing-its-nurses-to-the-west.

Depasupil, W. B. 2006. No hiring ban of RP nurses in UK. *The Manila Times*, August 9.

Dimaya, R. M., M. K. Mcewen, L. A. Curry, and E. H. Bradley. 2012. Managing health-worker migration: A qualitative study of the Philippine response to nurse brain drain. *Human Resources for Health* 10(1):47.

Doheny, K. 2006. Treating the nurse shortage. *Workforce Management* 85(19):39–42. Accessed on November 9, 2006, at www.workforce.com/articles/treating-the-nurse-shortage.

England, K., and C. Henry. 2013. Care work, migration and citizenship: International nurses in the UK. *Social and Cultural Geography* 14(5):558–574.

Evans, M. 2006. Help from India Inc.: For-profit enterprises train nurses headed abroad. *Modern Healthcare* 36(2):28–30.

Fang, Z. Z. 2007. Potential of China in global nurse migration. *Health Services Research* 42(3,

Part 2):1419–1428.

Hawkes, M., M. Kolenko, M. Shockness, and K. Diwaker. 2009. Nursing brain drain from India. *Human Resources for Health* 7:5.

HRSA (Health Resources and Services Administration). 2010. Preliminary findings: 2008 national sample survey of registered nurses. Accessed at bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyinitial2008.pdf.

Humphries, N., R. Brugha, and H. Mcgee. 2012. Nurse migration and health workforce planning: Ireland as illustrative of international challenges. *Health Policy* 107(1):44–53.

ICN (International Council of Nurses). 2001. Position statement on ethical nurse recruitment. Accessed on August 18, 2006 at www.icn.ch/psrecruit01.htm.

JPEPA (Japan–Philippines Economic Partnership Agreement). 2006. Accessed on May 21, 2015 at www.mofa.go.jp/policy/economy/fta/philippines.html.

Kingma, M. 2006. *Nurses on the Move. Migration and the Global Health-Care Economy*. Ithaca, NY: IRL Press. Nursing & Midwifery Council. 2005. Statistical analysis of the register. 1 April 2004 to 31 March 2005.

OSCE (Organization for Security and Co-operation in Europe), IOM (International Organization for Migration), and ILO (International Labour Office). 2006. *Handbook on Establishing Effective Labour Migration Policies in Countries of Origin and Destination*. Accessed on May 21, 2015 at http://www.osce.org/files/documents/c/9/19242.pdf.

Pittman, P. M., A. J. Folsom, and E. Bass. 2010. U. S.-based recruitment of foreign-educated nurses: Implications of an emerging industry. *The American Journal of Nursing* 110(6):38–48.

Polsky, D., S. J. Ross, B. L. Brush, and J. Sochalski. 2007. Trends in characteristics and country of origin among foreign-trained nurses in the United States, 1990 and 2000. *American Journal of Public Health* 97(5):895–899.

Republic of the Philippines Professional Regulation Commission. 2012. Statistics of 2012 Nurse licensure examination: Results. Accessed on February 3, 2015, at www.prc.gov.ph/uploaded/documents/NURS1212ft.pdf.

Schmid, K. 2004. Strategies to manage migration of health professionals to protect national health systems will be successful only if all stakeholders are involved in the process: Round table discussion. *Bulletin of the World Health Organization* 82(8):616–623.

Thomas, P. 2006. The international migration of Indian nurses. *International Nursing Review* 53(4):277–283.

WHO (World Health Organization). 2006. *The World Health Report. Working together for*

Health. Geneva: WHO.

Notes

1 Commission on Graduates of Foreign Nursing Schools (CGFNS) data compiled with assistance from Catherine R. Davis PhD, Director of Global Research and Test Administration, CGFNS, Philadelphia, Pennsylvania.

Author

Barbara L. Brush

The Lake Professor of Nursing in Population Health and an associate professor at the University of Michigan. Her research focuses on international nurse migration and nurses' work around the globe, including controversial aspects related to racial segregation and immigration policy, for which she is regularly consulted. She completed her baccalaureate degree from the University of Massachusetts and her master and doctoral degrees from the University of Pennsylvania.

Part 4. Organs for Sale

Is Transplantation Tourism a Form of Cannibal Market?

Philippe Steiner

The word “cannibalism” was already used in reference to transplantation when the so-called Pittsburg Protocol set out to remove organs from non-heart-beating patients. Renée Fox, a sociologist who began studying transplantation in the mid-1990s, considered the protocol so aggressive—bodies brought to the operating room for organ removal just a few minutes after the heart stopped beating—that she chose the term of “cannibalism” to describe it. It was a strong claim, indeed, since cannibalism is considered to be the sheer negation of humanity. However, it is a social practice that anthropologists have found in almost every culture and civilization. [1]

Medical cannibalism refers to dead bodies being harvested of any body parts fitting the needs of the living. However, neither Fox nor Guille-Escuret (2012) has considered the issue of a cannibal market.

This section offers some insights on this topic within the current practices in transplantation, where there are distinct differences between situations involving foreigners and those involving people of the same country, tribe, or similar group. Indeed, the differences between transplant tourism and national market transplantation can be compared to the differences between exo- and endo-cannibalism.

The current policy in transplantation is to fight transplant tourism, as the Declaration of Istanbul clears in 2008. However, data collected by the European Union indicates that about one tenth of kidney transplantations involve transplant tourism. The lack of a sufficient number of organs, rising economic inequalities, and the existence of corruption in poorly state-managed countries

are the main factors behind this tragic situation. Transplant tourism involves movement from one country to another. When all the cases Jacob A. Akoh describes are considered together, transplant tourism boils down to a movement of resources (the recipient and/or the vendor, and sometimes the surgeon) towards a medical isolate (a place where illegal transplantation is performed) before going back home. In this regard, it resembles the Atlantic slave trade, which also entailed the movement of resources to and from a “sugar production isolate” (plantations located on islands most of the time). [2] However, if men and resources travel from country to country, so do organizations, as Rafael Matesanz demonstrates. The founding father of the famous “Spanish model” explains how it can be implemented in Latin America in order to expand the number of organs made available to the medical systems there. This is an obvious and serious way to put a stop to transplant tourism.

Finally, Mitra Mahdavi-Mazdeh considers the flip side of the coin. Iran is the only country to have made the bold move to legalize a regulated market of living vendors—I see no reason to use euphemized words, such as “paid donors”—for kidney transplantation. This system is far from functioning in a satisfactory way, since the regulation is far from optimal, as she acknowledges; however, as long as the recipient must be an Iranian citizen, this system differs from transplant tourism and should be examined in terms of its national outcomes, notably those concerning the vendors and their financial and social fate after the selling of one part of their body.

Bibliography

References

Fox, R. C. 1993. “An ignoble form of cannibalism”: Reflections on the Pittsburgh protocol for procuring organs from non-heart-beating cadavers. *Kennedy Institute of Ethics Journal* 3(2):231–239.

Guille-Escuret, G. 2012. *Les mangeurs d’autres. Civilisation et cannibalisme*. Paris: Éditions de l’EHESS.

Steiner, Philippe. 2010. *La transplantation d’organes. Un commerce nouveau entre les êtres humains*. Paris: Gallimard.

Notes

1 See the general presentation of the issue in Guille-Escuret (2012).
2 This idea is elaborated further in chapter 6 of Steiner 2010.

Author

Philippe Steiner

Professor of sociology at the Paris-Sorbonne University and senior member of the Institut universitaire de France. He has recently published *La transplantation d’organes: un commerce nouveau entre les êtres humains*, Paris, Gallimard, 2010; *Durkheim and the Birth of Economic Sociology*, Princeton, Princeton University Press, 2011; and *Calcul et morale. Coût de l’esclavage et valeur de l’émancipation*, (with C. Oudin-Bastide), Paris, Albin Michel, 2015.

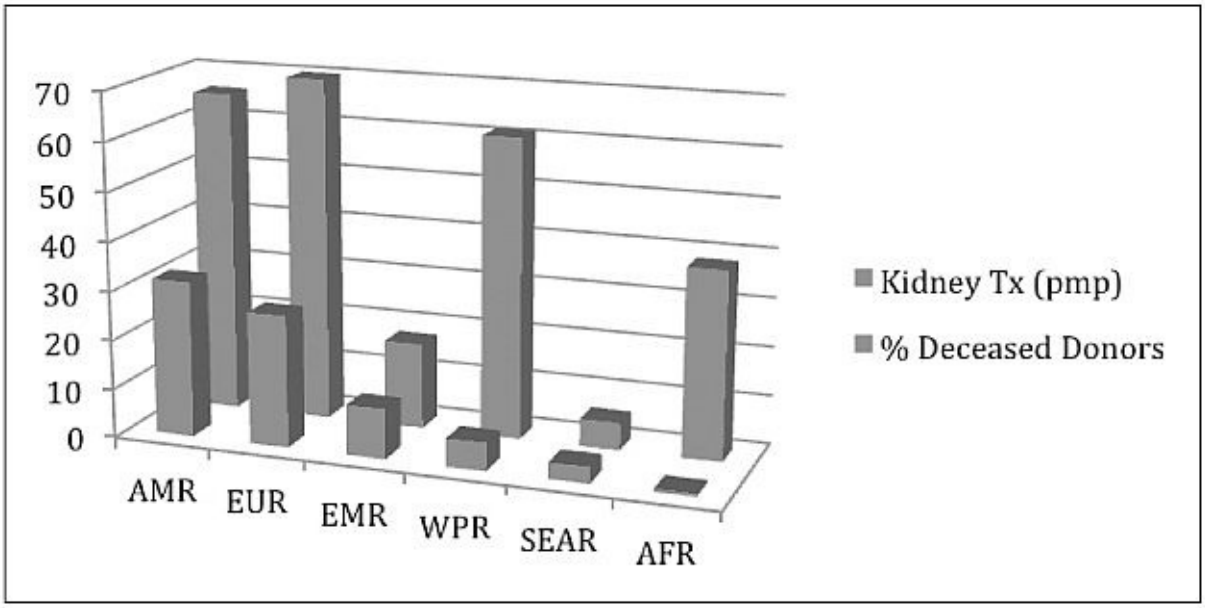
State of the Trade: World Transplant Tourism

Jacob A. Akoh

The General Agreement for Trade in Services (GATS) has led to liberalization of the international health-care market with consequent growth in medical tourism. Unlike general medical tourism, transplant tourism is associated with many ethical issues, as it is closely linked with organ trafficking and commercialization.

About 114,690 transplants (77,818 renal) were performed throughout the world in 2012, representing approximately 10% of the global demand (WHO-ONT 2012). Transplant rates vary substantially around the world with important regional differences (Figure 1). This is likely due to differences in rates of end-organ diseases, economic differences in the ability to provide transplants, cultural differences that might support or hinder organ donation and transplantation, and reporting differences (Kasiske *et al.* 2013). According to Shimazono's previous estimation (Shimazono 2007), between 3,800 and 7,600 (5%–10%) of the 77,818 renal transplants performed worldwide in 2012 were commercial renal transplants. The key stakeholders of commercial renal transplants include: patients on the waiting lists in developed countries or not on any list in developing countries; dialysis funding bodies; brokers: doctors; transplant centers; organ-exporting or-selling countries; and organ vendors. This chapter presents an overview of the state of transplant tourism in the world and the key challenges with such transplantation.

Figure 1. Regional differences in kidney transplantation (Data from the WHO-ONT Global Observatory on Donation and Transplantation 2012).

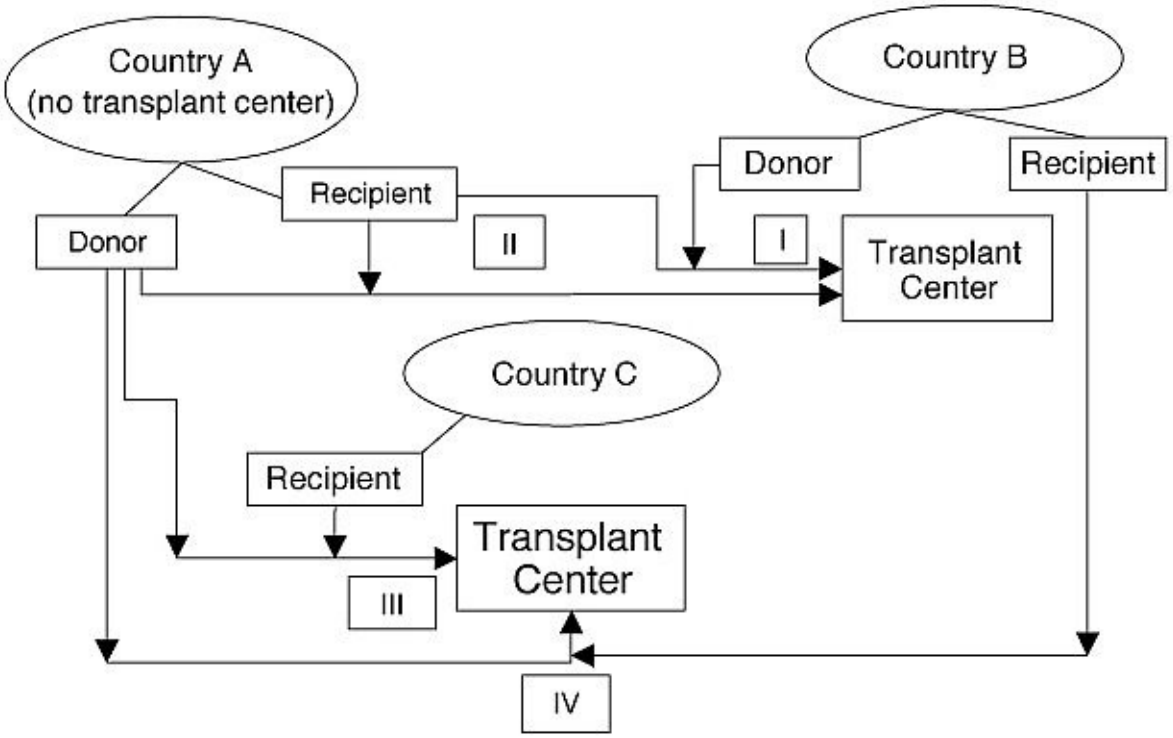


AMR The Americas, *EUR* Europe, *EMR* East Mediterranean, *WPR* Western Pacific, *SEAR* South East Asia, *AFR* Africa, *Tx* transplantation.

Types of tourism

To address the growing problems of organ sales, a summit meeting was held in Istanbul bringing together more than 150 representatives of scientific and medical bodies, governments, social scientists and ethicists from 78 countries. According to the resulting Declaration of Istanbul (2008), *organ trafficking* entails the “recruitment, transport, transfer, harboring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power, of a position of vulnerability, of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation by the removal of organs, tissues or cells for transplantation”; and *travel for transplantation* becomes transplant tourism when it involves commercialization or organ trafficking or deprives the local population of their services. In most instances of transplant tourism, patients travel on their own to obtain organs through the organ trade or through other means that contravene the regulatory framework of their countries of origin. According to Shimazono (2007), transplant tourism takes various forms as depicted in Figure 2 (Akoh 2012).

Figure 2. Types of transplant tourism.



Model I: Recipient (R) travels to country B where donor (D) and transplant center (TC) are.
Model II: R and D travel to another country for transplantation.
Model III: D travels to country C where R and TC are.
Model IV: D and R residing in different countries travel to another country (C) for transplantation.
(Culled from Akoh 2012.)

Ethical dilemmas

Many clinical and bioethical concerns surround transplant tourism, with divergent views across the world. In some parts of the world, transplant tourism is associated with the practice of organ sales by entrepreneurs for financial gain through exploitation of the poor, for the benefit of the wealthy. Such practices denigrate human dignity by commodification or objectification of body parts—against World Health Organization (WHO) Guiding Principles on Human Cell, Tissue and Organ Transplantation (WHO 2010). Shroff (2009) opined that in many affording families, even when there are relatives in good health who could donate, the general argument that is often presented is “why donate and take any risks when you could buy a kidney?” Transplant tourism undermines altruistic donation of deceased organs, encourages exploitation of kidney donors by middlemen, and endangers the lives of donors undergoing nephrectomy in poor, unregulated conditions (Rizvi 2009).

Consent to “donation” or, more appropriately, selling an organ can hardly be considered as informed as it is not known how much information prospective vendors are given and whether they have any access to redress if things go wrong. Many vendors cite family pressure as a reason for selling an organ—a clear case of coercion by family or significant others. Transplant tourism is associated with lack of appropriate assessment prior to “donation” and poor follow-up of vendors—considered to be unethical practices.

There is intense debate about what to do with newly transplanted patients returning from abroad with complications (Cohen 2009). This issue challenges traditional professional principles of beneficence and non-judgmental regard. Adopting positions based solely on high moral grounds without consideration of the plight of the affected patients might not be appropriate (Schiano and Rhodes 2010). Not condoning transplant tourism does not abrogate a physician’s right to

care for such patients. It is thought that ethical principles mandate transplant physicians to provide adequate care for returning transplant tourists.

Drivers of transplant tourism

Transplant tourism is facilitated by several factors including inadequate/absent transplant services, ineffective measures to address organ shortage, ease of travel across the world, legal loopholes in different countries, difficulty in ensuring compliance with international law, competing cultural values, risk of death on the waiting list, and the widening gap between the rich and the poor (Kelly 2013).

Need for transplantation

In developing countries, an ageing population combined with a high incidence of type 2 diabetes mellitus and hypertension has led to an increased burden of chronic kidney disease. Efforts at primary prevention are sporadic and the majority of those with established renal failure (ERF) die because of lack of funds, as few can afford regular maintenance dialysis or renal transplantation. Other reasons for the grim outlook include the lack of dialysis facilities close to home or the debilitating effects of frequent travel over long distances for dialysis. Rich patients living in such economies would be tempted to seek help elsewhere.

In countries with developed transplant services, lengthy waiting times can contribute to increased risk for clinical deterioration, reduced quality of life, and in many cases, removal from the list. In the US, the median waiting time for transplantation increased from 2.7 years in 1998 to 4.2 years in 2008, and 20% of adult patients first listed for a kidney transplant in 2009 had either died or been removed from the waiting list by 36 months after listing (Matas *et al.* 2014). Some patients whose immediate prospects of being transplanted are low travel to other countries where they can acquire kidneys either from executed prisoners or live unrelated donors (Kennedy *et al.* 2005). Unlike many illegal markets, this one is driven by the need of desperate patients with established renal failure at risk of increased morbidity and mortality.

Inadequate organ donation

The lack of legislation and infrastructure has prevented growth of deceased donor programs in developing countries, so living donors have continued to be the major source of transplantable kidneys. Even the most well-developed deceased donor programs like the Spanish program (with a deceased donor kidney transplant rate of 46.3 per million population [pmp] in 2011) can barely cover 50% of its waiting list (4,493 = 95.6 pmp) due to high demand for organs (WHO-ONT 2012). The establishment of live-unrelated-donor transplantation as a viable option has inadvertently allowed donor recruitment by illegal practices such as coercion or commercialization.

Competing interests

Though commercial transplantation is prohibited in most countries (Kennedy *et al.* 2005), the practice of organ sales is common in some parts of the world. It is felt in some quarters that many WHO resolutions represent an imposition of the values and interests of Western countries and do not take into consideration the differing cultural and sociopolitical circumstances in a global economy. Barsoum (2008) controversially stated that certain cultures and developing economies perceive transplant tourism as a human-right that meets the demands of all stakeholders and should therefore be organized rather than declined in the interest of Western countries.

Economic inequality

Commercial renal transplant is made possible because a high proportion of the population in developing countries live below the poverty line and some believe falsely that selling an organ can positively change their circumstances (Tong *et al.* 2012). It is not surprising therefore that the known major organ exporting countries (transplant tourism hubs) fall within the developing-economy category. This economic inequality is considered by some as a new form of slavery, as the vendor’s freedom of choice is compromised.

Miscellaneous

Globalization along with easier communication and transportation enable traffickers to move their operations fluidly, taking advantage of legal loopholes that exist in various countries. As a result, enforcement in one country merely prompts traffickers to seek other countries with more favorable legal environments (Kelly 2013; Rizvi 2009). Also, manipulation of the Internet allows brokers to operate despite prohibitive laws.

Commercial kidney donors

The risks associated with living kidney donation, such as surgical complications, deterioration of remaining kidney function, and death (Mjøen *et al.* 2014; Tong *et al.* 2012), also apply to commercial kidney donors. A recent report from Norway, a country with a well-established living-donor program with adequate follow-up, has highlighted significant long-term risks in non-commercial kidney donors. Mjøen *et al.* (2014) compared long-term renal function, cardiovascular, and all-cause mortality in 1,901 living kidney donors (median follow-up of 15.1 years) with a control group of 32,621 individuals who would have been eligible for kidney donation between 1963 and 2007. They showed that the hazard ratio for all-cause mortality was significantly increased to 1.30 (95% confidence interval 1.11–1.52), cardiovascular death was 1.40 (1.03–1.91), and the risk of established renal failure was 11.38 (4.37–29.6) for donors. The outcome of commercial kidney donors may in fact be worse than for altruistic donors reported by Mjøen *et al.* (2014) due to the suboptimal care experienced by organ vendors.

Naqvi *et al.* (2008) conducted a cross-sectional survey of 104 kidney vendors in Pakistan, comparing them to 184 matched living related kidney donors from their center and reported a higher rate of hypertension (17% versus 9.2%, p = 0.04), lower glomerular filtration rate (70.94 +/–14.2 versus 95.4 +/–20.44, p = 0.0001), and higher hepatitis C positivity (27% versus 1.0%, p = 0.0001) respectively. Several studies show deterioration in the health of commercial kidney donors possibly due to insufficient donor assessment and pre-existing compromised health conditions, and lack of economic benefit from the sale of an organ (Budiani 2006; Goyal, Mehta, Schneiderman and Sehgal 2002; Naqvi *et al.* 2008; Zargooshi 2001).

Public attitude to commercial kidney donors is in sharp contrast to altruistic

living kidney donors who were supported by a public anxious to ensure their health and well-being (Tong, Chapman, Wong, Josephson, and Craig 2013). Tong *et al.* (2012) reviewed seven studies involving over 676 commercial kidney donors that identified: desperation (the participants' decision to sell their kidney was forced by poverty or to fulfill a family obligation), despair (shame and secrecy, loss of livelihood, and regret), and debasement (deception by brokers and recipients, victimization by the hospital, stigmatization by community, and rejection by family) as the major issues in commercial kidney donation. Budiani reported that 91% of 142 vendors in Egypt expressed social isolation about their donation and 94% regretted donating (Budiani 2006). Furthermore, a kidney sale does not solve the most frequently given reason for being a commercial kidney donor (Budiani 2006; Goyal *et al.* 2002; Tong *et al.* 2012; Zargooshi 2001). A long-term financial disadvantage is reported following nephrectomy from a compromised ability to generate the prior income level.

Transplant recipient outcomes

There are numerous reports indicating that transplant tourism is associated with a high incidence of surgical complications, acute rejection, and invasive infection including the transmission of HIV and hepatitis B and C viruses, which cause major morbidity and mortality (Table 1) (Alghamdi *et al.* 2010; Ivanovski *et al.* 2011; Kennedy *et al.* 2005; Krishnan *et al.* 2010; Kwon, Lee and Ha 2011; Salahudeen *et al.* 1990;

Table 1. Outcome for recipients of commercial kidney donation (Akoh 2012).

Study (country)	N	GS (%) 1-yr	PS (%) 1-yr	Comments
Alghamdi (United States) 1998–2008	93T 72H	100 100	100 100	Transplants performed in Pakistan, the Phillipines and Egypt. AR 27.9% vs. 9.9% CMV infection 15.1% vs. 5.6% HCV 7.5% vs. 0%
Ivanovski (Macedonia) 2006–2007	36 T 40 H	60.0 100	78.0 100	India and Pakistan; 16/36 wound infections; active HCV+ in 9; 7 died; 56% developed complication in early postop.
Kennedy (Australia) 1990–2004	16 T	66.0	85.0	India and China. Aspergillosis in one patient.
Krishnan (UK) 1996–2006	36T 40H	87 97.5	83 97.5	Indonesians in the UK. Poor clinical outcome in tourists—42% had major infections.
Kwon (S Korea) 1999–2005	462 T	96.8 (dc)	96.5	All transplants performed in China. 15 died; 42.5% complication rate.
Salahudeen (UAE/ Oman), 1984–1988	131T		81.5	Transplants performed in India 25 deaths in first year; HIV = 5; HBV = 3.
Tsai (UAE) 1987–2006	215 T 321 H	55 60	81.5 89.3	China; 10-yr survival figures; Higher risk of cancer in T group.

AR acute rejection; *CMV* cytomegalovirus; *HBV* hepatitis B virus; *HCV* hepatitis C virus; *GS* graft survival; *PS* patient survival; *T* tourism; *H* home country.

Tsai *et al.*, 2011). Invasive fungal infections, frequently originating at the graft site, have emerged as a serious complication of commercial renal transplants and are associated with high rates of graft loss and death. Nineteen incidences of invasive fungal infections occurring in 17 patients resulting in graft loss or death in 13/17 (76%) of patients and overall mortality of 59% (10/17) have been described (Shoham *et al.* 2010).

In discussing the consequences of organ trade in Pakistan and of a regulated paid donor model in Iran on transplant activities in these countries, Rizvi *et al.* (2009) showed that recipients of commercial kidney donor had poor outcome and high infectious complications in Pakistan, whereas graft survival rates were similar to those for living related donors in Iran. A comprehensive review of commercial renal transplantation performed in several developing countries showed patient and graft survival were generally inferior to internationally accepted standards (Sajjad, Baines, Patel, Salifu, and Jindal 2008). However, some studies report survival figures comparable to local standards (Table 1).

Global reality

The global reality is that demand for transplantation far outstrips supply of organs throughout the world (WHO-ONT 2012). ERF patients are desperate for transplantation and some die on the kidney waiting list (Matas *et al.* 2014). In many developing countries, there are no deceased-donor programs and no dialysis facilities. It is thought that transplant tourism functions according to market laws and is profit-driven, as opposed to the legal organ-exchange programs in Europe and the US, which are non-profit and patient-oriented. The WHO, in collaboration with The Transplantation Society and the International Society of Nephrology, has produced several resolutions aimed at curtailing transplant tourism, facilitating transplantation and national self-sufficiency (WHO 2010; The Madrid Resolution 2011) with varying uptake among the 194 WHO member states. Several countries have laws prohibiting transplant tourism and consequently, where this practice takes place illegally, it is unregulated. Given the desperate desire of patients to undergo organ transplantation, the risk of exploitation should not be underestimated.

Way forward

It is widely acknowledged that widespread criminalization of transplant tourism, worldwide development of organ donation and transplant services, and achievement of self-sufficiency in organ donation by nation states would provide the most potent antidote to transplant tourism (Matas *et al.* 2014; WHO 2010; The Declaration of Istanbul 2008; The Madrid Resolution 2011). Matas *et al.* (2014) opined that to effectively address this problem, the international community must craft a new binding instrument that uniformly criminalizes organ trafficking while simultaneously encouraging domestic legislation to address the organ shortage. Meanwhile other options should be considered.

Legalized market

Proponents argue that vendors ought to be allowed respect of their autonomy to do as they wish with their own organs. They point out that patients from countries with Western moral standards quickly lose these when they become desperate for transplantation. They believe that allowing a legalized market would eliminate many of the negative effects of the organ trade. The main arguments against a legalized market relate to concerns about justice and fairness as well as disproportionate rewarding of the better-off (Demme 2010). It can also be argued that commercialization of living kidney donation does not serve the interests of the donors but endangers the health of recipients and undermines healthy development of international transplantation.

Hippen (2005) and Clemmons (2009) argue that a regulated market in organs from living vendors would ensure: safety for both vendors and recipients, transparency regarding the risks to vendors and recipients, and institutional integrity regarding guidelines for managing vendors. Further arguments against commercial kidney donation such as “exploitation” of “vulnerable” vendors, and “violating human dignity” (The Declaration of Istanbul 2008) are regarded by proponents of a legalized market as in fact against the effects of an unregulated market.

Financial incentives

Due to the ethical problems associated with a regulated legalized market and the fears that it would be difficult to properly control it, others have advocated regulated financial incentives for kidney donation (Berman, Lipschutz, Bloom, and Lipschutz 2008). A good example is the Iranian model (Ghods and Savaj 2006). The Iranian government pays all of the hospital expenses for renal transplantation, provides essential immunosuppressive drugs, and gives an award and health insurance to live unrelated donors in addition to a rewarding gift from the recipient or one of the charitable organizations. The program is under the close scrutiny of the transplant teams and the Iranian Society for Organ Transplantation regarding all ethical issues. To prevent transplant tourism, foreigners are neither allowed to undergo renal transplantation from Iranian live unrelated donors nor permitted to volunteer as kidney donors to Iranian patients. The Iranian model cuts off the middlemen and the risks of exploitation.

Development of a regulated system of incentives might be the most effective means of crippling the core economic support for transplant tourism. Starzl and 18 transplant colleagues (2009) stated that simply making organ trafficking illegal will not make it go away and called for a *regulated trial* of incentives for donation, to determine whether such incentives would increase the number of available organs while preserving the health, well-being, and dignity of donors and their families.

Limitations

A review of this nature has several important limitations. The culture of secrecy surrounding transplant tourism means that it is impossible to fully understand the effects of this activity. Reported outcomes of commercial renal transplant may not be reliable because commercial transplantation is illegal, recipients of such transplants return to their native countries soon after the operation and may not have access to follow-up, and it may not be in the interest of practitioners to publish poor results. Furthermore, data on such activity is often based on reports by returning patients to home transplant centers or units for continuing care. Perioperative deaths and defaults from treatment may not be included in published results. Published results are liable to selection bias, publication bias, and underreporting. The “ethical” practice by certain transplant journals in not accepting to publish results of work including commercial kidney donation causes significant publication bias. A recent meta-analysis of commercial kidney donors only included 676 donors (Tong *et al.* 2012) despite an estimated global rate between 3,800 and 7,600 per year!

Recommendations

The complex nature of globalization indicates that multiple approaches are required to address the increasing problem of transplant tourism. There is need to improve or develop transplantation services all over the world including *enforceable* professional guidelines for organ donation and transplantation. Concerted efforts must be continued to curtail transplant tourism by:

- Expanding education—targeting potential commercial donors and governments.
- Collecting information—setting up an international registry for transplant tourism. It should become mandatory for details of transplants performed outside any country to be reported to a central national registry.
- Effectively criminalizing organ trafficking—This requires the enactment of more effective and binding laws such as extraterritorial criminal frameworks against organ trafficking (currently patients who travel abroad to purchase organs experience no legal repercussions upon their return).
- Encouraging ethical practices—Several international resolutions and standards have been developed to encourage the development of ethical practices in organ donation and transplantation and to prevent trafficking in humans and organs (WHO 2010). The WHO needs to create a unit solely tasked with lobbying governments to accept and enact these resolutions into their national laws in order to ensure better compliance.

Conclusions

Legislation does not address the root cause of transplant tourism and altruism has proved inadequate in ensuring an adequate supply of organs for transplantation. As attempts to increase donation have not been universally successful and transplant tourism seems to be growing, alternative options are required. It is now time to re-examine intrinsic attitudes to transplant tourism bearing in mind the cultural and economic realities of globalization. Several options need to be pursued by nation states in their drive to national self-sufficiency in organ donation and transplantation. A critical intervention would be devising an effective way of transforming internationally agreed resolutions, standards and protocols into binding national laws. Meanwhile alternative strategies must be considered in the form of reactivating research into xenotransplantation or grafts generated by tissue engineering.

Bibliography

References

Akoh, J. A. 2012. Key issues in transplant tourism. *World Journal of Transplantation* 2(1):9–18. doi:10.5500/wjt.v2.i1.1.

Alghamdi, S. A., Z. G. Nabi, D. M. Alkhafaji, S. A. Askandrani, M. S. Abdelsalam, M. M. Shukri, A. M. Eldali, C. N. Adra, L. A. Alkurbi, and M. N. Albaqumi. 2010. Transplant tourism outcome: A single center experience. *Transplantation* 90(2):184–188. doi:10.1097/TP.0b013e3181e11763.

Barsoum, R. S. 2008. Trends in unrelated-donor kidney transplantation in the developing world. *Pediatric Nephrolology* 23(11):1925–1929. doi:10.1007/s00467-008-0858-2.

Berman, E., J. M. Lipschutz, R. D. Bloom, and J. H. Lipschutz. 2008. The bioethics and utility of selling kidneys for renal transplantation. *Transplanation Proceedings* 40(5):1264–1270. doi:10.1016/j.transproceed.2008.03.095.

Budiani, D. 2006. Consequences of living kidney donors in Egypt. Presentation at the Middle East Society On Organ Transplants (MESOT) Meetings, November 2006, Kuwait.

Clemmons, A. 2009. Organ transplantation: is the best approach a legalized market or altruism? *Journal of Healthcare Management* 54(4):231–240.

Cohen, D. J. 2009. Transplant tourism: a growing phenomenon. *Nature Clinical Practice Nephrology* 5(3):128–129.

Demme, R. A. 2010. Ethical concerns about an organ market. *Journal of the National Medical Association* 102(1):46–50.

Ghods, A. J., and S. Savaj. 2006. Iranian model of paid and regulated living-unrelated kidney donation. *Clinical Journal of the American Society of Nephrology* 1(6):1136–1145. doi:10.2215/CJN. 00700206.

Goyal, M., R. L. Mehta, L. J. Schneiderman, and A. R. Sehgal. 2002. Economic and health consequences of selling a kidney in India. *JAMA* 288(13):1589–1593. doi:10.1001/jama.288.13.1589.

Hippen, B. E. 2005. In defense of a regulated market in kidneys from living vendors. *The Journal of Medicine and Philosophy* 30(6):593–626. doi:10.1080/03605310500421397.

International Summit on Transplant Tourism and Organ Trafficking. 2008. The Declaration of Istanbul on organ trafficking and transplant tourism. *Clinical Journal of the American Society of Nephrology*, 3:1227–1231.

Ivanovski, N., J. Masin, I. Rambabova-Busljetic, V. Pusevski, S. Dohcev, O. Ivanovski, and Z. Popov. 2011. The outcome of commercial kidney transplant tourism in Pakistan. *Clinical Transplantation* 25(1):171–173. doi:10.1111/j.1399-0012.2010.01299.x.

Kasiske, B. L, M. A. Skeans, T. R. Leighton, V. Ghimire, S. N. Leppke, and A. K. Israni. 2013. OPTN/SRTR 2011 Annual Data Report: international data. *American Journal of Transplantation* 13(Suppl. 1):199–225. doi:10.1111/ajt.12026.

Kelly, E. 2013. International organ trafficking crisis: Solutions addressing the heart of the matter. *Boston College Law Review* 54(3):1317–1349. Accessed at: lawdigitalcommons.bc.edu/bclr/vol54/iss3/17.

Kennedy, S. E., Y. Shen, J. A. Charlesworth, J. D. Mackie, J. D. Mahony, J. J. Kelly, and B. A. Pussell. 2005. Outcome of overseas commercial kidney transplantation: an Australian perspective. *The Medical Journal of Australia* 182(5):224–227.

Krishnan, N., P. Cockwell, P. Devulapally, B. Gerber, R. Hanvesakul, R. Higgins, A. Ready, P. Carmichael, K. Tomlinson, S. Kumar, J. Baharani, and I. Dasgupta. 2010. Organ trafficking for live donor kidney transplantation in Indoasians resident in the West Midlands: high activity and poor outcomes. *Transplantation* 89(12):1456–1461. doi:10.1097/TP.0b013e3181da6019.

Kwon, C. H., S. K. Lee, and J. Ha. 2011. Trend and outcome of Korean patients receiving overseas solid organ transplantation between 1999 and 2005. *Journal of Korean Medical Science* 26(1):17–21. doi:10.3346/jkms.2011.26.1.17.

Matas, A. J., J. M. Smith, M. A. Skeans, B. Thompson, S. K. Gustafson, M. A. Schnitzler, D. E. Stewart*et al.* 2014. OPTN/SRTR 2012 Annual Data Report: Kidney. *American Journal of Transplantation* 14(Suppl. 1):11–44. doi:10.1111/ajt.12579.

Mjøen, G., S. Hallan, A. Hartmann, A. Foss, K. Midtvedt, O. Oyen, A. Reisæter*et al.* 2014. Long-term risks for kidney donors. *Kidney International* 86:162–167. doi:10.1038/ki.2013.460.

Naqvi, S. A., S. A. Rizvi, M. N. Zafar, E. Ahmed, B. Ali, K. Mehmood, M. J. Awan, B. Mubarak, and F. Mazhar. 2008. Health status and renal function evaluation of kidney vendors: a report from Pakistan. *American Journal of Transplantation* 8:1444–1450. doi:10.1111/j.1600-6143.2008.02265.x.

Rizvi, A. H., A. S. Naqvi, N. M. Zafar, and E. Ahmed. 2009. Regulated compensated donation in Pakistan and Iran. *Current Opinion in Organ Transplantation* 14(2):124–128.

Sajjad, I., L. S. Baines, P. Patel, M. O. Salifu, and R. M. Jindal. 2008. Commercialization of kidney transplants: a systematic review of outcomes in recipients and donors. *American Journal of Nephrology* 28(5):744–754. doi:10.1159/000128606.

Salahudeen, A. K., H. F. Woods, A. Pingle, M. Nur-El-Huda Suleyman, K. Shakuntala, M. Nandakumar, T. M. Yahya, and A. S. Daar. 1990. High mortality among recipients of bought livingunrelated donor kidneys. *The Lancet* 336(8717):725–728. doi: 10.1016/0140-6736(90)92214-3.

Schiano, T. D., and R. Rhodes. 2010. The dilemma and reality of transplant tourism: an ethical perspective for liver transplant programs. *Liver Transplantation* 16(2):113–117. doi:10.1002/lt.21967.

Shimazono, Y. 2007. The state of the international organ trade: A provisional picture based on integration of available information. *Bulletin of the World Health Organization* 85(12):955–962. Accessed at www.who.int/bulletin/volumes/85/06.039370.pdf. doi:10.2471/BLT.06.039370.

Shoham, S., F. Hinestrosa, J. Moore, Jr., S. O'Donnell, M. Ruiz, and J. Light. 2010. Invasive filamentous fungal infections associated with renal transplant tourism. *Transplant Infectious Disease* 12(4):371–374. doi:10.1111/j.1399-3062.2010.00498.x.

Shroff, S. 2009. Legal and ethical aspects of organ donation and transplantation. *Indian Journal of Urology* 25(3):348–355. doi:10.4103/0970-1591.56203.

Starzl, T., L. Teperman, D. Sutherland, H. Sollinger, J. Roberts, C. Miller, R. Merion*et al.* 2009. Transplant tourism and unregulated black-market trafficking of organs. *American Journal of Transplantation* 9(6):1484. doi:10.1111/j.1600-6143.2009.02632.x.

The Madrid Resolution on organ donation and transplantation: National responsibility in meeting the needs of patients, guided by the WHO principles. 2011. *Transplantation* 91(Suppl. 11):S29–S31. doi:10.1097/01.tp.0000399131.74618.a5.

Tong, A., J. R. Chapman, G. Wong, N. B. Cross, P. Batabyal, and J. C. Craig. 2012. The experiences of commercial kidney donors: Thematic synthesis of qualitative research. *Transplant International* 25(11):1138–1149. doi:10.1111/j.1432-2277.2012.01534.x.

Tong, A., J. R. Chapman, G. Wong, M. A. Josephson, and J. C. Craig. 2013. Public awareness and attitudes to living organ donation: Systematic review and integrative synthesis. *Transplantation* 96(5):429–437. doi:10.1097/TP.0b013e31829282ac.

Tsai, M. K., C. Y. Yang, C. Y. Lee, C. C. Yeh, R. H. Hu, P. H. Lee. 2011. De novo malignancy is associated with renal transplant tourism. *Kidney International* 79(8):908–913. doi:10.1038/ki.2010.500.

WHO (World Health Organization). 2010. Human organ and tissue transplantation. Resolution WHA 63.22 of the Sixty-Third World Health Assembly. *Cell and Tissue Banking* 11(4):411–412. doi:10.1097/TP.0b013e3181ec297b.

WHO, and ONT (Organización Nacional de Trasplantes). 2012. Global Activity in Organ Transplantation 2012 Estimates. Accessed on February 11, 2014 at www.transplant-observatory.org/Documents/Data%20Reports/Basic%20slides%202012.pdf.

Zargooshi, J. 2001. Iranian kidney donors: motivations and relations with recipients. *The Journal of Urology* 165(2):386–392. doi:10.1097/00005392-200102000-00008

Author

Jacob A. Akoh

MBBS, FMCS, FRCSEd, FWACS, FRCS (Gen), FICS, is a consultant general/transplant surgeon at Derriford Hospital, Plymouth. He is also associate professor of surgery with University of Plymouth and a member of the Training Committee of the British Transplantation Society (BTS). He was a member of BTS Council, director of the South West Transplant Centre and clinical director of the Surgery and Renal Services, and is an examiner for the Intercollegiate Specialty Board in General Surgery. He is a member of many medical societies and has published many articles and co-edited a book on dialysis access. He is an expert referee for the Health Technology Assessment program.

Lessons in Donation: The Spanish Experience in Latin America

Rafael Matesanz and Beatriz Mahíllo

Since the first successful kidney transplant was carried out in 1954 (Murray *et al.* 1956), organ transplantation has become a worldwide practice; it is the best, and sometimes the unique, therapeutic alternative for patients with end-stage organ failure as well as many other life-limiting conditions. The continuous advances of immunosuppressive therapies and the surgical techniques, and a longer experience of the transplant surgical and medical teams have progressively improved survival for the different types of solid organ transplants. Nowadays transplantation represents a well-established clinical therapy (Wolfe *et al.* 1999; Keown 2001).

According to the 2012 figures from the Global Observatory on Donation and Transplantation, more than 110,000 solid organ transplants are performed worldwide every year. Almost 78,000 of them are kidney transplants, and nearly 24,000 liver transplants; the rest include around 5,900 heart transplants, more than 4,000 lung transplants, almost 2,500 pancreas transplants, and about 150 small bowel transplants (GODT 2013).

Around 30% of the total number of solid organ transplants performed are from living donors, 66% from donors after brain death, and the other 4% from donors after circulatory death (GODT 2013).

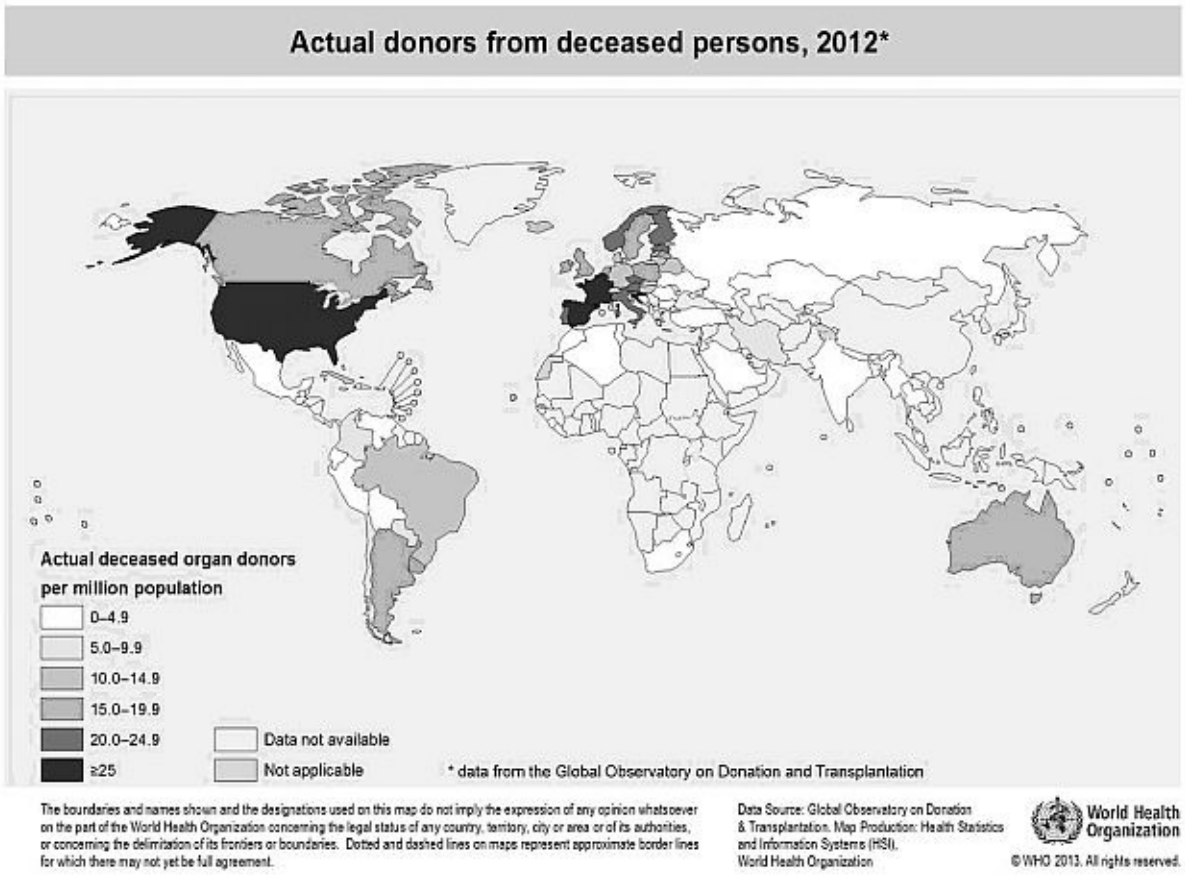
However, with these excellent results, transplantation has become a victim of its own success. There is no accurate global estimate for the number of patients on the waiting list for a transplant, but a simple calculation can be performed by extrapolating the number of patients on the list in Spain to the world population, assuming the same criteria applied. The results would be no less than 1 million

people potentially benefiting from organ transplantation each year: ten-fold the estimated number of transplanted patients (Matesanz, Coll *et al.* 2009).

The success of transplantation does not depend exclusively on technical development or professional expertise, but also on the availability of organs.

Global activities in organ donation and transplantation are highly variable, resulting in gross inequities in access to transplantation therapies. There is a wide range of variation in donation and transplantation figures among regions and countries (Figure 1). Although Asia includes 60% of the world population, it only reports between 2% and 5% of the deceased donors.

Figure 1. Deceased donation rates (year 2012) (source: Global Observatory on Donation and Transplantation; available at www. transplant-observatory. org).



This wide range of variation reflects not only vast global inequity in access to transplantation but also demonstrates how different approaches to the delivery of organ donation and transplantation program have the capacity to produce better

outcomes. For most high-income countries, current models of service delivery have not met the needs of patients, and there is room for significant progress to be made in the provision of transplantation.

One of the main problems derived from the organ shortage is the cost to the systems of alternative renal replacement therapies. Kidney transplantation has a more favorable cost-effectiveness ratio than dialysis. It is related to better results in terms of survival and quality of life. In addition, depending on the country, the cost of kidney transplantation can be offset in 2 to 4 years when compared to dialysis. This has been clearly proven in Europe, the United States, and also in countries like Pakistan, where renal transplantation remains the best and least expensive renal replacement therapy (Sakhuja and Sud 2003, Rizvi and Naqvi 1997).

Nevertheless, the most important and obvious consequence of organ shortage is the fact that many patients will never be placed on the waiting list and many of them will die or deteriorate while waiting for an organ. Under these circumstances, the desperation of patients waiting to be transplanted can lead to a search for alternatives outside legal transplantation networks, such as organ trafficking and transplant tourism.

Transplant tourism is defined as the movement of organs, donors, recipients, or transplant professionals across jurisdictional borders for transplantation purposes (involving organ trafficking and transplant commercialism), if the resources devoted to providing transplants to patients from outside a country undermine the country’s ability to provide transplant services for its own population (Steering Committee of the Istanbul Summit 2008). This phenomenon has emerged due to a lack of organs, as an immediate solution for patients in need and in the extreme context of an extremely unequal distribution of wealth, with 20% of the world’s population controlling 80% of global resources. The most usual practice is represented by the movement of patients from rich to poor countries; in their desperation for finding an organ they travel to developing countries where the donor, usually a vulnerable and poor person, agrees to sell a kidney to solve his, also desperate, economic situation.

Examples of these practices are unfortunately very abundant. Countries like India, Pakistan, Philippines, Egypt, and several other countries are recognized as involved in organ trafficking and transplant tourism. In China, most of the transplanted organs are alleged to have been procured from executed prisoners, a practice that has been criticized by the international community, with pressure being put on the Chinese government to stop this practice (Shimazono 2007).

Another particular form of commercialization is the Iranian model, which provides an example of a regulated system of paid donation. In this country, nearly 2,000 patients receive a kidney transplant from a living donor every year, most of them unrelated. Donors receive some bonus, partially supported by the state and partly by the recipient, in a system that is organized and controlled by non-governmental organizations and forbidden to foreign citizens. Although criticized by the international community, this system has allowed the country to do away with the kidney transplant waiting list and avoid transplant tourism. Defendants claim that the system cannot be judged from the opulence of Western countries (Ghods and Mahdavi 2007; Major 2008).

Organ trafficking and transplant tourism violate the most basic of human-rights. These practices are also related to safety problems, with no guarantee of application of international safety standards. They also cause a profound damage to the universal image of donation and transplantation (Shimazono 2007).

Organ shortage and its consequences, including organ trafficking and transplant tourism, has become a universal problem. The World Health Organization (WHO) estimates that about 10% of all kidney transplants in the world are performed under some kind of commercialism.

Spanish model of organ donation and transplantation

The international role of Spain in this field is the consequence of the successful donation program within the country. It is the only country in the world in which a progressive and sustained increase in the number of deceased donors has been described.

The success of the Spanish system is based on the implementation of a set of measures, mostly of organizational nature, that is internationally known as the Spanish Model of Donation and Transplantation (Matesanz and Domínguez-Gil 2007).

These measures followed the creation of the Spanish National Transplant Organization (ONT) in 1989 and led Spain to triple the number of organ donors, from 500 to more than 1,650 in 2013 and from 14 to 35 donors per million population (pmp), resulting in significant reductions in the number of patients on the waiting lists and their waiting times (ONT).

ONT is a technical agency that depends on the Ministry of Health and is in charge of the oversight of donation and transplantation activities in the country.

The Spanish model of organ donation was developed based on an adequate legal, technical, and political framework. From the legal point of view, the principles of altruism and confidentiality were established, and the main aspects covered by the law included the protocol for brain-death diagnosis, organ retrieval, and consent to donate. Since the first transplantation law was enacted in 1979, Spain has a presumed consent or opting-out law. However, families are always approached as a way of understanding the wishes of the deceased about donation or as a way of getting the permission to proceed with donation in case the wishes of the deceased are unknown. Therefore, from a practical point of view, an informed consent or opting-in model has always been applied.

From a technical perspective, proper health-care facilities had to be present, and from a political point of view, the Spanish donation and transplantation system had to be accommodated to the reality of political competencies having been transferred to the 17 different governments of the autonomous regions.

The main elements of the Spanish model of organ donation and transplantation are explained below:

1. Transplant Coordination Network at three levels

Transplant coordination in Spain has been organized at three different, but interrelated, levels: hospital, regional, and national; each of these levels has specific responsibilities in the process of organ donation.

The national level is represented by the ONT and the regional level by 17 regional offices, one per autonomous regions.

These first two levels, dependent on the national and regional healthcare authorities respectively, act as a real interface between the hospital and the political level. Their main function is to provide full support for the actual realization of the donation process. Every technical decision is made by consensus at a National Transplant Committee composed by the ONT and the person in charge for each one of the regional offices.

The third level of the transplant coordination network is represented by the hospital coordinators, who are directly involved in the process of donation; developing a proactive program on donor detection; and in charge of donor evaluation and maintenance, family and judicial approach (when needed), as well as coordination of the entire process of organ procurement.

2. In-hospital transplant coordination teams

The profile of the hospital transplant coordinator in Spain is probably one of the most important differences with the organizational and structural transplantation systems in place in other European countries. Transplant coordinators are mainly physicians, supported by nurses in those hospitals with a quantitatively important donation activity. Nowadays most of the coordinators are intensive care unit (ICU) specialists.

Except for a few cases, the coordinator is a part-time position dedicated to transplant coordination activities. This characteristic allows the possibility of having a transplant coordinator appointed even in small hospitals. Although having a close relation to the transplant teams, the figure of the transplant coordinator in Spain does not depend on the transplant team; he or she is nominated by and must report to hospital management, yet is functionally linked to the regional and the national transplant organization.

The network of transplant coordinators, with these characteristics and the profile previously described, is one of the keys of success of the deceased donation program in Spain.

3. Continuous audit on brain deaths and outcome of donation at ICUs in transplant-procurement hospitals

The quality assurance program in the deceased donation process is comprised of a continuous brain-death audit in ICUs at the transplant-procurement hospitals; it allows the definition of a theoretical capacity of organ donation based on each hospital's characteristics, as well as the evaluation of the entire process of organ donation, identifying key areas for improvement in the deceased donation process.

The program is based on a continuous self-auditing of performance in the process of organ donation, which may be complemented by external audits. Evaluation requires the retrospective review of the medical charts of patients dying at the ICUs. The hospital transplant coordinator performs the internal audit, and the external audit is usually performed by coordinators from other regions. Final data include the number of deaths, brain deaths, and organ donors for every ICU.

Taking into account local hospital factors affecting every one of these numbers (available beds, neurosurgery procedures, transplantation facilities, patients admitted at ICU, and emergency departments), a calculation of specific indexes of efficiency for the whole process of donation may be performed and compared with standard or reference values.

4. Central office (ONT) as a supporting agency in the donation process

The ONT acts as a supporting agency for the whole process of organ donation. This first level of the transplant coordination network is also in charge of the organization of organ and transplant teams' transportation, management of the waiting lists, registries and statistics, as well as general and specialized information, and development of activities and action aimed to improve the performance in the whole process of donation and transplantation.

5. Great effort in professional training

Training may be considered one of the essential components of the Spanish model. Continuous training programs target all the professionals involved in the process of donation, with special emphasis on training new and already existing hospital transplant coordinators. Training covers each of the steps in the complex process of donation (donor detection and maintenance and legal aspects, including brain-death diagnosis, family approach, and organizational issues). Furthermore, training in areas such as management of resources and mass media relations, among others, have been developed.

6. Hospital reimbursement for donation and transplantation activities

As any other medical activity performed at the public health-care system, donation and transplantation activities in Spain are properly reimbursed by the regional health-care authorities. Each procurement and transplantation hospital has a yearly budget based on the donation and transplantation activities performed in the previous year. Reimbursement covers all human and material resources needed to efficiently develop the donation and transplantation program within the hospital.

7. Close attention to the media

The ONT and its network have developed a specific communication policy based on the following principles:

- A 24-hour telephone hotline available for consultation, questions, and answers. Anyone (general public, health-care professionals, and media) can obtain medical, legal, or statistical information about organ donation and transplantation at any time. This has contributed to reduce the incidence of adverse stories about transplantation, and has helped to generate a climate of trust and transparency.
- Easy and permanent access to the media.
- Regular meetings with journalists and opinion leaders are held in a proactive fashion or under specific requests.
- Transmission of messages with no intermediaries. In this sense a quick and efficient management of adverse publicity and other critical situations has also helped to generate a positive perception of donation and transplantation among the Spanish population.

Global approach to organ shortage

The World Health Assembly Resolution adopted in 2004 (WHA 57.18) urged member states to “take measures to protect the poorest and vulnerable groups from ‘transplant tourism’ and the sale of tissues and organs, including attention to the wider problem of international trafficking in human tissues and organs” (WHO 2004).

On April 2008, more than 150 representatives of scientific and medical bodies from 78 countries around the world, including government officials, social scientists, and ethicists were convened in Istanbul, Turkey, to work on the drafting of the Declaration of Istanbul, which was derived from the consensus reached by the participants.

The Declaration of Istanbul was first published in 2008 in *The Lancet* and subsequently in several medical journals and translated into more than a dozen languages (Steering Committee of the Istanbul Summit 2008).

After its publication, the Declaration of Istanbul Custodian Group (DICG) was created. The Mission of DICG is to promote, implement, and uphold the Declaration of Istanbul so as to combat organ trafficking, transplant tourism, and transplant commercialism, and to encourage adoption of effective and ethical transplantation practices around the world [1] .

In May 2010, the World Health Assembly endorsed the updated Guiding Principles on Human Cell, Tissue and Organ Transplantation through the resolution WHA 63.22, and urged member states “to strengthen national and multinational authorities and/or capacities to provide oversight, organization and coordination of donation and transplantation activities, with special attention to maximizing donation from deceased donors and to protect the welfare of living donors with appropriate health-care services and long-term follow-up” (WHO 2010b).

This resolution was approved by the WHA after the Third Global Consultation on Organ Donation and Transplantation, which was held in Madrid in March 2010. In this meeting, there was a call for a comprehensive national strategy based on self-sufficiency in transplantation (Report on the Madrid Consultation 2011).

In the context of organ donation and transplantation, “self-sufficiency” refers to the adequate and equitable provision of transplantation services and human organs to satisfy the organ transplantation needs of a given population, using resources obtained from within that population or provided through regional cooperation.

In close cooperation with the WHO and The Transplantation Society (TTS), ONT has stood at the forefront in recent years in the area of global strategy on donation and transplantation. This has been crucial for the establishment of new legislation in countries without legal frameworks regulating donation and transplantation activities, as well as banning transplant tourism and organ trafficking, and for the promotion of donation and transplantation systems that are grounded on the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation (WHO 2010a). The Guiding Principles are intended to provide an orderly, ethical, and acceptable framework for the acquisition and transplantation of human cells, tissues, and organs for therapeutic purposes.

ONT and the Iberoamerican example

It is in Latin America where Spanish cooperation is clearly becoming important for obvious historical and linguistic reasons. Spain, in close collaboration with the Panamerican Health Organization, is in charge of the development of WHO global strategy on organ donation and transplantation through the "Iberoamerican Network/Council of Donation and Transplantation" (Red/Consejo Iberoamericano de Donación y Trasplante, RCIDT).

The creation of the RCIDT was approved by the heads of states and governments at a summit held in Salamanca, Spain, in 2005. The mission of the RCIDT, composed of 21 Spanish and Portuguese speaking countries, is the development of cooperation between its members in organizational, legislative, professional training, ethical and sociological areas related to donation and transplantation of organs, cells, and tissues.

Since its creation in October 2005, the RCIDT has held 13 meetings and has approved 18 Recommendations. RCIDT is progressively becoming a technical, ethical, training, and cooperative reference for the development of transplant activities in all the countries within the region (RCIDT).

Donation and transplantation organizations have been created, restructured, or revived in countries that were lacking this type of system or where activity was minimal or null. These organizations are supported by the health authorities, following the Spanish model, and are being organized as a coordination network.

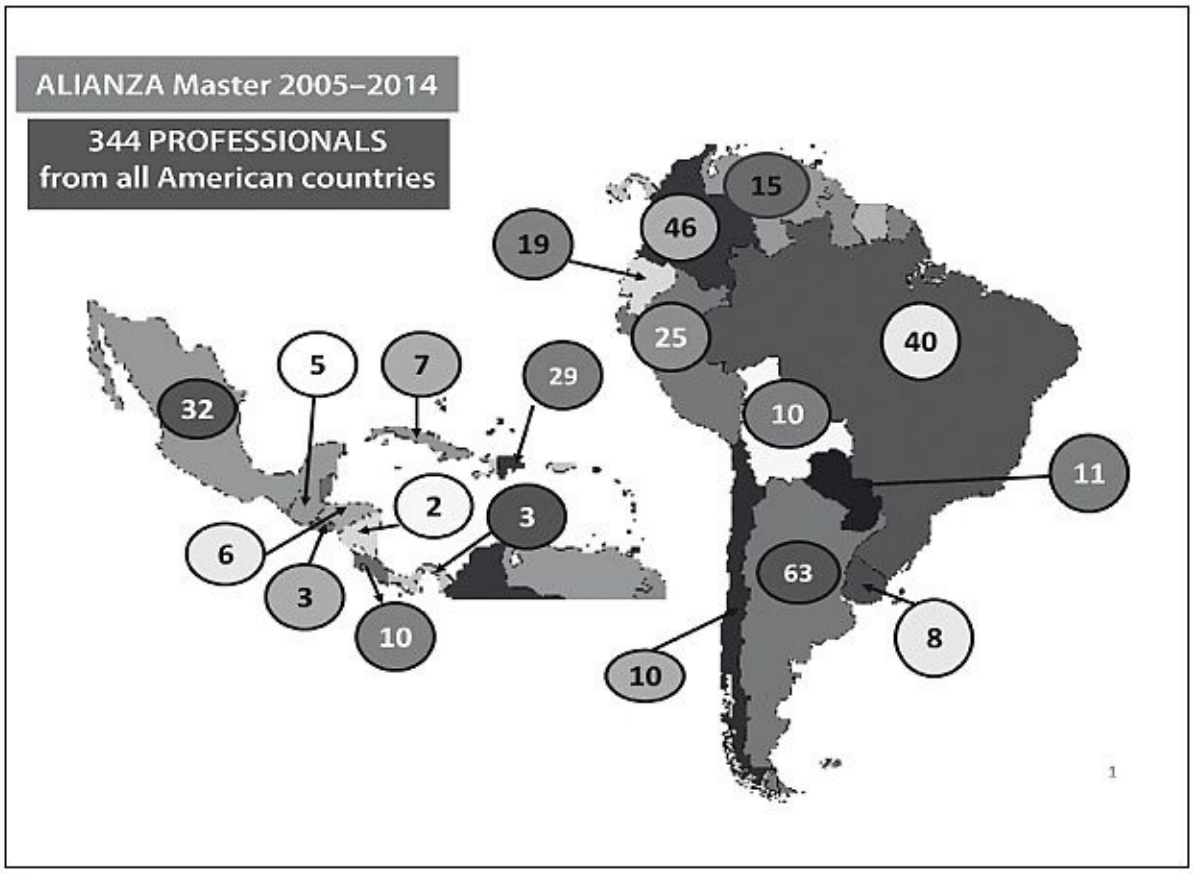
Initiatives to harmonize criteria, in agreement with scientific societies and in accordance to international standards, are being developed, focusing on a wide range of aspects, such as diagnostic criteria for brain death or clinical evaluation criteria of the possible donors.

As training is considered essential, one specific action plan has been developed for professional training in donation and transplantation activities. Through this

ALIANZA Master, professionals appointed by the different health ministries of Iberoamerican countries are trained as transplant coordinators in Spain. Training seeks to facilitate the translation of the Spanish model to the Latino-American reality. For a period of two months, these selected professionals complete a term in the biggest hospitals in Spain, and take part in a general coordination training course and other specific courses relevant for their training, which are held during the period of the Master.

They have to present and defend a final written project before reaching the final degree of the Master. ALIANZA Master has been in place since 2005 and so far 344 professionals have been trained (Figure 2), all of them already working in their countries and many occupying positions of responsibility at a national level.

Figure 2. Countries of origin of the professionals trained in the ALIANZA Master (2005–2014).



In parallel to the ALIANZA Master, training courses on specific aspects of the

process of deceased donation and transplantation have been held in several American countries. A particular reference should be made about a program for training of trainers focused on communication in critical situations. In the context of these programs, teams of monitors are being trained and they will be able to develop courses in their own countries as well as in others within the region. More than 400 trainer trainings plus follow-up courses have been performed and more than 5,500 professionals trained.

Finally, courses on quality and safety in the management of tissue banks are also being developed, with wide acceptance and increasing demand, mainly in those countries of the Southern cone.

In addition, the problems of organ trafficking and transplant tourism, which affect some of the countries within the region, have been one of the main challenges of the group. Since its creation, the RCIDT has expressed its complete opposition to these practices, which facilitate transplant commerce, and has considered them as morally condemnable. In countries with problems of organ trafficking and transplant tourism, the RCIDT is providing specific support to those organizations in charge of oversight of donation and transplantation, in order for them to overcome their problems.

Conclusions

As a universal problem, organ shortage must be approached through global initiatives that provide the base upon which locally tailored actions can be designed and implemented. Although changes in organ donation take time, the Latin American experience shows that if steps are taken in the right direction everything is possible, even the construction of a successful deceased donation program.

Bibliography

References

Ghods, A. J., and M. Mahdavi. 2007. Organ transplantation in Iran. *Saudi Journal of Kidney Diseases and Transplantation* 18(4):648–655.

GODT (Global Observatory on Donation and Transplantation). 2013. Accessed on April 2014 at www.transplant-observatory.org.

Keown P. 2001. Improving the quality of life: The new target for transplantation. *Transplantation* 72(Suppl. 12):S67–S74.

Major R. W. 2008. Paying kidney donors: time to follow Iran? *McGill Journal of Medicine* 11(1):67–69.

Matesanz, R., and B. Domínguez-Gil. 2007. Strategies to optimize deceased organ donation. *Transplantation Reviews* 21:177–188.

Matesanz, R., E. Coll, B. Domínguez-Gil, B. Mahíllo, E. Martín Escobar, G. Garrido. 2009. Global Approaches to organ shortage. *Transplantation* 88(7):95–159.

Murray, J. E., J. P. Merrill, and J. H. Harrison. 1956. Renal homo-transplantation in identical twins. *Surgical Forum* 6:432–436.

ONT (Organización Nacional de Trasplantes). Donation and Transplantation statistics. Accessed on April 2014 at www.ont.es/infesp/Paginas/Memorias.aspx.

RCIDT (Iberoamerican Network/Council of Donation and Transplantation). Accessed on April 2014 at www.transplant-observatory.org/rcidt-en/Pages/default.aspx.

Report of the Madrid Consultation: Parts 1 and 2.2011. *Transplantation* 91(Suppl. 11):S39–S114.

Rizvi, S. A., and S. A. Naqvi. 1997. Need for increasing transplant activity: A sustainable model for developing countries. *Transplantation Proceedings* 29(1-2):1560–1562.

Sakhuja, V., and K. Sud. 2003. End-stage renal disease in India and Pakistan: Burden of disease and management issues. *Kidney International* 83(Suppl.):S115–S118.

Shimazono Y. 2007. The state of the international organ trade: A provisional picture based on integration of available information. *Bulletin of the World Health Organization* 85(12):955–962.

Steering Committee of the Istanbul Summit. 2008. Organ trafficking and transplant tourism and commercialism: The Declaration of Istanbul. *The Lancet* 372(9632):5–6.

WHO (World Health Organization). 2004. Resolution WHA 57.18 about Human Organ and Tissue Transplantation. The Fifty-Seventh World Health Assembly, May 22, 2004. Accessed on April 2014 at www.transplant-observatory.org/SiteCollectionDocuments/wha57resen.pdf.

—. 2010a. WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation. Accessed on April 2014 at www.who.int/transplantation/Guiding_PrinciplesTransplantation_WHA63.22en.pdf.

—. 2010b. Resolution WHA 63.22 about Human Organ and Tissue Transplantation. The Sixty-Third World Health Assembly, May 21, 2010. Accessed on April 2014 at apps.who.int/gb/ebwha/pdf_files/WHA63/A63_R22-en.pdf.

Wolfe, R. A., V. B. Ashby, E. L. Milford, A. O. Ojo, R. E. Ettenberg, L. Y. Agodoa, P. J. Held, and F. K. Port. 1999. Comparison of mortality in all patients on dialysis, patients on dialysis awaiting transplantation, and recipients of a first cadaveric transplant. The *New England Journal of Medicine* 341(23):1725–1730.

Notes

1 Available at www.declarationofistanbul.org.

Authors

Rafael Matesanz

Founder and director of the Spanish National Transplant Organisation (ONT), and has been president of the Transplant Committee of the Council of Europe for seven years. He has also been president of the Iberoamerican Council of Organ Donation and Transplantation since 2005, and was president of the Public Health Group of the European Union in 2010 and was in charge of the elaboration and approval of the EU Directive & Action Plan for Organ Transplantation. He advises the World Health Organization in the global strategy for transplantation.

Beatriz Mahíllo

Medical doctor specialized in epidemiology, with a master’s degree in public health and a master’s degree in research methodology in health sciences. After several years working in health technology assessment and HIV clinical research, she joined the medical team of the

Spanish National Transplant Organisation (ONT) in May 2006, where she is mainly involved in the management and statistical analysis of the organ donation and transplantation databases. She is chief executive officer of the Global Observatory on Donation and Transplantation.

An Alternative to Trade: The Iran Experience

Mitra Mahdavi-Mazdeh

Globalization as an international integration process based on the movement of capital and people combined with knowledge dissemination has made organ shortage a global challenge. New strategies are required to protect vulnerable individuals and developing countries' resources in the face of foreign demand at low cost under the name of medical tourism. Sometimes the possibility of bending the rules may become a threat to people who are less well-off. Purchasing an organ from a socially disadvantaged person cannot be viewed in the same way as the purchase of a simple medical service. It is, in fact, a commodification of the human body, reminiscence of an era of slavery.

Iran has developed a solution aimed at addressing organ shortage using regulated, government-supervised compensated living unrelated donation, where payment to the donor is legally approved. Below is a brief description of the various stages of development of transplantation, brain-death donation (BDD) program implementation, and the use of unrelated donors in Iran.

Development of transplantation in Iran

Transplantation began in Iran in the era of the 1979 Revolution, along with economic challenges related to frozen overseas assets and sanctions. During that period, dialysis facilities were not available and funding patients who intended to do transplantation abroad was not easily affordable for the Ministry of Health, whose main mission was to fully support soldiers wounded in the Iran-Iraq war. In 1985, two renal transplantation centers were established, and 274 renal transplantations were performed in the two following years. In 1988, a government regulated and compensated living-unrelated-donor (LURD) program was approved by the Council of Guardians. However, the law of Gift of Altruism had not been approved by the Board of Ministers before the rejection of the Brain Death Organ Donation Act in parliament in 1995. When the efforts to make BDD legal failed in the early 1990s, this step was taken to minimize shortage of organs. This decision caused remarkable increase of living donation from 11 per million population (pmp) in 1996 to 17.8 pmp in 1998 and 20.1 pmp in 2000, without considerable change during the following 10 years. In 1999, it was announced that the waiting list had disappeared. In addition to an increased number of donations, the number of renal transplantation centers increased from 2 in 1985 to 13 in 1992 and 23 in 2001 (Mahdavi-Masdeh 2012; Ghods and Savaj 2006).

Brain-death-donation program implementation

The next breakthrough in the Iranian transplantation program was the Organ Transplantation and Brain Death Act, which was passed in 2000. Year after year, experts in various decision-making committees had reiterated the necessity of brain-death organ donation, spearheading the legalization of organ donation from brain-dead people. The country needed an action plan. Critical steps in its implementation included: developing expertise in medical and surgical donor and recipient management, provision of laboratory facilities for different tests and banking of potential recipients' blood samples, managing the expense of recipients' immunosuppression and the procedure, training teams, and public acceptance and trust. More than 7,000 living kidney transplantations all over the country not only empowered the medical teams, but also motivated the community to participate in providing solutions to the organ shortage for other patients with end-stage liver or heart failure. As a side note, this high level of transplantation activity had turned Iran into a huge market for immunosuppressive drugs. Over time, drug prices became more reasonable and in 2003 some local pharmaceutical companies started to manufacture Mycophenolate Mofetil under license and then in 2004 generic cyclosporine, [1] which decreased the price of drugs even more.

The government's strategy to promote the BDD program included not increasing the live-donor incentive payment in line with inflation and the foreign currency exchange rate. The savings were then allocated to the BDD program, which required a more sophisticated infrastructure not available easily in many developing countries, including Iran. The last essential steps taken were related to transparency and investment in developing public trust. Accordingly, it was decided that the declaration of brain death should be signed by five Ministry of Health and Medical Education-appointed physicians (an internist, a neurologist,

a neurosurgeon, an anesthesiologist, and a forensic medicine specialist). Gradually, the BDD program was implemented based on its strict definition of brain death, publicizing the outcomes, and without forbidding living donation. Based on national data, substantial increase of BDD was achieved. The BDD share in kidney transplantation increased from 2.2% in 2000 to 26% in 2010 (Mahdavi-Mazdeh 2012).

Unrelated live donors

The last item, which is the main focus of this chapter, is this program’s approach to the challenges of living donation and the local solutions that were tried. Iran has had the unique experience of legal donor payment. As a result, local professionals play a key role in investigating the main short-and long-term medical risks with a constant reminder of *primum non nocere* (do no harm) and awareness raising about ethical issues related to the financial connection between donor and recipient as well as to the possibility of exploitation of vulnerable kidney donors.

Decreasing short-and long-term medical risks

The surgical procedure is the leading factor that could increase a live donor's short-term risk. From this respect, related and unrelated donors are exposed to similar risk. Although no higher risk of long-term kidney-related disease or lower survival rates have been demonstrated in long-term follow-up, steps are taken to ensure that the ethical rule of "do no harm" is followed (Segev *et al.* 2010; Ibrahim *et al.* 2009).

The steps taken to reduce short-term risks include scheduling the procedure electively and avoiding emergency appointments, in addition to having the procedure to be done by an expert team in well-qualified hospitals. An important aspect of the Iranian model is that all transplantation teams belong to universities licensed by the Ministry of Health and Medical Education in order to guarantee that well-trained teams ensure the medical and surgical management of both donors and recipients (Mahdavi-Mazdeh 2012; Ghods and Savaj 2006; Einollahi and Taheri 2008). Introduction of laparoscopic nephrectomy in Iran has made the procedure safer (Simforoosh *et al.* 2014). In addition, donors are provided with one year of medical insurance coverage (Mahdavi-Mazdeh 2012). Verifying that pre-transplantation laboratory tests are as comprehensive and accurate as possible is another mandatory item in the Iranian model transplantation protocol (Nafar *et al.* 2014). After primary medical evaluation, the potential donor and recipient are referred to a nephrologist for final testing and approval, and the donor is checked by the transplant surgeon as well (Ghods and Savaj 2006; Einollahi and Taheri 2008; Haghighi and Ghahramani 2006). However, some argue that there may be no reliable test to check whether there is a family history of kidney disease (Danovitch 2014).

Although the program suffers from lack of long-term follow-up of the donors, it has been well documented in various international studies that there are no serious long-term complications in donors who have been carefully screened

(Ibrahim *et al.* 2009).

Is monetary compensation for donation ethical?

Kidney transplantation is a gift of life for end-stage renal disease (ESRD) patients. It also saves government and insurance agencies money and provides a paid job for the medical team. The main concern is the donor share. Physicians and nurses not only have the benefit of seeing their patient recover, they are also paid for their work. Donors, on the other hand, must face the fear of life-long disability and probable lost job opportunities. A compensation should not be looked upon as a taboo subject or be denied for fear of organ trafficking. Furthermore, it is not wishful thinking that donor incentives can serve another altruistic purpose in the person's own family. In 2005, Heidary Rouchi *et al.* studied 600 living donors in Iran and found that 365 donors (60.8%) had financial and altruistic motivation, each to some degrees. The financial motivations were mainly related to having money for medical needs of one of their family members or maintaining family reputation (Heidary Rouchi *et al.* 2006). It is not fair to impose additional burdens on donors by neglecting their right to be compensated to do their own altruistic action.

Such an incentive can not only increase the donor pool as is shown in the Iranian model but also eliminate the unregulated markets. The downside of the program is the direct financial connection between donor and recipient in addition to the governmental payment. This gift of altruism results from the limited national budget for this purpose. A guarantee of transparency of the payment would reduce any underground transactions, but at the expense of donor and recipient direct contact. If it could be done centrally, as it used to be done in the late nineties, it would be much more ethical [Mahdavi-Mazdeh 2012; Ghods and Savaj 2006).

Is this just another program for the rich?

Those who argue that incentives do harm to recipients and exploit poor donors to benefit the rich tend to base their arguments on international organ trafficking data (Danovitch 2014; Matas *et al.* 2012; Delmonico *et al.* 2012). The main recipients of these markets have been from Western countries with the highest gross domestic product (GDP) per capita and top ranks—United States ($51,749, 6th), Canada ($42,533, 9th), and Israel ($31,869, 25th). The main donors originate from countries with low GDP—India ($3,813, 133rd), Pakistan ($2,741, 140th), the Philippines ($4,339, 130th), and China ($9,083, 93rd) (World Bank 2014; Wikipedia 2014). Moreover, once the recipients return home, they receive reimbursement for immunosuppressive agents from insurance agencies. Consequently, lower-income countries' ability to provide transplant services for their own population is sabotaged as their recipients cannot compete with wealthy potential Western recipients.

More is needed to put an end to such an approach than just passing laws in vulnerable countries. Such laws create a resurgence of underground organ markets, and the decreased rate of foreign recipients in one country corresponds to a parallel increase in other similar countries. Furthermore, it has been proved that banning cannot be enforced. Passing appropriate national laws and tougher restrictions on insurance compensation are both needed to discourage wealthy recipients from traveling abroad to get the organs (Lavee *et al.* 2013). The other side of the coin is that recipients may also be exploited in such international black markets due to unsuitable donor selection and possible transmission of infections (Matas *et al.* 2012; Inston *et al.* 2005). It seems that it is mandatory to support national solutions that aim at addressing the global organ shortage based on each country's infrastructure and facilities. It can be anticipated that with open-ended growth in the number of potential recipients, these markets and brokers will grow even faster than before unless regulatory organizations take

some more creative practical local steps to respond to the global dilemma.

From a national point of view that could apply in any country, including Iran, authorities should not only pay attention to strategies for equal access of all inhabitants to kidneys as the best renal replacement therapy, but also assure provision of immunosuppressant medications. Provision of postoperative immunosuppressive agents is as important as equal opportunity access to organs to make transplantation a successful program for lower-income patients.

In Iran, recipient and donor must be Iranian. If wealthy candidates from high-income countries had been allowed on the scene, there is little doubt they would have flowed in and won the competition hands down (Mahdavi-Mazdeh 2012; Ghods and Savaj 2006; Einollahi and Taheri 2008).

Another governmental strategy to prevent inequalities and health disparities regarding transplantation has been importation, subsidization, and even funding for domestic production of essential immunosuppressive medications by pharmaceutical companies and then coverage of the remaining cost by public insurance agencies, as many low-income recipients were not able to afford them by themselves (Ghods and Savaj 2006; Tavallaii *et al.* 2009). These two strategies aimed at giving everyone an equal opportunity to successful transplantation. Consequently, transplantation would not be just for rich.

This program shows the advantages of local solutions over a standard global approach.

Better organs for the rich and exploitation of the poor?

Another concern is that if this approach could guarantee the low socioeconomic class access to organs equally, then the rich would pay more to get “better” organs or to undergo transplantation sooner (Delmonico *et al.* 2012). Studies looking into this issue in particular were not found. However, based on different studies of recipients, it seems that most of them do not belong to the wealthy percentile of the population, and if it were true there would be no necessity for Iranian health authorities to allocate some of the finite budget of health (6% of GDP) to make transplantation medications affordable (Table 1). Another nail in the coffin of the assumption of better organs for the rich is the fact that all Iranian unrelated donors who undergo extended laboratory tests based on national protocols are young ($18 \leq \text{age} < 35$). Accordingly, none of them can get better score than the other (Mahdavi-Mazdeh 2012; Einollahi and Taheri 2008; Tavallaii *et al.* 2009).

Other important issues are the donor’s motivation for donation and his or her socioeconomic situation. Although poverty and standard of living varies considerably among countries, there is a clear consensus that Iranian paid donors are worse off and their main motivation for donation is financial incentive. Based on national data, unemployment rates were reported as 12.1% in 2005, 10.6% in 2007, and 12.2%–15.5% in 2012 (World Bank 2014). The rates among donors were reported to be 20% (118/600), 29% (139/478), and 15% (15/100) in different studies (Mahdavi-Mazdeh 2012). Meanwhile, in most studies their educational level was 6–12 years or university training in more than 80% and 6% respectively. In an interesting study on 424 donors in 2008, they rated stressful events of life higher than the general population. For example they gave the score of 17.4 ± 4.2 to child birth and 18 ± 3.9 to hospitalization of a family member in comparison with 6.6 ± 6.9 and 16 ± 4.6 by general population scoring respectively (Mahdavi-Mazdeh 2012; Nejatisafa *et al.* 2008). This could suggest

that donors are more sensitive to their surroundings, which may persuade them to make such a decision to try to make a difference to their families.

Table 1. Economic situation of recipients in the Iranian model.

Recipients	**Ghods et al. 2001**	**Fathi-Ashtiani et al. 2007**	**Tavallaii et al. 2009**
Sample size	500	125	242
Gender (M/F))	315/185	87/38	165/77
Age (mean ± sd) years		39.6 ± 13.8	36.0 ± 14.0
Time from TX (months)		43 ± 15	35.0 ± 13.0
Economic status	Poor: 252 (50.4%) Middle class: 181 (36.2%) Wealthy: 67 (13.4%)Middle class: Those who could afford only average housing, food, and college training of their children.	105 (84%) <300 $	90% <400 $
Education	Illiterate: 90 (18%) Elementary: 100 (20%) High school: 254 (50.8%) University: 56 (11.2%)	High school/higher: 54 (43.2%)	
Outcome		Poor post-renal transplant marital quality can be predicted by monthly	Not only the negative impact of low income on HRQL was seen in recipients, but also the

	family income (OR, 2.20; *P* =. 028).	anxiety level was higher in this population.

TX transplantation*; HRQL* health-related quality of life.

Do donors make autonomous decisions to overcome economic constraints?

Respect of autonomy, the individual's right to make personal decisions regarding his or her own health and body, represents one of the major general ethical principles of medicine that has made informed consent the sacrosanct prerequisite of any procedure. However, the debate on the subject continues as many argue that poor donors are generally under-informed and so their consent cannot be reliable.

The prerequisite of informed consent is having competency to understand the provided information and make the decision.

Some have to show that in unrelated donation, informed consent results from some sort of decision-making calculus. However, if the process of decision-making for organ donation is explored thoroughly, some similarities between living related and unrelated donors surface. It is well known that the key factor for decision in living related donors is affection and regard for the related potential recipient because of love or undue sense of responsibility. Based on different studies, Iranian paid donors chose this option to solve a family problem such as the need for hospitalization of a family member (Mahdavi-Mazdeh 2012; Spital and Taylor 2007). The altruistic consideration in living related donation is direct and easily understandable (a parent to a child), but it is indirect in living unrelated donation, as with domino transplantation—donation to an unrelated person to receive a kidney for the family member from someone else. Although informing the donor as much as possible before donation is mandatory, it is important to look for the impact of disclosure of relevant information on the decisions. In a survey of Iranian nephrologists, 48% believed that more than half of donors were unwilling to know about the complications (Ossareh *et al.* 2007).

In addition to a minimum age of donation, there are two main principles in the

procedure of informed consent in the Iranian model. First, the form must not only be signed by the potential donor but also by his or her next of kin. This approach is an effort to prevent immediate decision-making and bringing the subject to the family to scrutinize the decision-making process carefully. The second is that the medical team is not part of the process of getting the informed consent (Mahdavi-Mazdeh 2012; Einollahi and Taheri 2008).

Is there any long-term follow-up health-care for Iranian donors?

It is necessary to ensure optimal follow-up for donors as well as recipients to minimize the possible future risks to them. It should be admitted that there is not any evidence-based follow-up study on Iranian donors, and the model has not implemented a program for long-term follow-up. Azar *et al.* studied 86 living kidney donors (80 donors were unrelated) after 17.24 ± 5.04 months and found hypertension and micro-albuminuria in 37.5% and 10.4% respectively (Azar *et al.* 2007). Recently, Fallahzadeh *et al.* assessed in a cross-sectional study the health status and quality of life of 52 paid unrelated versus 92 related living kidney donors and found similar levels of systolic and diastolic blood pressure between the two groups, but the rate of micro-albuminuria was 35% in unrelated and zero in related donors. However, it was measured just once instead of three times (Fallahzadeh *et al.* 2013). It is important to pay attention to the fact that many donors do not want to be known as donors. In the Fallahzadeh *et al.* study, out of 681 and 513 paid and related donors, only 52 and 92 donors participated in the study. International constant approach to Iranian donors as vendors should not be overlooked in this regard.

Conclusion

To make a long story short, there is strong belief that a global regulated market is not an appropriate solution for organ shortage. Establishing boundaries (same citizenship) protection of both donor and recipient would be one possible solution, which could make it feasible to prevent desperate dialysis patients from wealthy Western countries from looking for vulnerable organ donors in other countries. Providing enough medical facilities may protect both recipient and donor from possible disease transmission or unsuitable perioperative management. Receiving fair compensation based on standards of the country of residence could enable donors to carry through with a decision previously based on altruism. Long-term donor follow-up should be one of the items of any paid unrelated donation program from the very beginning. However, globalizing processes have an undeniable effect on interdependence of economic and cultural activities. Health services, as one of the most important human demands, cannot remain sheltered from them. It is key that experts solve the ethical conflicts regarding such an important issue.

Bibliography

References

Azar, S. A., M. R. Nakhjavani, M. K. Tarzamni, A. Faragi, A. Bahloli, and N. Badroghli. 2007. Is living kidney donation really safe? *Transplantation Proceedings* 39 (4): 822–823.

Danovitch, G. M. 2014. The high cost of organ transplant commercialism. *Kidney International* 85(2):248–250.

Delmonico, F., G. Danovitch, A. Capron, A. Levin, J. Chapman, and Council of the Declaration of Istanbul Custodian Group. 2012. "Proposed standards for incentives for organs donation" are neither international nor acceptable. *American Journal of Transplantation* 12(7):1954–1955.

Einollahi, B. and S. Taheri. 2008. Renal transplantation practice in Iran and the Middle East: Report from Iran and a review of the literature. *Annals of Transplantation* 13(1):5–14.

Fallahzadeh, M. K., L. Jafari, J. Roozbeh, N. Singh, H. Shokouh-amiri, S. Behzadi, G. A. Rais-jalali, M. Salehipour, S. A. Malekhosseini, and M. M. Sagheb. 2013. Comparison of health status and quality of life of related versus paid unrelated living kidney donors. *American Journal of Transplantation* 13(12):3210–3214.

Fathi-Ashtiani, A., G. R. Karami, B. Einollahi, S. Assari, F. Aghanasiri, M. Najafi, and E. Nemati. 2007. Marital quality in kidney transplant recipients: easy to predict, hard to neglect. *Transplantation Proceedings* 39(4):1085–1087.

Ghods, A. J., S. Ossareh, and P. Khosravani. 2001. Comparison of some socioeconomic characteristics of donors and recipients in a controlled living unrelated donor renal transplantation program. *Transplantation Proceedings* 33(5):2626–2627.

Ghods, A. J., and S. Savaj. 2006. Iranian model of paid and regulated living-unrelated kidney donation. *Clinical Journal of the American Society of Nephrology* 1(6):1136–1145.

Haghighi, A. N., and N. Ghahramani. 2006. Living unrelated kidney donor transplantation in Iran. *Nature Clinical Practice Nephrology* 2(12):E1.

Heidary Rouchi, A., M. Mahdavi-mazdeh, and M. Zamyadi. 2009. Compensated living kidney donation in Iran: donor's attitude and short-term follow-up. *Iranian Journal of Kidney Diseases* 3(1):34–39.

Ibrahim, H. N., R. Foley, L. Tan, T. Rogers, R. F. Bailey, H. Guo, C. R. Gross, and A. J. Matas. 2009. Long-term consequences of kidney donation. *The New England Journal of Medicine* 360(5):459–469.

Inston, N. G., D. Gill, A. Al-hakim, and A. R. Ready. 2005. Living paid organ transplantation results in unacceptably high recipient morbidity and mortality. *Transplantation Proceedings* 37(2):560–562.

Lavee, J., T. Ashkenazi, A. Stoler, J. Cohen, and R. Beyar. 2013. Preliminary marked increase in the national organ donation rate in Israel following implementation of a new organ transplantation law. *American Journal of Transplantation* 13(3):780–785.

Mahdavi-Mazdeh, M. 2012. The Iranian model of living renal transplantation. *Kidney International* 82(6):627–634.

Matas, A. J., S. Satel, S. Munn, J. R. Richards, A. Tan-Alora, F. J. Ambagtsheer, M. D. Asis*et al.* 2012. Incentives for organ donation: proposed standards for an internationally acceptable system. *American Journal of Transplantation* 12(2):306–312.

Nafar, M., A. Firoozan, F. Poor-reza-gholi, P. Ahmadpoor, F. Samadian, S. Samavat, S. Ziaie*et al.* 2014. Kidney donor and recipient perioperative evaluation. *Iranian Journal of Kidney Diseases* 8(1):13–24.

Nejatisafa, A. A., S. Mortaz-hedjri, T. Malakoutian, M. Arbabi, M. S. Hakemi, A. N. Haghighi, M. R. Mohammadi, and I. Fazel. 2008. Quality of life and life events of living unrelated kidney donors in Iran: A multicenter study. *Transplantation* 86(7):937–940.

Ossareh, S., M. B. Asl, S. Al-Zubairi, S. Naseem. 2007. Attitude of Iranian nephrologists toward living unrelated kidney donation. *Transplantation Proceedings* 39(4):819–821.

Segev, D. L., A. D. Muzaale, B. S. Caffo, S. H. Mehta, A. L. Singer, S. E. Taranto, M. A. Mc Bride, and R. A. Montgomery. 2010. Perioperative mortality and long-term survival following live kidney donation. *JAMA* 303(10):959–966.

Simforoosh, N., M. H. Soltani, A. Basiri, A. Tabibi, S. Gooran, S. H. Sharifi, and M. H. Shakibi. 2014. Evolution of laparoscopic live donor nephrectomy: a single-center experience with 1510 cases over 14 years. *Journal of Endourology* 28(1):34–39.

Spital, A., and J. S. Taylor. 2007. Living organ donation: always ethically complex. *Clinical Journal of the American Society of Nephrology* 2(2):203–204.

Tavallaii, S. A., B. Einollahi, M. Azizabadi Farahani, and M. Namdari. 2009. Socioeconomic links to health-related quality of life, anxiety, and depression in kidney transplant recipients. *Iran Journal of Kidney Diseases* 3(1):40–44.

Wikipedia. 2014. List of countries by GDP (PPP) per capita. January 14. Accessed at en.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita.

World Bank. 2014. PPP conversion factor, GDP (LCU per international $). Accessed at

data.worldbank.org/indicator/PA.NUS.PPP.

Notes

1 Mycophenolate and cyclosporine are drugs used for the prevention of organ transplant rejection.

Author

Mitra Mahdavi-Mazdeh

Professor in the division of nephrology at Tehran University of Medical Sciences. She has been director of the Iranian Tissue Bank Research Center since 2007. Her major research interests lie in the field of tissue engineering and epidemiologic features of renal replacement therapy, especially renal transplantation in developing countries.

The Ends of the Body: Neocannibalism and Military Necropolitics

Nancy Scheper-Hughes

Drawing on Michel Foucault's critique of sovereignty and its relation to war and biopower (Foucault 2003) and on Giorgio Agamben's *Homo sacer: Sovereign Power and Bare Life* (1998), this chapter addresses the neglected and controversial problem of necropolitics, which Mbembé and Meintjes (2003) defined as "the exercise of sovereignty over death, maiming, and killing in wartime."

Genealogies of a tabootopic

My subject is the plunder of the bodies of the enemy during or in the aftermath of wars, with the complicity and collaboration of military and police states. It represents the extreme limit of what might be called neocannibalism. The theft and consumption (cannibalization) of human body parts, especially during times of war, has a long genealogy (Richardson 2001). Evidence of the biosavagery and headhunting for trophies taken from the enemy body is a common theme in the archaeological (Preston 1998; Turner and Morris 1970) and ethnographic records (Rosaldo 1980).

However, this practice took on a new form with respect to “modern” warfare beginning in European Middle Ages when hunting and warfare were still closely related (Harrison 2012), and then late modern technologies brought in their wake new capabilities to plunder, harvest, store, and distribute human organs, tissues and genetic materials. Global licit and illicit markets to supply the demands of transplant medicine, orthopedic, and orthodontic medicine, dermatology, plastic surgery, and to serve the needs of basic science and research, commercial pharmacology, and medical training are a late twentieth-century innovation.

There are many genealogies of war crimes and biological war booty going back to ancient Rome and the famous communal rape of the Sabine women as a war tactic. But a specifically late modern deviation began in the twentieth century with the emergence of the Nazi death camps, and continues through the early twenty-first century with the torture camps and political refugee and wartime detention camps alleged to be organ-harvesting camps. This rupture points to the demise of classical humanism, holism, and history—the end(s) of the body and the ends of history as we once knew it (or believed we did).

Partible/divisible bodies, part-histories, and part-truths have replaced Enlightenment certitudes and universal codes of human-rights and ethics.

A second genealogy begins with the end of the Cold War and its chaotic aftermath, which released a triumphal millenarian capitalism bolstered by an ethic of individual rights and choices. Global capitalism and advanced biotechnology led to new medically incited "tastes" for human bodies, living and dead, for the skin and bones, flesh and blood, tissue, marrow, and genetic material of the other. Rapacious demands for scarce organs and tissues produced a post-modern form of human sacrifice. Organ scarcity and needs created an unprecedented demand for them and a division of the world into organ "givers" and organ "getters," to put it bluntly, sanctified by the medical mantra of "saving lives," a dangerous discourse that can obliterate the collateral harm done to individuals, communities, and nation-states in the illicit procurement of human biomaterials, especially when they are still attached to their native bodies.

Cannibal markets based on the disposability and dispensability of bio-available populations and groups have certainly flourished under economic globalization. There are cannibal markets in bodies, whole and in parts, dead and alive; in partible and portable organs; in tissues, oocytes, rented wombs, and babies; and even cannibal markets in doctors, surgeons, and nurses that move and remove these "things"—bioproducts and medical goods—from one vulnerable country to other locations and populations that have defined new rights and new sovereignties over the bodies of others. As in any market enterprise, these markets are producing winners and losers, advantaged and disadvantaged, supercitizens and subcitizens.

Elsewhere (Scheper-Hughes 2003a, 2003b, 2006, 2008, 2011a, 2011b), I have described the criminal aspects of the traffic in humans for their disposable organs and tissues. I publicized the scars left not only on the ruined bodies of disillusioned sellers, but on the geopolitical landscapes where the illicit transplant trade has taken root. In an effort to get the attention of medical professionals, human-rights organizations, regulatory agencies and government officials, I used forceful language, describing markets in human bioproducts as "neocannibalism," as "biolust," "body theft," and, even (in some instances) as "bioterrorism." I have called surgeons involved in illicit transplants with

trafficked persons “outlaws,” “vultures,” and part of an international “organs mafia,” naming their local recruiters “kidney-hunters.” I described the buyers—the medical tourists and travelers—as ethically impaired, having no qualms about helping themselves to rented wombs, buying up the oocytes and/or the embryos taken from other bodies, or kidneys purloined for pennies from depressed, displaced, disgraced, and debt-ridden-slum and shantytown dwellers, treating these “suppliers” as if they were dead bodies, or simply fresher and more mobile proxy-cadavers.

At the heart of this book on “cannibal markets” is an analysis of post-human (see Whitehead 2009, Wolfe 2010) forms of human sacrifice. Fetishized gametes and designer infants emerge as new commodities, the new “blood diamonds” in this cannibal trade. This traffic is fueled by a neoliberal economy that values humans as commodities and the “self”—suppliers, brokers, buyers, sellers, and processors—as a market mechanism for reusable body parts, pushing human agency and hyperindividualism to their extreme limits.

The enduring bioethical quandaries of the new biomarkets can be subsumed under the four C’s: (1) *consumption*, as related to the conditions making it ethically permissible to consume (cannibalize) the body parts of the other, living or dead, and what that compassionate cannibalism entails; (2) *consent*, especially with respect to the recruitment of the vulnerable as organs-givers and convenient sources of fresh and non-reproducible medical material; (3) *coercion*, in connection to the demand for sacrificial violence and bodily gifting to fulfill altruistic, kin-based, or economic survivalist needs; and, finally, (4) *commodification*, or the fragmentation of the body and the sale and distribution of its (alienated) parts.

Several chapters in this book address the commodification and commercialization of the body and its parts in various forms, including transplant and reproductive tourism for kidneys, tissues, oocytes and embryos as well as the predatory recruitment of fresh and cheap doctors and nurses imported from the global South and East to the North. Today, the global quest for fresh organs from living, paid (mostly kidney) providers is widespread and robust,

involving private and clandestine as well as public and normative exchanges among buyers, brokers, surgeons and sellers from North and South, East and West. Human trafficking for the removal of kidneys from the living is recognized and condemned by the global medical and transplant professions (Delmonico 2009). The United Nations Convention against Transnational Organized Crime (UN 2000a) and the Protocol to Prevent, Suppress and Punish Trafficking in Persons (UN 2000b) for forced labor, sex, or to procure fresh kidneys, recognize trafficking for kidneys as organized crime, a human-rights abuse, and a potential crime against humanity.

There is a global consensus that kidney trafficking today is: a) widespread; b) a dangerous and criminal corruption of normative organ harvesting; c) dependent on illicit organized crime; d) a serious violation of human-rights. There is also reluctance and perhaps an inability to prevent, suppress, or punish those involved in this crime. The growth of the syndicates in contrast to the small number of very limited prosecutions worldwide leads one to consider the possibility that markets in humans for the removal of their kidneys has become so normalized and routine that, despite the strong sanctions against it, few prosecutors want to take up the challenge and few governments pursue the criminals involved. There have been arrests but no prosecutions in Turkey, a major hub between East and West in illicit transplant schemes. There have been arrests and limited prosecutions of organized organs and transplant trafficking schemes in India, Israel, Brazil, South Africa, Ukraine, Kosovo, and the United States. The outcomes are variable given the different legal jurisdictions, laws applied, and legal interpretations. Some striking examples have been published elsewhere (Scheper-Hughes 2011a, 2011b; Hanssan and Sole 2011).

A great many informed scholars from the fields of economics, bioethics, transplant medicine, and criminology have argued (as have some contributors to this volume) that regulation rather than prohibition and criminalization might be the best solution to the problem of scarcities and demands for fresh organs. The chapter by Mitra Mahdavi-Mazdeh on Iran’s government program allowing a charitable trust to organize the matching and financial compensation of willing

living kidney providers for end-stage nephrectomy patients is a case in point. And compensation rather than prohibition might be a better strategy in the long run. If so, we ought to seriously consider how this can be accomplished without violating the universally shared medical ethics of care, equality, fairness, the protection of human dignity, and the avoidance, above all, of what may simply be intrinsic violence and exploitation involved in these new social and medical contracts.

Biopiracy of the dead: the body of the enemy

Three photos of dead and violated bodies have kept my Organs Watch project alive. They are icons, displayed over my writing desk at home as I would not want my students to grapple with them. The first is a classic photo, purchased in Paris, of “Che” Guevara, his limp but graceful and slightly smiling dead body, propped up by clueless CIA agents, who did not realize they were showing the world the body of a future “saint.”

Traumatized mothers gave the other photos to me. The second is that of seventeen-year-old Andrew Sitshetshe from Gugutethu, South Africa, whose plundered remains lay exposed on a concrete slab at the Salt River mortuary in Cape Town toward the bitter end of the antiapartheid struggle. Andrew was caught in township crossfire, while carrying his mother’s radio that had been repaired in a local shop. Andrew’s body is shown split in half and his abdomen is as empty as his eye sockets. Andrew’s evacuated body—literally a body without organs—was carelessly laid out for viewing on the *Cape Times* Sunday comic strips. “Like a gutted fish,” his mother, Rosemary Tandiwe Sitshetshe, told me. Then she asked a question from the Bible: “What have they done to my son?” I pursued the question, a quest that led to a full day’s reckoning at the South African Truth and Reconciliation Commission about politically motivated dismemberment of the dead, mixed race and black, at police mortuaries run by old school Afrikaner pathologists.

I was given the third photo in the West Bank of Palestine, a short sprint from Jerusalem. Abdel Karim Musalmeh had been shot in the head on November 8, 1995, by Israeli Defense Force (IDF) snipers. The single bullet hole that was determined to have killed Abdel was clearly visible in the photo attached to the Israeli autopsy report from the Abu Kabir National Forensic Institute in Tel Aviv. Abdel’s execution followed a military order for the demolition of his

family's home in the Arab village of Beit Awa. Abdel was caught fleeing the family home and shot without provocation as a "wanted person on the run." Abdel's body was returned in tatters to his mother with the autopsy report that confirmed her son's death by a rifle shot to his head. Why, then, his mother asked, was his dead body cracked open from neck to torso and crudely sown together and his eyes and skin removed, "Skinned," she said, "like a rabbit." I did not know, but promised to find an answer. And I did (Scheper-Hughes 2010, 2011c; Kugel 2010; Scheper-Hughes and Boström 2013). His autopsy at the Israeli National Forensic Institute had been followed by body plunder for organs, skin, and eyes—the skin was sent to a military skin bank at Hadassah Hospital.

In contrast to the gradual normalization of kidney trafficking and selling, the plunder of dead bodies, especially of prisoners, enemies of war, the mentally incompetent, and children is perceived differently, as a heinous crime, a crime against the state, and (in the case of the unconfirmed allegations in Kosovo) as a crime against humanity. Ethnographic examples include: a psychiatric camp at the Argentine National Mental Colony of Montes de Oca, during and after the Dirty War; a police mortuary in Cape Town, South Africa, during the antiapartheid struggle; a militarized National Forensic Lab in Tel Aviv (Israel) during and after the two Intifadas; and finally, allegations of murder for "fresh" organs in transit-detention camps in Kosovo and Albania at the end of the Kosovo War in 1999 (Aliu 2012).

Each case concerns missing or disappeared bodies, illegal dissections, and harvesting and stockpiling organs, tissues, and other body parts from the bodies of enemies, terrorists, combatants. In each case fact and fiction, the social imaginary, and the hallucinatory collide in media and in forensic, medical, and scientific reportage. The motives attributed to each case—eliminationist social hygiene toward the profoundly mentally disabled abandoned to the public asylum in Montes de Oca, Argentina; the desecration of dead bodies of Palestinian enemies in the Israeli case; the harvesting of tissues and solid organs from black and colored bodies in Cape Town—were often as contradictory as they were complex.

The study of cannibal markets operating in concert with militarized states is the most toxic and self-polluting research in which one can engage. Details will not be given here but have been—and will be—published elsewhere (Scheper-Hughes 2015, in press). This research led me to engage with a taboo anthropological topic: a banned discourse on the anthropology of evil.

An anthropology of evil?

Evil is not an anthropological subject, except, perhaps, with reference to African witches or to Amazonian dark shamans. After the Holocaust some social scientists dared to introduce a phenomenology of evil (see Ricœur 1967; Staub 1989). Few anthropologists entered the discussion. It is my intent to suggest that some forms of body plunder are just that, especially when linked to war crimes, as when the bodies of the enemy, or the bodies of terrorists, or the bodies of "subhuman" non-citizens (the profoundly disabled) are used as sources of organs, bone, skin, and tissues.

The anthropologist's norm of reluctance to judge or to second-guess what we are told by our informants takes on a different shape when one is working in the field of criminal behavior. Our discipline's moral reticence may be a gentlemanly vestige of our postcolonial conventions of political reticence, one that has sometimes turned us into willing bystanders when crimes, including crimes against humanity, are taking place in our field sites. Documenting such crimes require collaborations with forensic pathologists, police and detectives, bio-archeologists, ethnographers with experience working in war zones. And anthropologists can assist governments and international investigations on organ trafficking not only from the living but also and perhaps even more urgently, from the dead, including those nightmarish scenarios in which the bodies of the enemy become the spoils of war.

As Paul Reisman (cited by Scheper-Hughes 1995) commented in a discussion we had, "Once we identify an evil, I think we give up trying to understand the situation as a human reality. Instead we see it as in some sense inhuman, and all we then try to understand is how best to combat it. At this point we [leave anthropology behind] and we enter the political process." For some, such as Didier Fassin (2008) and Roy D'Andrade (1995), an objectivist approach to

“evil”—maintaining evil as a culturally constructed and neutral category—will ultimately provide a better understanding of how the world works. Yet modern concentration camps, transit camps, detention camps, refugee camps, pathology labs, police morgues, and transplant wards lead me to Georgio Agamben’s reflections on the *Homo Sacer* (1998)—the accursed ex-human, the socially dead, dehumanized entity, stripped down to a beastly form of corporality, a zoological specimen, the one to whom anything can and must be done, who can be killed with impunity. I am not afraid to identify the *Homo Sacer* as an evil institution. But saying so assumes no duality. It does not imply what a good opposing figure might be.

Theft of life—the real, the unreal and the uncanny

The Organs Watch Project began in 1997, when I began to investigate rumors and strange allegations bearing on what appeared to be a collective human nightmare—the fear of being kidnapped, executed and dismantled, with one's organs or those of one's children stolen and distributed to strangers (Campion-Vincent and Scheper-Hughes 2001).

Organ theft stories combine aspects of the real, the unreal, and the uncanny. There are many social and political realities that render ordinary people vulnerable, gullible, and terrified. In times of political chaos or natural disasters, people do disappear, and fears and allegations of kidnapping and murder for organs proliferate. They surface from the "*political social imaginary*"— where state biopower and necropolitics occupy a zone between the real and the imagined. They express the "worst fears" of vulnerable populations in the face of real acts of bioterrorism, as in Argentina during the Dirty War and in Kosovo at the end of the war there. Bodies have gone missing—where are they? Why haven't their graves been found? Could the missing and unaccounted-for dead have fallen into the hands of medical executioners looking for their organs? I have argued that organ-theft rumors are at the very least metaphorically true, operating by means of symbolic substitution. They witness the ontological insecurity of classes of people to whom almost anything could be done, reflecting everyday threats to bodily security, urban violence, police terror, summary executions, and body mutilation, all of which were daily occurrences.

Obviously not all allegations of body and organ theft are true. Yet, as some allegations of organs trafficking from the living and from the dead, from strangers and from enemies, were proven to be factual, my Organs Watch investigations shifted toward a kind of forensic or detective ethnography, and I

followed rumors of illicit organ trafficking networks from Africa to the Middle East to Southeast Asia to South America, Europe and the United States.

Most instances of human trafficking for the purpose of organ procurement fit into the paradigm of what the late Franco Basaglia (in Scheper-Hughes and Lovell 1987) called peacetime crimes, *crimini di pace*, in which the violence requires the complicity of state bureaucrats, doctors, surgeons, blood-matching technicians, public health officials, hospital administrators, medical-insurance agents and immigration officers. The crimes are directed at the displaced, disposable, distressed and sick poor, immigrants, refugees, dispossessed and the mentally or cognitively challenged. But peacetime crimes can also be deployed as war crimes, and in the worst instance transform into crimes against humanity.

The chaos of war—civil wars, dirty wars, and genocides—provides an ideal cover for the inhumane treatment of the bodies of the enemy, the terrorist, and those seen as mentally or morally deficient, as "better off dead." In many cases in the Organs Watch archives, the war crimes and the crimes against humanity continued under the radar, unacknowledged by Human-Rights Watch and other humanitarian organizations. They were protected by the belief that such crimes are technically impossible, that organs harvesting and transplant could not be conducted under unstable and technologically primitive conditions.

When military interests and public health projects are enmeshed, moral reasoning is reduced to a kind of megalomaniacal hubris, which Ostrovsky and Hoy (1990, 335) describe as "the feeling you can do anything you want to whomever you want for as long as you want because you simply have the power to do so." Under these circumstances those in power believe they are themselves in combat with a larger evil force, be it a lethal disease or political enemies of the state.

In addition, a lack of awareness of the minimal technical-medical-surgical requirements of organ and tissue harvesting and transplantation in unruly times and places made these cases difficult to adjudicate. Even seasoned prosecutors are often confused about the difference between organ and tissue harvesting from dead bodies, brain-dead (deceased) donors, from executed prisoners, and

from living, trafficked kidney suppliers.

The role of heavily militarized states in organ theft from the bodies of the enemy combatant (the militant, the terrorist) or from the bodies of "the enemy" within —the undocumented, the new immigrants, the mad, and the mentally incompetent—is a special case in the larger realm of global organ trafficking. It is the moment when during wartime, peacetime crimes are employed on a larger, political stage, and with political intent. In unruly times severe rights abuses are perpetrated for the purpose of illicit organ and tissue theft from prisoners of war, public mental patients, and the unwanted dead bodies of the poor. Organs and tissues are harvested from nonpersons, from the socially and politically dead, the *Homo Sacer* of the postmodern era, and such acts can be so abhorrent as to fall under the moral-political category of crimes against humanity, that is, evil crimes.

Worst fears

Human trafficking, kidnapping and disappearances, for the purpose of illicit organs harvesting, stem from greed, the desire to display power and authority or to curry favor with colleagues and government officials, and from political motives. Human trafficking for organs is not uncommon in war zones, during (and after) political conflict, in transitional states as well as during natural disasters, like the earthquakes in Turkey and Haiti, all of which create the public chaos that can provide a cover for illegal harvesting and plundering the bodies of the dead, or can stir up rumors that such things have happened, without any forensic evidence.

Some of these human trafficking allegations are false, based on moral panics, post-traumatic stress disorder, and the anxiety and the abovedescribed “worst fears” of vulnerable populations and ethnic groups who have experienced the disappearances of their loved ones, and to whom (they know quite well) almost anything could be done, even the murder of their children for organs. Their lives aren’t worth 20 centavos in the mind of the organs traffickers. The fears were based on a sense of political and existential bio-insecurity.

For example, there were many allegations of illegal organ harvesting by the Israeli humanitarian field clinic set up in Haiti following the 2010 earthquake there. A spokesperson for the UK Liberal Democratic Party called for a parliamentary investigation of the allegations, which were later dismissed as political propaganda from Iran and Palestine (www.haaretz.com/news/u-k-lawmaker-fired-over-claims-idf-harvested-organs-in-haiti-1.263311). However, the rumors were actually fueled by the presence in Haiti of both US and Israeli religious organizations that proposed airlifts and adoptions by foreign families of the alleged “tens of thousands of Haitian children” orphaned by the earthquake. Organ theft and child theft are often linked in rumors. In this instance they were

fueled by humanitarian interventions to rescue orphaned children whose parents were not dead but missing in the initial chaos (www.nbcnews.com/id/34934553/ns/world_news-haiti/t/haiti-quake-creates-thousands-new-orphans/#.VQCQK6WKh0s).

The announcement was made on Israel National News that two humanitarian organizations, “Israel Flying Aid” and “Orange Israel Telecommunications” were planning to open an orphanage to accommodate more than 200 Haitian orphans in Port-au-Prince with the hope of air lifts and adoptions by Israeli couples (www.israelnationalnews.com/News/News.aspx/135698#.VQCYt6WKh0t).

In Kosovo, there were allegations, some of which have been verified, of the wanton killing of Serb civilians and former militants in retaliation for the genocide in former Yugoslavia, concerns being raised regarding the several hundred Serbs whose bodies were still missing at the end of the Kosovo war (Ghia 2011). United Nations and European Union investigations were informed by what were politically generated disinformation campaigns, including the release of a tape in Serbia in September 2012 in which a former Kosovo Liberation Army militant described the illegal harvesting of a heart from a Serbian prisoner at a detention center near the Albanian town of Kukes in the late 1990s and the transport of the heart to the airport in Tirana, the capital of Albania, to be sold on the black market. The witness was unreliable, which contributed to the European Parliament decision to table the investigation altogether. In fact, the EU later found evidence from the chief prosecutor, Clint Williamson, to conclude that at the end of the Kosovo war (1998–1999), [1] a small number of Serbian captives had been killed and their organs harvested. But the fears expressed were not irrational or absurd. An international scheme of illicit transplant and organ harvesting of trafficked persons did nest inside Kosovo, resulting in the deaths of the transplant patients and the kidney suppliers. In this instance, the EU was forced to act and a long prosecution resulted in convictions of local doctors and international brokers. The primary defendant, a Turkish doctor, Yusef Sonmez, is still at large, though he was

reported as seen in South Africa and in Azerbaijan, in public, drinking and carousing, showing that he feared nothing, least of all the Interpol detectives.

In the case of the abuses of the bodies of the mentally deficient at Colonia Montes de Oca during and after the Dirty War, the introduction of rumors, urban legends and the mysterious disappearance of a sympathetic doctor (Cecilia Giubileo) initially contributed to a hallucinatory cordon sanitaire that protected the criminal behavior on the part of administration and staff and allowed the abuses to continue well into the beginning of the twenty-first century. When she experienced a moral and medical ethical crisis and began to share her deep reservations about the abnormality of the system, she was liquidated, or so I have concluded based on a multi-year anthropological and archival investigation of the history of that institution. There, the patients were simply referred to by the administration as “depositos”—deposited ones whose human status was under question due to their cognitive impairments. Elsewhere, I have argued that within the political-genocidal battleground of Argentina’s Dirty War (1976–1983), a war within the war was being waged by a military-dictator-appointed doctor, Florencio Sanchez, against the mentally deficient inmates concentrated at the national psychiatric hospital, the Colonia Nacional Dr. Manuel A. Montes de Oca in Torres, and its sister institution, the Colonia Psiquiatrica Domingo Cabred, in Lujan, both in Buenos Aires province. There is evidence of medical-human-rights abuses committed against abandoned mental “defectives” who were used as sources of blood, tissues and organs and allowed to die prematurely of starvation, hypothermia, blood-letting anemia, and by an institutional regime of neglect, including death by feral dogs and wild pigs (Scheper-Hughes 2015).

The Colonia administration defended its practices of harvesting blood, tissues, and corneas, basing their practices on a legal contract with the national organs harvesting institute in Buenos Aires, today called INCUCAI. Blood taken from the inmates on a regular basis was sold to private banks, sent to the military, and sold to individuals who were required to bring a quantity of blood to the hospitals where they would have surgery. During the period of the Dirty War, the inmates were also used in clinical trials and medical experiments, as the

director of the Colonia, Florencio Sanchez, admitted in his prison memoir. As we have seen here, Argentina was not the only modern military state to recognize the value of the human body—whether the body of the enemy, the body of disposable subcitizens, and whether living or dead—to supply scarce and valuable medical, surgical, and reproductive material. In its worst form, however, the abuses at the mental colony were egregious, almost in a class by themselves.

Primo Levi's (1959) chilling description of the pernicious "hierarchy of bodies" at Auschwitz in Nazi-occupied Poland identifies the lowest rung of hell as reserved for the *Muselmänner*—those who were like walking dead men, their eyes having receded into their sockets, their legs unsteady, unable to stand, without the will to survive, unable to flee. Central to Georgio Agamben's *Homo Sacer* thesis is the figure of the *Muselmann*, the man or woman in an advanced state of starvation, stupefaction, and "living in death", a life reduced to silence, awaiting death, with no other destiny. While I am suggesting that the inmates at Montes de Oca occupy a similar status, both *Muselmänner* and the ghosts of Montes de Oca are the extreme case, even for the concentration camps, even for the wretched madhouses that have housed the profoundly mentally deficient.

Camp life at Montes de Oca, as described by Florencio Sanchez in his prison diary, was hardly a pleasant nudist camp of vacationers. It reproduced a hierarchy of ethnomedical folk categories, which ranged from the "high functioning," the violent ones, the dangerous ones, the aggressive, the oversexed, the useful, the ambulatory, and then, at the bottom of the heap, were the NNs, the "*depositos*," and the "*gatosos*," the cats, the pissers, and the crawlers, those who seemed to have surrendered any claim to human status, and were not so much despised by their caretakers for their inability to keep themselves minimally intact, but symbolically "disappeared" and rendered invisible. But in "suffering" their inhumanity the *Muselmänner* of Montes de Oca stand as an indictment of the social and medical system that created them.

Crimes such as these, ones that are often referred to as heinous crimes, unpardonable crimes, crimes "that cry out to heaven for vengeance," are

protected by the emotions of disgust, repugnance, and fear of seeing, let alone handling, dead bodies. Death anxiety, death pollution—a fear and avoidance of confronting the dead body—creates a hermetically sealed environment for abuses to take place. Such was the case at the Israeli National Forensic Institute at Abu Kabir. The elegant building housed a genetics/DNA lab on the top floor that was clean, pure, completely segregated from the morgue in the basement. Those of the third floor did not know what crimes were being committed beneath the clean scientific labs of which they were so proud.

What explains the complicity of the forensic pathologists? Perhaps during the worst times of political conflict there was a moral dispensation, even a belief that the desecration of the dead was necessary. One thinks of many other similar cases, such as the collapse of morality among US soldiers in the prison at Abu Ghraib in Irak. Perhaps it began with the body of the enemy, the Palestinian "terrorist", and gradually the practice of autopsies turned into ad hoc dissections spread to other populations.

The allegations of the plunder of the bodies of the enemy at the Israeli Forensic Institute were dismissed as blood libels and political propaganda against Israel. When we began our independent investigations of Abu Kabir, neither Boström nor I knew that an internal whistleblower, a colonel, Dr. Chen Kugel, an Israeli forensic pathologist and a military officer, had been working behind the scenes with three other younger pathologists to stop the plunder of the dead and the stockpiling of body parts at the Institute. These "perversions," as he called them, filled Dr. Kugel with righteous anger at the corruption, deceit, and abuse of the dead by public officials whose obligation was to be their final guardians. Kugel paid a heavy price for his interventions. He was forced out of his position at the National Institute and was treated as a traitor and, worse, as a "leper," he told me.

The unlikely collaboration among a Swedish journalist, an American anthropologist, and an Israeli pathologist and IDF military officer brought about an unanticipated outcome. The Ministry of Health and the Israeli government accepted our published conclusions and concluded their own investigations that

led to the removal of Dr. Yehuda Hess and the appointment of Dr. Chen Kugel as his successor.

"The dead body has rights and a dignity of its own," Kugel commented as he took Israeli anthropologist Meira Weiss, Israeli Organs Watch Assistant Zvika Or, and me on a private tour of the "new" Forensic Institute and Ministry of Health, and the morgue at Abu Kabir in 2013, now under his direction. "Bad things may happen here, as in any forensic institution," he said as he rolled out a dead body from its refrigerated cubby. "But these bodies under my care will be safe from illicit harvesting. It won't matter if these are Jewish bodies, Muslim bodies, Christian bodies, whether they are Israeli bodies or Palestinian bodies or undocumented guest worker bodies, or Russian bodies. There is only one body here and they are all to be treated in the same way."

According to the dedicated Israeli pathologist, a guardian of the dead, and also a proud Israeli military officer, the dead body is not nothing. A dead body is not simply an evacuated object. Kugel often substituted the word "person" for the body of the dead and never used the words corpse or cadaver. "Dead bodies matter" could be his political slogan. The dead body was, in his view, a precious "someone" to his parents, siblings, partners, and other loved ones. The body had a history and a life. The dead bodies had grieving relatives. There are no hierarchies of dead persons. He said that the choice to practice forensic pathology meant that the pathologist and the dead were joined at the hip, joined at the heart, the lung, and the skin. What happened during those two decades of corruption of the morgue was a violation of the body politics. It was an evil, a term most secular Israelis reserve for the Shoah, for terrorist bombings, and for suicide attacks. Translated into secular language, the dismemberment, disarticulation, distribution, the stockpiling of skin, bones, organs, genitals, and tissues of the dead, was, indeed, to Dr. Kugel, a crime against humanity.

The violations of the bodies of the incarcerated, the disabled, the despised, and the political enemy derive from a mix of base corruption, indifference, greed, and the violation of civil rights and medical humanrights. The wanton harvesting of the dead bodies of the enemy is not only a war crime, it is a crime against

humanity in which morality is suspended and—in the words of Jan Gross (2001) writing about the systematic butchery, torture, and burning alive of 1,600 Jewish men, women, and children in the Polish town of Jedwabne on July 10, 1941 —“the devil enters history.”

Bibliography

References

Agamben, G. 1998. *Homo Sacer. Sovereign Power and Bare Life*. Stanford, CA: Stanford University Press.

Aliu, F. 2012. Medicus Clinic was “part of wider crime syndicate.” Interview with Nancy Scheper-Hughes. *Balkan Insight.* September 14. Accessed at: www.balkaninsight.com/en/article/medicus-clinic-was-part-of-wider-crime-syndicate/1425/6.

Campion-Vincent, V., and N. Scheper-Hughes. 2001. On organ theft narratives. *Current Anthropology* 42(4):555–558.

D’Andrade, R. 1995. Moral models in anthropology. *Current Anthropology* 36(3):399–408.

Delmonico, F. L. 2009. The implications of the Istanbul Declaration on Organ Trafficking and Transplant Tourism. *Current Opinion in Organ Transplantation* 14(2):116–119.

Fassin, D. 2008. Beyond good and evil? Questioning the anthropological discomfort with morals. *Anthropological Theory* 8(4):333–344.

Foucault, M. 2003. *Society Must be Defended. Lectures at the Collège de France, 1975–1976*. New York, NY: Picador.

Ghia, R. M. 2011. A word with: Nancy Scheper-Hughes. Bright: Organising Media against Organised Crime. Accessed at flarenetwork.org/report/enquiries/article/a_word_with_nancy_scheper_hughes.htm.

Gross, J. T. 2001. Neighbors: The Destruction of the Jewish Community in Jedwabne. Princeton, NJ: Princeton University Press.

Hanssan, F., and S. Sole. 2011. Kidneygate: What the Netcare bosses really knew. *Mail and Guardian*, April 29.

Harrison, S.. 2012. *Dark Trophies. Hunting the Enemy Body in Modern War*. New York, NY: Berghahn Books.

Kugel, C. (Lt. Col). 2010. Medical human-rights abuses at the National Forensic Institute Abu Kabir. Paper delivered at the University of California Organs Watch Conference, Berkeley, CA, May 21.

Levi, P. 1959 (2010). *Survival at Auschwitz*. New York, NY: Orion Press.

Mbembé, A., and L. Meintjes. 2003. Necropolitics. *Public Culture* 15(1):11–40.

Ostrovsky, V., and C. Hoy. 1990. *By Way of Deception. The Making and Unmaking of a*

Mossad Officer. New York, NY: St. Martin's Press.

Preston, D. 1998. Cannibals of the Canyon. Originally published in *The New Yorker*. November 30.

Richardson, R. 2001. *Death, Dissection, and the Destitute*. Chicago, IL: University of Chicago Press.

Ricœur, P. 1967. *The Symbolism of Evil*. New York, NY: Harper and Row.

Rosaldo, R. 1980. *Ilongot Headhunting, 1883–1974*. Stanford, CA: Stanford University Press.

Rothman, D., E. Rose, T. Awaya, B. Cohen, A. Daar, S. L. Dzemeshkevich, C. J. Lee *et al*. 1997. The Bellagio task force report on transplantation, bodily integrity, and the international traffic in organs. *Transplantation Proceedings* 29(6):2739–2745.

Scheper-Hughes, N. 1995. The primacy of the ethical: Propositions for a militant anthropology. *Current Anthropology* 36(3):409–440.

—. 2003a. Keeping an eye on the global traffic in human organs. *The Lancet* 361(9369):1645–1648.

—. 2003b. Rotten trade: Millennial capitalism, human values, and global justice in organs trafficking. *Journal of Human-Rights* 2(2):197–226.

—. 2006. Alistair Cooke's bones: A morality tale. *Anthropology Today* 22(6):10–15.

—. 2008. The illegal organ trade: Global justice and the traffic in human organs. In *Living Donor Organ Transplantation*. Edited by R. W. G. Gruessner and E. Bedetti. New York, NY: McGraw-Hill Medical.

—. 2010. Body parts and bio-piracy: tissue, skin, bone and organ harvesting at Israel's National Forensic Institute. *CounterPunch*, October 25. Accessed at www.counterpunch.org/2010/10/25/body-parts-and-bio-piracy/print.

—. 2011a. The Rosenbaum kidney trafficking gang. *CounterPunch*. November 30.

—. 2011b. Mr Tati's holiday and João's safari: Seeing the world through transplant tourism. *Body and Society* 17(2-3):55–92.

—. 2011c. The body of the terrorist: Blood libels, bio-piracy, and the spoils of war at the Israeli Forensic Institute. *Social Research: An International Quarterly* 78(3):849–886.

—. 2015. The ghosts of Montes de Oca: buried subtext of the Argentina's Dirty War. *The Americas* 72(2):87–220.

—. 2015 (in press). *The Ghosts of Montes de Oca: Naked Life and the Medically Disappeared.* Chapel Hill, NC: University of North Carolina Press.

Scheper-Hughes, N., and D. Boström. 2013. The body of the enemy. *Brown Journal of World Affairs* 19(11):243–263.

Scheper-Hughes, N., and A. M. Lovell, eds. 1987. *Psychiatry Inside Out. Selected Writings of Franco Basaglia*. New York, NY: Columbia University Press.

Staub, E. 1989. *The Roots of Evil. The Origins of Genocide and Other Group Violence.* Cambridge and New York, NY: Cambridge University Press.

Turner, C. G., and N. T. Morris. 1970. A Massacre at Hopi. *American Antiquity* 35:320–331.

UN (United Nations). 2000a. United Nations Conventions Against Transnational Organized Crime and the Protocols Thereto.

—. 2000b. Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children, Supplementing the United Nations Convention Against Transnational Organized Crime.

Whitehead, N. L. 2009. Post-human anthropology. *Identities: Global Studies in Culture and Power* 16:1–32.

Wolfe, C. 2010. *What is Posthumanism?* Minneapolis, MN: University of Minnesota Press.

Notes

1 rt.com/news/176504-kosovo-organs-serbia-investigation/

Author

Nancy Scheper-Hughes

Professor of anthropology at University of California, Berkeley, where she also directs the doctoral program in medical anthropology. Her research and writings focus on violence, suffering, and premature death as these are experienced on the margins of the late modern world. She has written or edited several award winning books including *Death without Weeping: the Violence of Everyday Life*, *Violence in War and Peace* (with Philippe Bourgois), and *Commodifying Bodies* (with Loïc Wacquant). Scheper-Hughes is the founding director of Organs Watch, a fieldwork-based, medical human-rights and documentation project, based at the University of California, Berkeley. She has participated in the production and filming of several documentaries on the human organ trade.

Part 5. The Human-Product-Banking Industry

Do Human Body Parts Have a Social Life?

Vinh-Kim Nguyen

We are in an era in which the processing of human cells, tissues, and organs into therapeutic tools and pharmacological agents has burgeoned into a globalized industry, with the potential to create enormous wealth, especially for drug and other biotechnology companies. Articles about the commodification of human eggs, sperm, blood, cells and organs appear frequently in the media. The language of individual rights, privacy, and dignity is often appended to them, and sometimes discussion about the appropriate disposal of body parts is included, couched in the language of property. But debate about the broader social implications of commodification of tissues and organs is less common—notably about new forms of inequity and equally, at times, new forms of social solidarity that are emerging as a result of these technologies. Furthermore, the "social life" of human body parts, to paraphrase the anthropologist Igor Kopytoff, and their ambiguity as signifiers, is rarely discussed, nor are the social ramifications of the moral economy associated with this new form of exchange. When human body parts can readily be disaggregated and redistributed for use as therapeutic material in other people, or else as research material, what does this entail for our sense of relatedness to each other? Medical use of human and animal bodies has long been justified in terms of saving lives and enhancing medical knowledge, and obviously biomedical knowledge should not stagnate, but irresolvable contradictions persist when human body parts and human experimentation are the principle means to this end.

Disputes may arise in the social exchange of virtually all kinds of objects, but the commodification of human cells, tissues, and organs is of particular concern

because boundaries assumed to be natural and inviolable are inevitably transgressed through technological manipulation. Debates also arise when tissue, for example, is transplanted from one person to another about what constitutes “self” and “other.” Or, when people provide bodily fluids or tissue for research, arguments takes place about where the line should be drawn between individual interest and privacy and possible financial gain, as opposed to the gifting of biological material for the greater good of humankind. Disagreements are not simply about ownership, property rights, intellectual property, or even about alienability, but also result from a profound angst about possible violations of the moral order. This part is about techno/biologicals of one kind and another; above all, it is about the social repercussions of their creation, supply, and application in practice.

The human-product-banking industry has been a bellwether for broader concerns around the commodification and exchange of body parts. While these concerns first began when blood transfusion emerged as a practice, they have expanded exponentially as advances in biomedicine and biotechnology have made it possible to bank and exchange cells and indeed entire organs. As these articles show, the issue has been to balance the potential for benefit for patients, the risk of exploitation of donors, and public health. As the three contributions that follow demonstrate, the human-product-banking industry challenges notions of what is good, of what constitutes a commodity, of how to value intangible goods, and of the nature of the gift.

Author

Vinh-Kim Nguyen

HIV physician and medical anthropologist. As both a practitioner and researcher, he is concerned with the relationship between science, politics, and practice in global health. His current work focuses on molecular epidemiology, global health, and social theory. He practices at the Clinique médicale l’Actuel and in the Emergency Department at the Jewish General

Hospital in Montreal (Canada). He is associate professor at the Department of Social and Preventive Medicine at the University of Montreal and heads the chair in Anthropology and Global Health at the College of Global Studies in Paris. He is the author of *The Republic of Therapy: Triage and Sovereignty in West Africa's Time of AIDS*; the coauthor, with Margaret Lock, of *An Anthropology of Biomedicine*, and also the co-editor, with Jennifer Klot, of *The Fourth Wave: Violence, Gender, Culture, and HIV in the 21st Century*, as well as numerous articles in biomedical and anthropological journals.

In the Name of Quality and Safety: Commercialization of Human Cells and Tissues

Jean-Paul Pirnay

When I read the invitation for the international research symposium called “Globalization and Commodification of the Human Body: A Cannibal Market?”, I hesitated to accept. Professor Jean-Daniel Rainhorn, one of the organizers of the symposium, reassured me: the subtitle referred to “therapeutic cannibalism” and not to “alimentary cannibalism.” But the inertia of my brain made me think of the movie *Soylent Green* (based on the 1966 novel *Make Room! Make Room!* by Harry Harrison), which I saw in my youth and had left a profound impression. It is the year 2022 and, as natural resources have been exhausted, people are fed synthetic Soylent products (green crackers said to be made of plankton). At the end of the movie, Detective Thorn (Charlton Heston) uncovers the disturbing truth about the real ingredients of Soylent Green: recycled human bodies. As it takes some time for my brain to shift momentum, I asked myself (out loud, in the office): “Would the activity of the Soylent Corporation—i.e., recycling human bodies into food—be *legally* permissible today?” A colleague immediately replied: “No, because cannibalism is illegal in the Western world.”

But is it, in fact? I screened the Internet and soon found out it wasn’t. England, for instance, does not have a specific law against cannibalism. In 1988 and in 1989, Rick Gibson legally ate the flesh of another person in public. [1] When he tried to eat a slice of human testicle in Vancouver, the police confiscated the testicle. However, the charge was dropped and he finally ate the piece of human testicle on the steps of the Vancouver courthouse. In 2011, two presenters of a

Dutch TV show ate each other's flesh on air. [2] A piece of their muscle tissue was surgically removed and was then fried and eaten in front of a studio audience. A lawyer had advised the program's producers that cannibalism is not itself against the law. The presenters consented and claimed that there was no risk of ill health, as long as the human meat is properly cooked. Produce quality and safety shall prevail. The presenters were not prosecuted. So cannibalism is not illegal, providing consent and adherence to some quality and safety requirements, but—and this is important for any new business—is there a market for human meat? Well, pending global famine (this business has a high growth potential), the Soylent Corporation could focus on the very lucrative exclusive food market (anyway, it is recommended to start with a small business). Recently in Nigeria, police shut down a "cannibal restaurant" with roasted human flesh on the menu. The human flesh was sold as an expensive treat, but there were some consent and quality and safety issues.

I'm not, however, a specialist in food safety, and food-industry-promoted cannibalism is not the topic of this paper. I was asked to elaborate on "therapeutic cannibalism" and more specifically on the issues associated with the increasing commercialization of human cells and tissues.

Human cells and tissues

There are important differences between tissue and organ donation that the public are not aware of. Solid organs such as kidneys, livers, and hearts can be taken only from donors who are brain-dead and on life support or immediately after irreversible cardio-respiratory arrest. They need to be transported as quickly as possible from donor to recipient and are not, or only slightly, processed. Surgeons in transplant hospitals control their procurement and national or regional organizations coordinate their allocation. In contrast, human cells and tissues (HCTs) such as bone, skin, and heart valves may come from live organ donors, but more often they come from deceased donors in hospitals, morgues, or even funeral homes. These HCTs are often transformed and stored —they are preservable for years—in “tissue establishments” from which they can be globally distributed. Tissue brokers, processors, and distributors steer the allocation of the resulting HCT products. The HCTs of one donor can be used in 25 to 100 people.

Tradable goods

Another major difference between organs and HCTs is that almost anywhere in the world the latter are considered to be tradable goods. Inside the global market, HCTs give rise to immense opportunities for profits. Theoretically, a single United States (US) donor could generate up to $230,000 in HCT products (solid organs not included), but usually HCTs for a value averaging “only” $80,000 are harvested (United States Congress 2001). As is the case for organs, HCTs are donated for free by donors or their families and, in most parts of the world, it is illegal to buy and sell HCTs. Then, how are profits made? Large tissue establishments set up seemingly altruistic offshoots to collect the HCTs that are later processed into lucrative products. Nobody charges for the tissue itself—this would be illegal—but it is legal to charge “reasonable fees” to compensate for the procurement and the handling of the HCTs. Unfortunately, the term “reasonable fee” has never been defined and this loophole is now used by brokers and tissue establishments to turn altruistic donations into large profits.

HCTs are not only used in transplantation surgery. “Big Pharma” is also interested in HCTs. Using human instead of animal HCTs in the early stages of new medicinal product (drug in the US) testing will help to predict more accurately their safety and can speed up their development. Large firms have been set up to supply HCTs for research. HCTs for medicinal product testing are scarce, and as a result they are said to be worth more than diamonds, being valued at $500/gram (Barnes 2006).

IFAs—illegal and fraudulent activities

Already in 1985, philosopher Malcolm Muggeridge warned the transplantation field that the “hacking-out of bits of peoples’ organs and putting them on the market is becoming an extraordinarily lucrative occupation—It’s going to be a very big trade” and that “where you have money being the decisive factor, there you will have trouble and disruption inevitably” (Marcus 1985). Since then, numerous scandals involving activities that today competent authorities call “illegal and fraudulent activities” (IFAs), have proved him right. Examples of IFAs are non-consented procurement, direct payment for human body parts, inadequate testing, inaccurate or false donor files, and absence of traceability. Whistle blowers exposed black-market sales of cadaveric body parts all over the world. For instance, executed Chinese prisoners were found to provide organs, but also tissues (e.g., skin), for transplantation (Smith 2001). The media had a field trip. Mediagenic and shocking cases such as the “New York body-snatching ring” (Waltz 2006) and the “Alder Hey organ retention scandal” (Redfern *et al.* 2001) drew public attention. Investigations, recalls (more than 60,000 HCT products were recalled in the US between 1994 and 2007) (Willson *et al.* 2012), lawsuits, out-of-court settlements, convictions, resignations, and the shutdown of tissue establishments followed. Corporate tissue establishments were often involved, but managed to keep out of the clutches of the court. The judge in the “New York body-snatching” case stated: “Just because the district attorney never prosecuted the executives from the bigger companies doesn’t necessarily mean they didn’t ‘participate in an enterprise.’” The “New York body snatcher,” Michael Mastromarino, was sentenced to 18–54 years in prison, and yet he concluded, “Nothing is going to change, there are too many people making too much money” (Willson *et al.* 2012).

Public dissatisfaction prompted politicians to act. In the US, a Congress-Senate

committee concluded that the federal government's oversight of tissue banks was insufficient (United States Congress 2001). Although the incidents that had triggered policymakers were not representative of the entire tissue-banking community, and could have been prevented through adequate enforcement of the then-applicable laws and guidelines, more stringent HCT legislation was implemented in 2004 in the US and also in the European Union (EU). Efficient industry lobby, risk-averse competent authorities and policymakers, and US's and EU's urge to promote growth of (biotechnology) markets and jobs led to business-oriented HCT legislation (Pirnay *et al.* 2013). They introduced pharmaceutical industry quality and safety requirements such as Quality Management System, Good Manufacturing Practice (GMP), and Marketing Authorization, which in turn facilitated industry's takeover of the HCT transplantation field. Ethical issues and public-health interests were evaded.

Ethical issues: out of scope, out of mind?

The main ethical principles that are applicable to the HCT transplantation field are: the basic principle of “respect for human dignity” and the consequent principle that “human body material should not be considered as a commercial product or a commodity.” The emerging HCT legislations, however, disregard these principles. Throughout the elaboration process of the EU HCT legislation, various stakeholders presented a wide variety of philosophical, social, religious, and economic viewpoints on relevant ethical issues and in particular on the prohibition of commercialization and commodification of human body material, which lead to fierce ethical debates (particularly in the European Parliament). For some stakeholders, tissues originating from an altruistic (free) donation should only be handled by non-profit-making cell and tissue banks and laboratories, while others argued that the processing of tissues (e.g., into tissue-engineered products) involves costs that justify their commercialization, which in turn provides an incentive for industry to invest in tissue engineering. In the end, ethical issues were deemed legitimate, but out of the scope of Article 152(4)(a) of the Amsterdam Treaty: i.e., the quality and safety of organs and substances of human origin (Pirnay *et al.* 2013).

The subsidiarity principle was used to pass down the ethical issues, caused by the liberal EU HCT legislation, to the member states. As prescribed by the EU, Belgium tried to address some ethical issues in its national transposition of the EU HCT directives. In Belgium, the manager of HCTs must be a medical doctor (MD) (should obey medical deontological codes), an ethical committee must approve the activities and goals of tissue establishments, and the price of HCT products (and of some processes) are fixed by ministerial decree. Unfortunately, these additional national measures have proven insufficient, as MDs can be opportunists too, ethical committees have approved unethical activities (e.g., of a

private autologous cord-blood bank), and a private company successfully lobbied for a ten-fold reimbursement price (Pirnay *et al.* 2013).

It seems impossible to deal with ethical issues on a local level, while being forced to be part of a liberal global market. Moreover, it is clear that ethical issues, such as paid or unpaid donation, the type and extent of donor consent and the eventual commercialization of HCTs, also impact quality and safety and should thus be dealt with at the EU level, or even better, at a global level. This moment of parliamentary "cultural ethical relativism" (each culture—i.e., EU member state—should use its own standards to judge all actions and institutions) is rather strange when it comes to the field of health-care, because one may assume that health is a universal ethical good. In the organ transplantation field, where industry plays a less pronounced role, similar ethical issues are dealt with on a global level (Steering Committee of the Istanbul Summit 2008). Concordantly, the HCT transplantation field would also greatly benefit from a global ethical framework that prohibits financial gains on the human body and its parts (Pirnay *et al.* 2010).

The globalization of human cells and tissues

In 1983, Harvard Business School professor Theodore Levitt argued that companies should emphasize offering standardized products all over the world (Levitt 1983). Companies that concentrated on idiosyncratic consumer preferences would not be able to take in the forest because of the trees. As today's successful global brands demonstrate, this notion clearly makes sense from a linear/mechanistic economical point of view. Globalization is typically accompanied by technological advances and the introduction of regulatory frameworks said to be necessary to increase quality and safety. For instance, small food producers are suffering under new product regulations. Established (some are around for centuries) and tasty local products are suddenly presumed of inferior quality and safety and are gradually replaced by uniform pale global brands with (a perception of) superior quality and safety. Bioengineering is rapidly transforming the crop-development industry, accelerating the concentration and centralization of agrochemical corporations pushing (genetically modified) monocultures and undermining the cultural diversity of local farmers (McMichael 2001). Over the last decades, small independent beer brewers are diminishing in significance as brewing multinationals have transformed one of the oldest industries in the world from a local market into a global one (Hurt 2010). The US artisan cheese world was shaken when the US Federal Drug Agency (FDA) shutdown several small (award-winning) cheese-making facilities due to bacteria findings in cheeses. And so on and so forth. Those defending the age-old methods of local craftsmen find the quality and safety rules to be over the top and argue that the products of large-scale food companies have caused many more illnesses than any product from small producers.

A decade ago, the globalization tide caught up with the HCT transplantation

field. As with most (if not all) markets, the emerging global HCT market is inherently confronted with financial considerations. Emerging HCT legislations focus on quality and safety, evade ethical issues, and exhibit loopholes that allow excessively free maneuvering of those that seek economic advantage. This is quite logical from an economical point of view. Moreover, in the EU it was one of the goals of the HCT regulation to "allow competitiveness in a key biotechnology area and growth of an emerging industry" (Pirnay *et al.* 2013). Unfortunately, service to public health is not seen as industry's key priority.

In the 1970s, most supporters of a market economy embraced Friedman's view (1970) that the social responsibility of business is to increase its profits (for shareholders), not to relax the conditions of profit-maximization on behalf of the wider interests of society. But, is this acceptable when it comes to health-care? Or, to quote Bela Blasszauer (1997): "medicine is a moral enterprise whether it is practiced in the system of slavery or market economy." Defenders of Friedman's thesis claim that for executives to use company resources to advance social goals would be for them to usurp the political function (Norman 2000). Indeed, it is up to the political world to demand that health-care companies defy the laws of economics and fulfill social duties. Policymakers should not be allowed to hide behind cost-based (economic) options to protect the interests of private companies. They should assume their social responsibility (Pirnay *et al.* 2012).

LEPRAs—legal excessive profit-making activities

Up until now, policymakers turned a blind eye to the commercialization and commodification of HCTs. In most parts of the world, the processing of donated HCTs into lucrative products is legal, provided that: 1) there is no proof of payment for the tissue itself, only for processing; 2) some kind of consent is obtained (no necessity to mention eventual non-therapeutic use or commercialization); 3) involved tissue establishments/brokers are registered/accredited; and last but not least 4) all relevant quality and safety requirements are fulfilled.

This introduces a new class of problems to the HCT transplantation field: legal excessive profit-making activities (LEPRAs) (Pirnay *et al.* 2012). The proportion of LEPRAs is much greater compared to IFAs, and they can be equally deleterious for the HCT transplantation. The four most common LEPRAs are: exploitation of low-income countries to procure “raw materials,” excessive processing fees, irresponsible allocation, and commodification.

Exploitation of low-income countries to procure “raw materials”

The supply of HCTs creates problems for companies as they face pressure to maximize their profits. For example, the product AlloDerm® (a skin substitute derived from human cadaveric skin), which earned the biotech firm LifeCell the sixteenth place on *Fortune’s* 100 Fastest-Growing Companies list in 2004, was confronted with a potential hitch: raw material (human-donor skin) supply constraints (Birger 2006).

Today, LifeCell Corporation produces several human allograft tissue matrix products: AlloDerm®, Cymetra®, GraftJacket® and Repliform®. In 2013, the firm reported that the demand for their tissue-matrix products was significant and increasing in the United States, and they continued to expand their manufacturing capabilities to meet this demand. Although, since 2010, the inventory of AlloDerm has been maintained at a level sufficient to meet market demand, LifeCell acknowledges that it is still dependent on the availability of sufficient quantities of raw materials, including donated human cadaveric tissue, and that any shortfall in their ability to procure unprocessed tissue, or manufacture AlloDerm in sufficient quantities to meet market demand would negatively impact their growth (Centaur Guernsey L. P. 2012).

Stock-exchange-listed companies need to maintain profit growth trends; stagnation is not an option. For this they need increasing amounts of raw materials, at the lowest possible cost. In this context, the unequal distribution of wealth and the lack of a global ethical framework (Pirnay *et al.* 2010) create exploitation opportunities that are considered by some as unethical.

International brokers are known to supply human organs, cells, and tissues, obtained in low-income countries without self-sufficiency—basically located in Africa, Asia, Eastern Europe and South America—to the powerful human-tissue

industry (Council of Europe 2009). As such, some large tissue establishments in rich Western European, North American and Asian countries obtain large amounts of raw materials for small procurement fees, which in turn make welcome additions to salaries in low-income countries. Corporate firms process these “raw materials” into lucrative products for users in high-income countries and emerging countries that have embraced global capitalism (US firms distribute more than 2 million HCT products per year). The local health-care systems in the “donor countries” mostly remain deprived of the transplantation of the exported types of tissues.

The “Skin and Bone” project of the International Consortium of Investigative Journalists for instance revealed that Slovakia and Ukraine export cadaver parts to Germany, Germany exports finished products to South Korea and the US, South Korea exports to Mexico, and the US to more than 30 countries. Shipments came in under vague import codes such as “orthopedic implant material” and Ukrainian tissue was exported from Germany to the US as a product of Germany. Raw materials and finished products are moved around the world without much scrutiny (Willson *et al.* 2012). The implementation of a global coding system for medical products of human origin (MPHOs) (WHO 2015), a “Vigilance and Surveillance of Substances of Human Origin” (SOHO V&S 2015) program, and effective cross-border inspections are bound to enhance traceability, vigilance, and surveillance of international HCT movements. But, even then, most transactions are legal, providing the presence of mandatory paperwork regarding quality and safety requirements and the absence of paperwork referring to the direct purchase of HCTs.

Why do some tissue establishments in rich countries prefer to procure HCTs in developing countries? Are regulatory requirements in developing countries less stringent, procurement costs lower, rights of donor families less founded, or corruption in health-care more widespread? In 2008, the Declaration of Istanbul on Organ Trafficking and Transplant Tourism urged EU member states “to take measures to protect the poorest and vulnerable groups for transplant tourism and the sale of tissues and organs, including attention to the wider problem of

international trafficking in human tissues and organs" (Steering Committee of the Istanbul Summit 2008).

Excessive processing fees

It is not illegal to charge reasonable fees for the procurement and processing of HCTs. As the term “reasonable fee” has not been defined, there is a grey zone and plenty room for misuse in terms of profit making. If everybody would charge reasonable fees then there should not be too much price variation. Instead, a wide variation in HCT product prices (hundreds to thousands of dollars per product) from company to company, city to city, and country to country is observed. Sports medicine tendon and bone allografts are popular (even in auto-graft indications) and fetch higher prices than tendon and bone products for general orthopedics. Average HCT product prices are almost five times higher in the US than in Belgium (Pirnay *et al.* 2010). The reason for this is that, in the US, rules of supply and demand are setting the price, just as in any other business, while in Belgium HCT product prices are fixed by the government. In 2007, US Senator Charles Schumer introduced the Safe Tissue Act, designed to “improve the oversight and regulation of tissue banks and the tissue donation process, and for other purposes” (Schumer 2007). The bill, if accepted, would determine the concept “reasonable processing fee.” So far, the bill has not become law.

Irresponsible allocation

Where hospitals mostly focus on medically important trajectories for health-care, private tissue establishments take a business approach to ensure their profits, often taking a more lucrative approach with respect to the processing of donated HCTs. A striking example is the processing of human-donor skin, the gold standard in the management of severe burns (Hermans 2011), into products that can be used in plastic surgery or in vanity procedures such as penis-widening or lip enhancements, in people with normal penis and lip sizes. The “burn-wound market” is relatively small (fortunately, severely burnt patients are rare today) and prices of skin-derived products for burn treatment are relatively low. The use of human skin-derived filler substances in tissue augmentation is established in clinical practice (Klein 1998) and donor skin-derived products for cosmetic or vanity applications fetch much higher prices. LifeCell estimated the potential revenue from AlloDerm in reconstructive and cosmetic surgeries at $200 million, ten times what they hoped to make assisting burn victims (Heisel *et al.* 2000).

Many doctors have used Alloderm as a material to widen the penis. On the Internet, they state that the tissue itself is processed from a deceased human being, but stress that it is disease free according to reports issued from tissue banks that supply it, abiding by FDA rules and AATB (American Association of Tissue Banks) general rules. Quality and safety are important indeed. Nevertheless, the use of human allograft products in augmentation phalloplasty is not without risk (Bruno *et al.* 2007; Park *et al.* 2011). In 2009, a leading US tissue establishment introduced BellaDerm®, the first dermal tissue graft (derived from donated human skin) offered *specifically* for facial and body contouring procedures. Did donor families consent to transform the skin from their loved ones into penis-and lip-fillers?

Even more problematic is the possibility that some less lucrative, but life-saving

HCTs will no longer be available. US burn centers were reported struggling to obtain skin because local skin banks committed all their donated skin to firms that market products for plastic and cosmetic surgery (Heisel *et al.* 2000). The director of a tissue bank that sent all its skin to LifeCell Corporation stated: “I’d like to say that the price didn’t enter into it, but it was a factor.” There are also indications that donor skin will be replaced by less performing, but from an industry point of view more interesting, biosynthetic dressings for the temporary covering of burns.

It also goes without saying that the skin of executed Chinese prisoners was processed into beauty products (Cobain and Luck 2005). Fully in line with expectations, a UK consultant plastic surgeon and government adviser stated: “I can see the utility of it, as they have access and no ethical objection,” he said. “The main concern would be infective risk.” Quality and safety are important indeed. But, no need to worry, quality and safety of human organs and tissues for transplantation are also important matters of concern to the Chinese authorities. According to a Chinese official, “the use of a bullet to the back of the head is ideal for transplants because the bullet does not contaminate the organs with poisonous chemicals as lethal chemicals do and does not directly affect the circulatory system as a bullet through the heart does,” and “If they want the corneas they shoot in the chest,” “If they want the internal organs, they shoot in the head” (Sun 1994). When lethal injection was introduced, chemicals were chosen that were suitable to organ harvesting.

Commodification

Donor families expect HCTs to be treated with respect and recognized as resulting from a donation from their loved ones. However, industry increasingly processes HCTs into products with little or no resemblance to human tissue. These include cubes, screws, chips, paste, glue and powder, which are then sealed in appealing packaging and advertised in glossy catalogues or on flashy Internet sites (including online allograft-tissue order forms).

There is a major discrepancy between donor family expectations and the activities of some tissue processing firms. In their slogans—"The Gift of Life," "The Gift of Hope," "You can give hope and life to 25 people," "Tissue donors save lives," "Changing lives through tissue donation," "You have the power to change 100 lives"—large procurement establishments respond to the expectations of the former, while providing HCTs to the latter. A penis enlargement is bound to change someone's life (note that most penis enlargements are performed in men with normal penis sizes [Mondaini *et al.* 2002]), but I doubt that this is what donor families were hoping for. Our civilization, for centuries, has accepted and demanded respect for the dead (Marcus 1985). Turning human bodies (in secret, i.e., without donor-informed consent acknowledging potential non-therapeutic and/or commercial uses) into lucrative commodities in a global market is not very respectful and if publicly known it would reduce the public's trust in the entire transplantation field.

Moreover, when donated HCTs give rise to financial gain, do donors (or their family) have the right to share in any of these financial benefits? The issues with regard to ownership, property rights and commercialization of donated HCTs for research are discussed in depth by Bernice S. Elger in this book. Research has revealed that contributors of biospecimens to genomic biobanks saw in their samples (the DNA and the information it encodes) something of unique value in the "business" of medical research, i.e., the traditional definition of a "trade

secret" (Conley *et al.* 2012). Others would be allowed to exploit their trade secrets under restrictive conditions. Much like conventional trade-secret licensors, contributors also demanded—among other things—compensation, restrictions on access and use, the opportunity to share in the benefits of future research, and a limited term to the license (Conley *et al.* 2012). It is likely that HCT donors who give consent to turning their HCTs into (lucrative) therapeutic or cosmetic products have similar demands.

The doctrine of double effect

The European Group on Ethics in Science and New Technologies (EGE) acknowledged that the issue of commercialization of HCTs might be controversial, but concluded: “It is difficult to exclude tissue banking activities by commercial organizations, such as large private laboratories. This is particularly true where human tissues are used as a basis for ‘engineered’ products requiring the use of sophisticated medical techniques” (EGE 1998).

The key question is: Can the processing of human body material lead to a product that is no longer subject to ethical principles? One could consider HCTs to be “dual products,” consisting of human body material and an added value in the form of a technological process. Both parts clearly have a different moral status, which leads to an ethical dilemma; the human body material is not a tradable good, while the added technological process (know-how) clearly is. The problem is that one cannot be sold without the other. A possible way out of this dilemma would be to use the “doctrine of double effect” (Cavanaugh 2006): if an action has foreseen harmful effects practically inseparable from the good effect (for example, killing non-combatants when bombing a military target), it is justifiable if the following are true:

- The nature of the act is itself good, or at least morally neutral.
- The agent intends the good effect and not the bad either as a means to the good or as an end itself.
- The good effect outweighs the bad effect in circumstances sufficiently grave to justify causing the bad effect and the agent exercises due diligence to minimize the harm.

Translated to the HCT-transplantation field, this could imply that the commercialization of human body material (foreseen harmful effect) could be justified when tissue establishments act in good faith and produce HCTs for use

in meaningful (e.g., life-saving) therapies (good effect in grave circumstances). The good faith of cell-and-tissue establishments could be reflected in a HCT cost price that only relates to the added technological process and this in a reasonable manner. This rationale could be the basis of a clear and global ethical position overcoming the above-mentioned commercialization issues.

In the name of quality and safety

In the late 1990s, at the peak of the biotechnology hype, industry incited policymakers to create a regulatory environment that would facilitate the emergence of a strong biotechnology market. The mediatized safety and ethical scandals involving HCTs presented policymakers with an ideal opportunity to issue new HCT legislation. Officially, industry representatives and policymakers emphasized that new legislation was urgently needed to improve the quality and safety of HCT products. However, most incidents involving unsafe HCTs were not the result of too-loose quality and safety requirements in the then prevailing legislations. They were due to the greed of opportunists that downright ignored the existing guidelines and common sense and engaged in profit-maximizing activities that ultimately endangered patients and trampled ethics. It is also important to stress that these incidents were not representative of the entire tissue-banking community. We need to keep in mind that quality and safety is no fairy dust and GMP no magic formula. In some cases, substantial increases in quality and safety requirements will *not* substantially increase quality and safety, but will indisputably result in a massive increase in costs, which in turn will negatively impact social health-care systems (Pirnay *et al.* 2013).

A false perception of quality and safety is creeping in. For example, in 2011 the French authorities issued a guideline urging 30,000 French women to have their breast implants removed (Chrisafis 2011). A French company was found to have made breast implants from cheaper industrial-grade silicone normally used for electronics, mattresses, and the agriculture industry (which is of course illegal). And yet, they were granted a certificate of conformity with European standards and hundreds of thousands of them were sold on three continents. The problem here of course was not the legislation itself, but the fact that competent authorities had not uncovered the fraud in a timely manner. The (predictable)

reaction of policymakers, however, was to call for more stringent legislation. The HCT-transplantation field that was shocked by IFAs is now suffering from LEPRAs, and increasingly stringent quality and safety requirements are no solution, on the contrary.

Back to *Soylent Green*. The “donor,” Sol Roth (Edward G. Robinson), surely looks healthy: he rides a cycle home trainer, eats apples and drinks a moderate amount of red wine. Upon arrival at the Soylent Corporation donor center, he fills in some paperwork (donor history questionnaire—“informed” consent?) and we can assume that during the euthanasia process he was injected with chemicals that are compatible with human consumption. A hint: according to the FDA, low amounts of pentobarbital in dog food (from processed euthanized cattle or horses) are unlikely to cause health problems. Next, Sol Roth’s body is transported under controlled conditions from the donor center to the processing plant. We see no proof of payment for the body, and we can assume that traceability was assured. The processing of the body into Soylent Green products seems to be performed in accordance with high quality and safety requirements. We assume that the Soylent Corporation obtained a Custom Meat Program license (to slaughter or process uninspected meat food animals). The 2012 “Pink Slime” or “Soylent Pink” scandal demonstrated that food product labels are not legally required to mention all animal (or human) components (Flock 2012). Not sure about the green color additive though.

The way ahead

Cynics believe that the commercialization of all aspects of society, including health-care, is inevitable and resistance futile. Optimists, however, believe that one day policymakers will decide to give priority to the overall public interest and halt the erosion of public health-care systems. With regard to the HCT-transplantation field, a balance should then be sought between the solidarity principle of public tissue establishments and the interests of the biotech and pharmaceutical industry. The availability of medically important HCT products for all patients who can benefit from them, and this at a price that can be borne by social security systems, should be central in the development and authorization of HCT products and in the elaboration of relevant legislation. Not only IFAs, but also LEPRAs, should be banned. To achieve this, a combination of oversight actions is warranted (Table 1):

- Ease off on quality and safety requirements (they are often overzealous and prioritize industry over the public sector).
- Effectively enforce balanced HCT legislation (including cross-border inspections).
- Define the term “reasonable processing fee” and fix HCT-product prices.
- Enforce a global coding system for HCTs.
- Enforce exportation rules with an emphasis on self-sufficiency.
- Enforce a global ethical framework, possibly based on the “doctrine of double effect” and overcoming commercialization issues.

Table 1. Probable impact of different oversight actions on illegal and fraudulent activities (IFAs) and legal excessive profit-making activities (LEPRAs).

Oversight action	Probable impact on IFAs	Probable impact on LEPRAs

HCT legislation that focuses on pharmaceutical industry quality and safety requirements.	No impact on IFAs. Opportunistic offenders downright ignore any quality and safety requirement.	Promotes LEPRAs. Facilitates industry's take-over of the HCT field.
Effective enforcement of balanced HCT legislation (including cross-border inspections).	Will reduce IFAs.	No direct impact. LEPRAs are legal. Balanced legislation ensures a level playing field, including public actors, and may indirectly reduce LEPRAs.
Definition of the term "reasonable processing fee" and fix HCT product prices.	Will reduce IFAs. Will remove the incentive.	Will reduce LEPRAs. Will remove the incentive.
Implementation of a global coding system for HCTs.	Will reduce IFAs.	Will have no impact. LEPRAs are legal.
Global and binding ethical framework, possibly based on the "doctrine of double effect" and overcoming commercialization issues.	No impact on IFAs. Opportunistic offenders will also ignore ethical rules.	Will reduce LEPRAs, when enforced in combination with a global coding system.

Acknowledgments

I would like to thank my colleagues Carl Ceulemans, Daniel De Vos, Jean-Pierre Draye, Geert Laire, Pierre Neirinckx, Thomas Rose, Alain Vanderkelen, and Gilbert Verbeken for the support and the inspiring discussions.

Bibliography

References

Barnes, K. 2006. Human tissue worth more than diamonds. *Drug Researcher. com*. Accessed on March 9, 2014 at www.outsourcing-pharma.com/Preclinical-Research/Human-tissue-worth-more-than-diamonds.

Barry, N. P. 2000. Controversy: Do corporations have any responsibility beyond making a profit? *Journal of Markets and Morality* 3(1):100–107.

Birger, J. 2006. Give me some skin. *Fortune Magazine*. Accessed on April 3, 2012 at money.cnn.com/magazines/fortune/fortune_archive/2006/09/04/8384735/index.htm.

Blasszauer, B. 1997. Petty corruption in health-care. *Journal of Medical Ethics* 23(3):133–134.

Bruno, J. J., 2nd, D. M. Senderoff, J. A. Fracchia, and N. A. Armenakas. 2007. Reconstruction of penile wounds following complications of AlloDerm-based augmentation phalloplasty. *Plastic and Reconstructive Surgery* 119(1):1e–4e.

Cavanaugh, T. A. 2006. *Double-effect Reasoning: Doing Good and Avoiding Evil*. Oxford: Oxford University Press.

Centaur Guernsey L. P. Inc. 2012. Annual report for the fiscal year ended December 31, 2012. Accessed at www.sec.gov/Archives/edgar/data/1557939/000155793913000004/kci1231201210k.htm.

Chrisafis, A. 2011. French government “to order women to remove defective breast implants.” *The Guardian*. Accessed on April 3, 2012 at www.theguardian.com/world/2011/dec/20/french-remove-breast-implants-silicone.

Cobain, I., and A. Luck. 2005. The beauty products from the skin of executed Chinese prisoners. *The Guardian*. Accessed on March 10, 2014 at www.theguardian.com/science/2005/sep/13/medicineandhealth.china.

Conley, J. M, R. Mitchell, R. J. Cadigan, A. M. Davis, A. W. Dobson, and R. Q. Gladden. 2012. A trade secret model for genomic biobanking. *The Journal of Law, Medicine and Ethics* 40(3):612–629.

Council of Europe. 2009. Trafficking in organs, tissues and cells and trafficking in human beings for the purpose of the removal of organs. Joint Council of Europe/United Nation study. Accessed on April 4, 2012, at www.coe.int/t/dghl/monitoring/trafficking/docs/news/OrganTrafficking_study.pdf.

EGE (European Group on Ethics in Science and New Technologies). 1998. Opinion No. 11 to

the European Commission: Ethical aspects of human tissue banking. Accessed on November 2, 2012 at www.who.int/ethics/en/ETH_TissueBanking.pdf.

Flock, E. 2012. “Pink Slime” in school lunches: Government is buying 7 million pounds worth. *The Washington Post*. Accessed on February 18, 2015 at www.washingtonpost.com/blogs/blogpost/post/pink-slime-in-school-lunches-government-is-buying-7-million-pounds-worth/2012/03/07/gIQAKIzRxR_blog.html.

Friedman, M. 1970. The social responsibility of business is to increase its profits. *The New York Times Magazine*. Accessed on April 4, 2012 at www.colorado.edu/studentgroups/libertarians/issues/friedman-soc-resp-business.html.

Heisel, W., M. Katches, and L. Kowalczyk. 2000. The body brokers—part 2: skin merchants. *The Orange County Register*. Accessed on October 4, 2010 at www.lifeissues.net/writers/kat/org_01bodybrokers part2.html.

Hermans, M. H. 2011. Preservation methods of allografts and their (lack of) influence on clinical results in partial thickness burns. *Burns* 37(5):873–881.

Hurt, H. 2010. King of beers, and a slippery throne. *The New York Times*. Accessed on March 9, 2014 at www.nytimes.com/2010/10/17/business/17shelf.html?ref=beerindustry.

Klein, A. W. 1998. *Tissue Augmentation in Clinical Practice. Procedures and Techniques*. New York, NY: Marcel Dekker.

Levitt, T. 1983. The globalization of markets. *Harvard Business Review* 61(3):92–102.

McMichael, P. 2001. The impact of globalisation, free trade and technology on food and nutrition in the new millennium. *The Proceedings of the Nutrition Society* 60(2):215–220.

Marcus, C. 1985. Spectre of commercialism dominates transplant symposium. *Canadian Medical Association Journal* 133(4):314–317.

Mondaini, N., R. Ponchietti, P. Gontero, G. H. Muir, A. Natali, E. Caldarera, S. Biscioni, and M. Rizzo. 2002. Penile length is normal in most men seeking penile lengthening procedures. *International Journal of Impotence Research* 14(4):283–286.

Park, M. K., H. K. Kim, K. Y. Park, K. Li, S. J. Seo, and C. K. Hong. 2011. Complications following BellaGen™ injection. *Annals of Dermatology* 23(Suppl. 3):S306–S309.

Pirnay, J. P., A. Vanderkelen, D. De Vos, J. P. Draye, T. Rose, C. Ceulemans, N. Ectors, I. Huys, S. Jennes, and G. Verbeken. 2013. Business oriented EU human cell and tissue product legislation will adversely impact member states’health-care systems. *Cell and& Tissue Banking* 14(4):525–560.

Pirnay J. P., A. Vanderkelen, N. Ectors, C. Delloye, D. Dufrane, E. Baudoux, and M. Van

Brussel*et al.* 2012. Beware of the commercialization of human cells and tissues: situation in the European Union. *Cell and Tissue Banking* 13(3):487–498.

Pirnay J. P., A. Vanderkelen, M. Zizi, D. De Vos, T. Rose, G. Laire, N. Ectors, and G. Verbeken. 2010. Human cells and tissues: the need for a global ethical framework. *Bulletin of the WHO* 88(11):870–872.

Redfern, M., J. W. Keeling, and E. Powell. 2001. *The Royal Liverpool Children's inquiry report*. London: HMSO.

Schumer, C. 2007. A bill to improve the oversight and regulation of tissue banks and the tissue donation process, and for other purposes. Bill introduced in the Senate of the United States. Accessed on April 3, 2012 at www.opencongress.org/bill/110-s1479/text.

Smith C. S. 2001. Doctor says he took transplant organs from executed Chinese prisoners. *The New York Times*. Accessed on March 10, 2014 at www.nytimes.com/2001/06/29/world/doctor-says-he-took-transplant-organs-from-executed-chinese-prisoners.html.

SoHO V & S. 2015. Public health vigilance and surveillance of substances of human origin. Accessed on February 10, 2015 at www.sohovs.org/soho/.

Steering Committee of the Istanbul Summit. 2008. Organ trafficking and transplant tourism and commercialism: the Declaration of Istanbul. *The Lancet* 372(9632):5–6.

Sun, L. H. 1994. China's executioners: a punishing schedule/China's executed convicts donate organs unwittingly. *Washington Post*. March 27.

United States Congress. Senate. Committee on Governmental Affairs. Permanent Subcommittee on Investigations. 2001. *Tissue Banks: Is the Federal Government's Oversight Adequate? Hearing before the Permanent Subcommittee on Investigations of the Committee on Governmental Affairs, United States Senate*. Washington, DC: Diane Publishing Company.

Waltz, E. 2006. The body snatchers. *Nature Medicine* 12(5):487–488.

WHO (World Health Organization). 2015. ISBT consistent coding systems. Accessed on February 10, 2015 at www.who.int/transplantation/tra_isbt/en/.

Willson, K., V. Lavrov, M. Keller, and M. Hudson. 2012. Body brokers leave trail of questions, corruption. *Skin and Bone*. The International Consortium of Investigative Journalists (ICIJ). Accessed on March 9, 2014 at www.icij.org/tissue/body-brokers-leave-trail-questions-corruption.

Notes

1 www.rickgibson.net/perform.html
2 news.sky.com/story/910630/dutch-tv-presenters-in-cannibal-stunt

Author

Jean-Paul Pirnay

Was born in 1967 in Antwerp (Belgium). He graduated a biotechnology engineer at University College Ghent and received a PhD in medical sciences from the Université libre de Bruxelles. In 1993 he completed his military service in the military blood bank, but could not break clear of his military orbit. He is currently head of the Laboratory for Molecular and Cellular Technology, which harbors the human tissue banks and the GMP bio-manufacturing facility of the military hospital in Brussels.

Selling Donations: Ethics and Transfusion Medicine

Jean-Daniel Tissot, Olivier Garraud, Jean-Jacques Lefrère and Jean-Claude Osselaer

What is blood, what are blood products, and what are derived medications from blood? Many different representations are associated with blood transfusion (Garraud and Lefrère 2014a), and many questions emerge as soon as transfusion medicine is evoked in the public mind. The scandals of contaminated blood (human immunodeficiency virus—HIV—and hepatitis C virus—HCV) are still in our memories and have definitively changed our appreciation of global safety. Nevertheless, many questions remain open in 2014: What are the residual risks of transfusion? What is the real security of blood transfusion? What are the costs of the blood transfused for a patient? What are the ethical issues that the transfusion medicine community has to face?

Blood transfusion is one aspect of human solidarity. Millions of blood donations are made every year throughout the world, either to save or to support life. The blood components include fresh-frozen plasma, platelet concentrate, red blood cells, whole blood, and blood-derived preparations. The World Health Organization recognizes that achieving self-sufficiency “in the supply of safe blood components based on voluntary, non-remunerated blood donation, and the security of that supply are important national goals to prevent blood shortages and meet the transfusion requirements of the patient population.” Voluntary, non-remunerated blood donation is an important ethical aspect of blood transfusion (Garraud and Lefrère 2014b).

The idea of taking blood from one individual to infuse it into another is very old and was developed by the ancient Egyptians. The origin of the word “transfusion” stems from the ancient Latin *transfundo*, which initially meant to

pour from one vessel to another. Its acceptation was extended early to two different notions: the corruption of a population by mixture with foreigners, with sexual and hybridization connotations, and the transfer of a debt. Both sexuality taboos and the notion of debt were thus initially present in the word transfusion (Tissot and Lion 2013). Hence, the concept of transfusion (transfer of the vital spirit or idea) was present before transfusion (transfer of blood between two individuals).

Many important discoveries highlight the story of modern transfusion medicine, including the identification of ABO blood groups by Karl Landsteiner, the anticoagulation of blood preparations using citrate, technologies allowing fractionation of proteins from plasma, and plasmapheresis for collecting large volumes of plasma. However, the perception of the transfusion medicine picture has been completely modified by the major crises arising from transmission of HIV by transfusion and the identification of hepatitis C virus as the agent of non-A non-B hepatitis.

Principles of modern transfusion medicine

The main concerns of national health authorities for blood and blood components are to maintain an adequate blood and plasma supply for patients requiring transfusion and to ensure the appropriate use and warrant the safety of blood products, together with the prevention of transmission of infectious diseases. At the European level, numerous initiatives related to the blood and plasma sectors have been undertaken since 1989 (Directive 89/381/ECC), with recommendations and directives about the quality and safety for the collection, testing, processing, storage, and distribution of human blood and blood components (Directive 2002/98/EC and the relevant implementing Directives 2004/33/EC, 2005/61/EC, and 2005/62/EC), as well as traceability requirements and notification of serious adverse reactions and events (hemovigilance).

Many important questions remain: What are the needs, and how are terms such as “shortages” and “self-sufficiency” defined? What is a “voluntary unpaid donation” and how do we understand “compensation” or “remuneration”? These questions are true challenges for the future of transfusion medicine, and the answers may originate from legislative decisions, from the economy of the needs of the market, and/or from ethical considerations.

Globalization, merchandizing (between cannibalism and vampirism)

Globalization of the market, merchandizing of the human body as well as social inequalities must be taken into consideration when discussing blood transfusion. Whole blood can be considered a gift specially aimed to be the source of specific manufactured goods. However, collected (apheresis) plasma is considered a source material designated to the industrial production of blood-derived drugs. Thus, in many parts of the world, individuals are paid to be the source of plasma aimed to be transformed into medicines. Some aspects of the plasma industry have been particularly well described in a recent issue of the magazine *Eco* of the Swiss Television (in German). [1]

Plasma, in many countries, is a medicine, and the market is open to “non-profit blood services” as well as to commercial companies with the aim to do profits. In France, the war is open [2] , and the health authorities [3] as well as justice [4] will have to decide what should be done. Globalization is really present in the market of blood products, and commercial companies may be compared with the new vampires of neocolonialism. Production of intravenous immunoglobulins (ivIGs), a very expensive but very useful drug derived from human plasma, represents a fabulous market, and new indications for the product—such as a treatment for mild to severe Alzheimer’s disease—are being explored. The market is controlled; profits are the driving force in the domain. In summary, the plasma of poor young individuals will be collected and treated to produce the very expensive drugs such as ivIGs that may eventually be useful for the elderly rich of wealthy countries.

Ethics and transfusion medicine

The hierarchy of ethical principles can differ among individuals in cases of conflicting values. There is general agreement that we should act for good, but the discussions usually start when we have to define what exists in terms of practical implications that we have to draw from a universally shared ethical aspiration. Indeed, the variability in ethical priorities not only links to the individual but is also (and more importantly) a product of cultures moving with time. The Universal Declaration of Human-Rights was typically an eighteenth-century product with effects that have persisted to today. This declaration included the so-called first-generation human-rights, including respect for one's personal integrity (duty to respect another person's integrity), freedom of opinion, freedom of religion, freedom of expression, and freedom of property. More recently, these obligations have been completed by the human-rights of the second and third generations, including the right to education, health (which would have been better defined as a right to medical treatments), housing, and work. These rights ask for a far more active contribution from society. Paradoxically, they may sometimes enter into conflict with the human-rights of the first generation (legal prohibition of racism or xenophobic speech may enter into conflict with freedom of expression, for example). This shift reflects a progressive transition from the concept of rule of law to the concept of the welfare state. The comportment of society through intermediating structures, whether professional, religious, familial, or geographical, was felt as an obstacle for upcoming liberation and capitalism, requiring free exchange and an anonymous labor force. To manage an ever-increasing phenomenon of poverty, a central welfare state had progressively to take over the union mechanism of solidarity presided over by charity and the private initiatives of the intermediate structures. Solidarity therefore has become quite anonymous and is no longer considered a gift but a prerogative, owed by the welfare state to the individual.

Simultaneously, growing individualism has led to a culture in which self-accomplishment, free choice, and right to privacy are important tenets.

Ethical values classically linked with transfusion are volunteering, making an unpaid contribution, anonymity, and donor liability. These ethical aspects are highly important. Two refer to the notion of solidarity (volunteering and gratuitousness), whereas anonymity and volunteering reflect a desire for privacy and donor liability derives from the moral obligation not to harm somebody else. Professionals in transfusion should optimally use these values to promote blood donation to provide the best possible care to recipients.

Furthermore, epidemiological studies performed in the Western world have shown that blood obtained from volunteer, unremunerated donors contains fewer infectious markers than blood from paid donors. However, this finding does not necessarily have universal or eternal value (Ala *et al.* 2012). Therefore, we should ask ourselves what value we prioritize between non-paid blood donations or providing blood to patients in sufficient quantity. Ethical judgment includes the balancing of two values (that, in a given context, may be conflicting) and the duty to check for the practical consequences of a choice. However respectable, the expressions we give to values such as solidarity are linked to our culture and do not necessarily have a universal value (sometimes best intentions may lead to catastrophes). If prohibition of familial donations in African countries does not lead to a better and safer blood supply but paradoxically worsens already existing shortages, it’s reasonable to consider the ethical consequences of such a strategy.

The responsibilities of the professional in transfusion medicine

Professionals have to meet ethical obligations on three fronts.

Obligations towards patients

Because every patient has the right to receive the safest and most adequate product, donor testing should meet all legal and regulatory requirements and be in compliance with good clinical practice according to the currently available scientific evidence. After the so-called “contaminated-blood scandal” in France and in several other countries, a major effort has been made to translate into legal statutes what were until then simply the principles of good professional practice. The public interest in blood safety at that time was tremendous and, at first glance, it seemed indeed normal to lock everything into a framework of legally mandatory rules. In the long term, however, the legitimacy of this strategy appears less obvious: It may lead to a lack of flexibility, and one can wonder if the executive power of a given country is the best authority to give medical instructions and choose the most “appropriate” among several possibilities. Indeed, transfusion safety is of utmost importance, and one can be pleased that minimum blood safety is guaranteed by mandatory rules, but the risk of a tendency towards bureaucracy remains, one in which transfusion professionals could consider that their only obligation is to comply with an ever-increasing array of technical rules imposed by the health authorities.

The aim of the whole process of donor selection and testing should always remain patient centered, leaning towards optimal safety (the ideal transfusion is not the transfusion that will never take place, but the transfusion given to a patient in conditions that maximize the benefit/risk ratio). The quality of donor selection is not necessarily proportional to the percentage of donor deferral. The perception of an increased risk should be based on scientific and epidemiological data, not on feelings that are sometimes more grounded in worries about possible litigation than concern about patient safety. A hiatus in regulation never can be an excuse not to do whatever is reasonably possible to protect a patient. Yet ethical requirements go far above even legal requirements. If, because of a lack

of funding, pertinent safety measures cannot be taken, the professionals and the transfusion community as a group have the duty to build pressure on competent authorities and, if necessary, initiate a public debate.

The question of what one can do to optimize safety depends, of course, on personal judgment; the same applies regarding the question of the optimal level of safety we can reasonably attain. Absolute safety cannot exist, and regardless of the degree of economic prosperity a society can reach, there will always be limits on what can be invented in additional safety. The ethical requirement is not to agree on every issue but to keep the questioning alive and the debate open.

Furthermore, the moral duty of a transfusion professional is not only to deliver products that are as safe as possible but also to guarantee their delivery in a timely fashion. Very few hemovigilance systems contain information on the occurrence and the possible consequences of delayed transfusion as a result of product shortages. Similarly, if for reasons of safety and quality assurance a production facility cannot manufacture more products between Friday and Monday nights and if no alternatives are left, one can reasonably wonder whether such a facility, however compliant with national regulation, fulfills its ethical duties regarding the delivery of products such as granulocytes, with a maximum 12-hour shelf life.

Finally, transfusion professionals have the moral obligation to safeguard as much as possible the transfusional (and obstetrical) future of a patient: Induction of anti-RH1 (anti-D) in a woman with child-bearing capacity is always considered malpractice, but protection of patients chronically transfused by packed red cells has not benefited from the same attention. The debate still remains on what is optimal protection: Should we protect all recipients or focus on patients who have already developed an antibody response? Even if absolute protection against any alloimmunisation is an impossible challenge, more could often be done to protect patients against preventable exposure to alloantigens. Even if not required by national regulation, this protection constitutes an ethical obligation for the transfusion physician.

Obligations towards donors

Donors generously give their time and their blood, and they have the right to do it in optimal conditions of safety and comfort and to be treated with respect and tact in case of deferral. They also have the right to require the best possible use of their donation. According to a rule generally accepted in Western culture, the human body and its parts (including blood) cannot be the object of trade. Thus, at least in the Western world, blood donation should be voluntary and altruistic. It is probably wise, indeed, not to give financial compensation for a blood donation, especially not as long as epidemiological data show a lower prevalence of infectious markers in unremunerated vs. remunerated blood donors. The absence of remuneration, however, does not imply that donors cannot have their travel expenses reimbursed. Indeed, not doing so might lead to social discrimination against the poorer blood donors. Offering donors a small gift as a sign of gratitude and friendship or making drinks or snacks available to them can hardly be seen as “payment” and is generally practiced. Nevertheless, several individuals are totally opposed, for personal ethical reasons, to any kind of rewarding, including special snacks created by well-known chefs.

Clarifying the issues mentioned above would greatly help in both assessing and interpreting the notion of the “voluntary unpaid donor.” It also would decrease the risk of polemics and complaints about the interpretation of wording. The Nuffield Council on Bioethics report on “Human bodies: donation for medicine and research” [5] has provided specific terminology and the “intervention ladder” regarding transactions made in connection with human bodily material, including blood and plasma. A list of incentives was published which includes reimbursement of medical costs, compensation linked to loss of earnings, food vouchers, free physical check-up, time off from work (private sector), time off from work (public sector), reimbursement of travel costs, small tokens, refreshments, and other forms of incentives. Several notions such as

“recompense” or “reward” have also been defined: A recompense is a payment to a person in recognition of losses they have incurred, material or otherwise, and may take the form of either reimbursement of direct financial expenses incurred in donating bodily material (such as train fares), or compensation for non-financial losses (such as inconvenience, discomfort, and time). A reward is a material advantage gained by a person as a result of donating bodily material, which goes beyond “recompensing” the person for the losses they incurred in donating. If reward is calculated as a wage or equivalent, it becomes “remuneration.”

The review of ethical principles and the proposed terminology about transactions of human bodily materials led the Nuffield Council to envisage shifting the attention away from the paid/unpaid donation dilemma towards making a distinction between altruistic and non-altruistic interventions. Altruistic interventions include information about the need for the donation of bodily material for others’ treatment or for medical research; recognition of, and gratitude for, altruistic donation through whatever methods are appropriate both to the form of donation and the donor concern; intervention to remove barriers and disincentives to donation experienced by those disposed to donate; and interventions as an extra prompt or encouragement for those already disposed to donate for altruistic reasons. Non-altruistic interventions include those offering associated benefits in-kind to encourage those who would not otherwise have contemplated donating to consider doing so and financial incentives that leave the donor in a better financial position as a result of donating.

With the aim of seeking areas of shared consensus on what can be done by institutions and organizations to “facilitate” donation of human bodily material such as blood and plasma, the Nuffield Council suggested an “intervention ladder” as a tool for analyzing the ethical acceptability of different forms of encouragement for donating bodily material in various circumstances.

If we consider the right of a donor to donate, this right appears not absolute and absolutely conditioned by the right of the patient to receive the safest product. Obviously, in the case of deferral, the donor has the right to be treated with

utmost respect and attention: the donor came generously to help a fellow human being and does not have to leave the blood center with the feeling of social discrimination; an example might be males who have sex with males, who are deferred based on an increased rate of HIV prevalence (which is an epidemiological observation). Furthermore, deferred donors have the right to receive correct information. If some regulatory deferral criteria are mandatory, although without any satisfactory scientific instruction, this gap should be explained to the donors. The question of whether false-positive results should be communicated, and in what terms, is a matter of debate, especially in the absence of any scientific evidence that such a deferral effectively contributes to increased patient safety.

Scientific publications tend to suggest that if iron deficiency should be admitted as a consequence of blood donation, the risk of developing certain diseases is less with low–normal than with high–normal iron stores (Waldvogel-Abramovski *et al.* 2013). Such findings, if confirmed, could enhance donor recruitment. On the other hand, a certain number of blood donors say that they feel objectively "better" after the donation. For some of them, to donate blood is almost a necessity; they are convinced that, after a donation, their red-cell mass increases constantly and that they will get "overfilled" without a donation. In other cases, the feeling is only the psychological satisfaction of having done something positive, if not that of being acknowledged and valorized by a nursing staff in a society in which more and more people lack any form of social esteem. Thus, in a substantial number of cases, the gift of blood is not without any secondary benefit for the donor and therefore not strictly "gratuitous." In our opinion, a distinction should be made between the "gratification" that remains inherent to the donation process (altruist interventions) and the "gratifications" that are completely extrinsic (non-altruist interventions).

If a donor chooses to donate out of interest in the kindness of the nurses or esteem from the staff for having done something that might be life-saving, the donor will collaborate voluntarily on concerns of patient safety. In such situations, the fact of giving a small present or not or the value of the snack or

beverage will not interfere with the trustworthiness of the answers to the questionnaire. If, on the contrary, a financial counterpart is offered for a blood donation, totally out of proportion with reimbursement or travel expenses, the risk exists that the monetary incentive becomes the principal if not the only motivation of a donor. In this case, the financial incentive will increase the chances of incorrect answers to the donor questionnaire.

Obligations towards society

These obligations include giving the most correct information to both the authorities and the community, developing a hemovigilance organization to detect as far as possible more threats in transfusion practice, and allowing competent authorities to take preventive measures.

Blood and blood components are economic items in a double sense. Not only do blood component production and transfusion represent a cost to society but also blood donors are available in a limited number. In this context, it is vital to ensure that the link between the transfusion community and public opinion remains optimally transparent. Public opinion is not the supreme ethical criterion, but given that donor recruitment and loyalty are critical to maintaining the blood supply, it is important that the transfusion community understands the ethical values and motivations driving people in a given society. For the same reasons, it is a moral duty that the transfusion community remains loyal to society, giving information that is as correct and understandable as possible to the general public regarding issues such as blood supply and product safety. The so-called “contaminated-blood scandal” was not simply the result of assessment failures by some professionals, who do share their part of the responsibility, but who often have been denigrated in public opinion as scapegoats. What needed more examination were the true roots of system malfunctioning that allowed individual assessment errors to lead to consequences of this extent (Garraud and Lefrère 2013).

Conclusion

The reality differs from country to country and depends on historical and socio-economic perspectives. Thus decisions in transfusion medicine should be based on critically examined scientific evidence and not merely on personal or collective opinion. Decisions should be inspired by a willingness to work towards optimal protection of both the blood supply and product safety and not be beholden to the mere desire of avoiding litigation. Every step that can reasonably be taken in donor selection or product testing or preparation should be encouraged. However, every measure of donor exclusion that is not based on sound medical evidence will only lead to further compromise of the blood supply.

Communication with public opinion should be both professional and loyal. Professional, not because the form of the expression is more important than the content, but because the patient has a right to a benefit with maximal efficacy. Loyal, because in the long run, there is little advantage to being economical with the truth. Furthermore, if well informed, public opinion can be a highly valuable ally in influencing political decision-making. Finally, because of both medical and demographic evolution, the very last thing we can afford is a major confidence crisis among the general public towards the transfusion community.

Bibliography

References

Ala, F., J. P. Allain, I. Bates, K. Boukef, F. Boulton, J. Brandful, E. M. Dax*et al.* 2012. External financial aid to blood transfusion services in sub-Saharan Africa: A need for reflection. *PLoS Medicine* 9(9):e1001309.

Garraud O., and J. J. Lefrère. 2013. Are there still myths in—or associated with—transfusion? *Blood Transfusion* 11(1):148–150.

—. 2014a. Blood and blood-associated symbols beyond medicine and transfusion: Far more complex than first appears. *Blood Transfusion* 12(1):14–21.

—. 2014b. Voluntary non-remunerated blood donation and reasons for donating: Is there room for philosophy? *Blood Transfusion* 12(Suppl. 1):S404–S405.

Tissot, J. D., and N. Lion. 2013. Myths: history, blood, sex and money. *Blood Transfusion* 11(1):1–3.

Waldvogel-abramovski, S., G. Waeber, C. Gassner, A. Buser, B. M. Frey, B. Favrat, and J. D. Tissot. 2013. Iron and transfusion medicine. *Blood Reviews* 27(6):289–295.

Notes

1 www.srf.ch/player/tv/videoembed?id=72df5a1d-2195-4c81-8567-c6ed2d1aef9c&width=624&height=351&mode=inline&autoplay=true.
2 www.humanite.fr/tribunes/les-multinationales-des-medicaments-derives-du-san-553905.
3 questions.assemblee-nationale.fr/q14/14-51874QE.htm.
4 www.pptaglobal.org/images/source/2014/SPRING/Individual_Articles/7_European_court_of_j
5 www.nuffieldbioethics.org/wp-content/uploads/2014/07/Donation_full_report.pdf

Authors

Jean-Daniel Tissot

MD, specialized in internal medicine, hematology and transfusion medicine. He is managing director of Interregional Blood Transfusion SRC, Switzerland. He is professor of hematology at the Faculty of Biology and Medicine of the University of Lausanne. His main research

interests deal with iron deficiency, ethical issues in transfusion as well as storage lesions of blood products. He has authored about 200 scientific articles, and co-edited a book entitled *L'Immortalité – Un sujet d'avenir*.

Olivier Garraud

Holds a MD and a PhD degree, along with a MSc in anthropology. He trained both in onco-hematology, and infectious diseases. He is tenured professor of immunology with the University of Lyon/Saint-Étienne (France) and specialized in transfusion medicine, with two major topics: transfusion and inflammation, and ethics in transfusion. He headed a regional blood center in France for twelve years and moved a year ago to the (French) National Institute for Blood Transfusion in Paris.

Jean-Jacques Lefrère

Held a degree in French literature and has contributed several books on French poets by the dawn of the 19th century. Besides, he held a MD and PhD and graduated in hematology, with specialization in transmissibility of viruses by blood and transfusion. He shared interest in humanities and particularly in blood in history (encompassing ethics). He was tenured professor of hematology (Paris V) and was the CEO of the (French) National Institute for Blood Transfusion.

Jean-Claude Osselaer

Got a MD in 1982. He trained in internal medicine and clinical pathology, and is a specialist in clinical pathology (1993). He also holds special degrees in insurance law and forensic medicine. From 1992 to 2013, he was medical director of Mont-Godinne Blood Transfusion Service. He also was transfusion consultant at Mont-Godinne University Hospital, Université catholique de Louvain, Belgium.

Who Are the Owners?

Commercialization and Biobanking

Bernice S. Elger

Biobanks are repositories of biological samples with accompanying linked data (Shaw *et al.* 2014). For instance, the Organisation for Economic Co-operation and Development (OECD) defines biobanks as "structured resources that can be used for the purpose of genetic research and which include: (i) human biological materials and/or information generated from the analysis of the same; and (ii) extensive associated information" (OECD 2009). Globalization has produced new opportunities and challenges concerning biobank activities. On the one hand, globalization helps to strive towards international biobanks, which are particularly important when it comes to investigating rare diseases because samples have to come from different countries and geographical regions to permit a sufficiently large collection (Artene *et al.* 2013). On the other hand, globalization is a regulatory challenge (Knoppers *et al.* 2012) because it carries the risk that not all interests of biobank participants are respected. There is a risk that powerful commercial entities dominate the "biobank business" (Steinsbekk *et al.* 2013; Reymond *et al.* 2002). The fear is that they construct biobanks in poor countries or use minorities to develop new medication that will mainly be used by citizens from rich countries and majority groups. This could be interpreted as a commodification of the body of the most vulnerable to the benefit of health needs of the "better-off." Several studies have shown that African Americans have concerns about participation in biobanks. Focus group research involving 27 leaders in the black African immigrant community showed that the memories of "colonial mistreatment and exploitation by Western researchers in their home countries in sub-Saharan Africa" are prominent obstacles when the leaders consider participation in biobank research (Buseh *et*

al. 2013a; Buseh *et al.* 2013b). The consequence seems at present to be that racial or ethnic minorities are underrepresented in current biobanking programs (Hagiwara *et al.* 2014).

Given the risk and fears concerning exploitation, it is no surprise that bioethical debates related to biobanks include concerns about ownership (Porteri *et al.* 2014; Nisbet and Fahy 2013). Lack of clarity concerning ownership rules has been described as one of the three "major roadblocks" that have hindered the success of previous biobank consortiums (Gaffney *et al.* 2012). In this chapter we will focus on issues related to research biobanks of the type that have been examined in a recent survey (Zika *et al.* 2011; Zika *et al.* 2010) and examine how ownership is handled at present, how existing guidelines recommend it should be handled, and what recent lawsuits and publications have contributed to the ethical debate.

Ownership of research biobanks: recent practice

A survey carried out a few years ago (Zika *et al.* 2011; Zika *et al.* 2010) examined biobanks throughout Europe, as well as in some non-European regions (United States, Canada, Asia). The biobanks were identified through the Public Population Project in Genomics (P3G). The aim of the survey was to provide an overview of existing research biobanks in the above-mentioned four geographical regions. Of the 145 identified active biobanks, a total of 126 replies were received.

Among these research biobanks only a small minority (3%) reported private ownership. Most biobanks are owned by either universities (39%), national or regional agencies (39%), or non-profit foundations (19%) (Zika *et al.* 2010). In contrast to the ownership, the type of research in which the biobanks are involved reflects a more mixed approach, where public biobanks may be used for public as well as private commercial research. About one third of the biobanks (36%) reported “public research only,” 24% public and clinical research, 7% public, private and clinical research, 10% clinical research only, and 23% either “other combinations” of research or “other reasons only” (Zika *et al.* 2010).

Ownership: a complex concept

From a conceptual point of view, one can make two broad distinctions concerning “things” and “persons.” Property rights, in general, concern “things”—i.e., ownership refers to “things” such as for example a table, a lamp, or pieces of land that can be bought and sold (Waldron 2004). In contrast, human persons have autonomy rights and cannot be treated like things—i.e., human persons cannot be bought or sold. Other “entities” exist that seem to fall somehow between the two extremes. Animals are one example, many of which cannot be treated simply like “things” in most domestic animal laws (Switzerland 2005). Other examples include the ocean, which is considered a public good (Jones 2008), and human biological samples, which will be discussed in more detail below. Samples are detached from the human body, and therefore under certain conditions treated as owned “things” (theft of hair, etc.). At the same time samples are not purely “things” because they contain genetic material. This genetic material is related to the person and therefore subject to autonomy rights. Following Honoré (1961) property is often described as a “bundle of rights” in order to “capture the complexity of the rights associated with the concept of ownership” (Boggio 2008). The ownership question concerning human biological samples has been debated in court in the famous Moore case in California (*Moore v. Regents of the University of California 1990; cert. denied 1991*). Mr. Moore’s tissue had been used to create cell lines without his consent. The court did not recognize Mr. Moore’s property claim, but established the “principle of obtaining an informed consent to research uses of samples and genetic information—and, in particular, the requirement that researchers reveal their proprietary or commercial interests...[s]uch a requirement exists irrespective of the ‘property’ or ‘person’ characterization and allows a research participant to exercise a right of control” (Knoppers and Abdul-Rahman 2008).

Ownership of research biobanks: guidelines employ various approaches

The controversy about ownership of samples that are stored in biobanks is reflected by the various approaches used in the various existing guidelines concerning biobanks.

One extreme position is that the so-called tissue “sources” (or donors) own their samples: “Who owns the DNA in a bank? Banked DNA is the property of the depositor unless otherwise stipulated. Therefore, the word ‘donor’, which implies a gift, is inappropriate” (ASHG 1988). The opposite extreme position states that the agencies that fund a biobank own the samples: “Ownership of the samples and data held in UK Biobank will remain with the funding bodies” (UK Biobank 2007). The document explains further that ownership “conveys certain rights such as the right to take legal action against unauthorized use or abuse of the database or samples, and the right to sell or destroy the samples.” Interestingly, UK Biobank seems to feel a need to reassure sample donors that their samples will not be treated in the same way as “things,” as it continues: UK Biobank “does not intend to exercise all of these rights… it will not sell samples” (UK Biobank 2007).

Between these two extremes lie a number of intermediate positions. The Convention on Human-Rights and Biomedicine stipulates that financial gain from the human body and its parts is prohibited (Council of Europe 1997). The Medical Research Council in the UK describes a gift relationship that can be characterized as a form of ownership with restrictions (MRC 2001). A more recently proposed concept is that the biobank should function as a steward or custodian for the samples and form a “charitable trust” (Winickoff and Winickoff 2003). An intermediate position is that DNA is a unique entity “*sui generis*” as such that lies somewhat between property rights and personal rights

and should therefore not be treated as a commodity that can be owned or otherwise exploited as a private, proprietary, or commercial good (Pullman and Latus 2003). The French Comité cconsultatif national d'éthique (CCNE) holds that a biobank should act as a custodian as samples are a "common good," e.g., like the ocean (CCNE 2003). Finally, often various positions are mixed, as for example with the UK Biobank, which in spite of claiming formal ownership for the funding agencies, adheres also to the idea of stewardship: "UK Biobank does not intend to exercise all [ownership] rights… Rather, UK Biobank will serve as the steward of the resource, maintaining and building it for the public good" (UK Biobank 2007).

The Human Genome Organisation (HUGO) uses the concept of "common heritage" for genetic material (HUGO 1995; HUGO 1999). This concept stems from international law and implies non-appropriation, common management, equitable sharing of benefits, peaceful use, protection, and preservation for future generations.

The College of American Pathologists states that samples are part of the patient's health record (Grizzle *et al.* 1999), while the European Society of Human Genetics keeps alternatives open and defines ownership as "up to agreements" (ESHG 2003).

Ownership of research biobanks: recent cases

Apart from the Moore case (see above), a few more recent cases illustrate that, on the one hand, legal ownership rights of tissue donors concerning "their" samples remain rather limited, but on the other hand, in spite of those limitations, public perception seems to be that biobankers have an ethical obligation to treat samples with respect and to grant their donors some control rights. The case *Washington University v. Catalona* (2006) concerns a prostate cancer surgeon and researcher, W. Catalona. During his employment by Washington University he collected more than 3,500 samples with the consent of his patients. His patients supported him and requested from Washington University that their samples be transferred to Catalona's new employment site. Based on the original consent, the court refused to grant sample donors the right to control transfer (Charo 2006).

In another case, *Havasupai Tribe of Havasupai Reservation v. Arizona Bd. of Regents* (2008), Arizona State University (ASU) agreed "to pay $700,000 to 41 members of the Havasupai Indian tribe to settle legal claims that university researchers improperly used tribe members' blood samples in genetic research" (Mello and Wolf 2010). The Havasupai claimed that samples from a diabetes study had been used without adequate consent for other uses to which they objected, namely "a study evaluating the genetic basis of schizophrenia, which could stigmatize the tribe; one examining inbreeding, which raised stigmatization issues and concern related to a cultural belief that inbreeding brings harm to one's family; and evolutionary-genetics studies suggesting that contrary to the tribe's origin story, its ancestors migrated across the Bering Sea" (Mello and Wolf 2010). The fact that the university preferred a settlement in spite of the fact that previous similar legal claims of sample donors were unsuccessful shows that more is at stake than legal views. The university's

reaction could be understood as a form of recognition of moral duties towards sample donors that must be respected in order to maintain present and future donors' trust in medical research. As Mello and Wolf (2010) state, "[c]ase law is fairly clear that biospecimen donors do not retain property interests in samples collected and used in accordance with properly obtained informed consent." The case focuses rather on consent issues and shows that "what constitutes adequate informed consent is unsettled. Federal regulations require informed consent when identifiable biospecimens are collected for research purposes, but such regulations provide little guidance on how to obtain informed consent for future, unspecified uses" (Mello and Wolf 2010).

A recent debate has started as to whether instead of using consent as a form of control over tissue based on autonomy rights of donors, one should refer to the concept of a "trade-secret model" (Mitchell *et al.* 2011). The authors claim that their concept provides a new way to promote autonomy of donors. They uphold that "[d]onating genetic samples for medical research is like selling a confidential commodity of potentially lucrative value, warranting individual licensing arrangements to secure acceptable benefit outcomes" (Weil and Compton 2011).

"The conventional legal definition of a trade secret is any knowledge or information that is not generally available or readily ascertainable, confers an economic advantage on its proprietor over those who do not know it, and is the subject of reasonable efforts to maintain secrecy… Trade-secret owners often allow others to exploit their secrets under contracts or licenses that create a relationship between licensor and licensee. The licensor retains ownership of the trade secret but permits specific uses as long as the licensee complies with the conditions specified in the license" (Mitchell *et al.* 2011). Mitchell *et al.* explain that informed consent practice as well as commercial trade-secret licenses address four conditions: compensation, limits on access and use, measures for maintaining secrecy, and provisions for allocating rights in case of future technological improvements. They claim that the concept of trade secret allows for a more flexible approach to these four conditions.

Conclusion

Ownership is a complex concept and any control rights over biological samples of various stakeholders should be described in detail, keeping in mind that ownership is best described as a “bundle of rights.” A pragmatic approach should not only take into account legal rights but also ethical obligations perceived by sample donors and fears about commodification of the human body, neocolonialism, and lack of respect for the dignity of human body parts. In order to maintain trust and to prevent exploitation of vulnerable populations for the benefit of the “better-off” and to cause or profit from social inequalities, biobanks should employ clear governance agreements that use comprehensible consent to define the use of samples, their anonymization and transfer, commercialization (patents, benefit sharing), destruction, etc. This form of “ownership” has been described as a “conditional gift” (Knoppers 1996) and implies that different control rights need to be distinguished, that these control rights are defined in bilateral contracts (e.g., material transfer agreements) and that consent is obtained from donors after thorough information. It is preferable to consider biobanks as custodians of samples and not owners because property rights concerning bodily material and DNA are controversial and—in Europe—clearly limited (Council of Europe 1997). Written rules of a repository should specify the special obligations and rights of the parties involved, and patients need to be informed about the details of control they maintain over their samples. It is widely acknowledged that traditional ownership concepts do not fit when it comes to human biological samples and that legal concepts are often too “country-based.” The bundle of “things” one is allowed to do with samples and data has to be defined in detail for each biobank using ethical reflection and maintaining trust and transparency. A wise choice is to think ahead and to be “compatible with the future.” This implies not to rely only on what one is “allowed to do,” i.e., to respect (minimal) legal requirements, but to decide

based on broader values that have gained importance in today's societies and that become more and more a common ground for many countries. Last, but not least, compliance with these ethical requirements will influence the reputation of biobank research and the willingness of future donors to participate in biobanks.

Bibliography

References

Artene, S. A., M. E. Ciurea, S. O. Purcaru, D. E. Tache, L. G. Tataranu, M. Lupu, and A. Dricu. 2013. Biobanking in a constantly developing medical world. *The Scientific World Journal* 2013:343275.

ASHG. 1988. DNA banking and DNA analysis: points to consider. Ad Hoc Committee on DNA Technology, American Society of Human Genetics. *American Journal of Human Genetics* 42(5):781–783.

Boggio, A. 2008. Ownership of samples and data and territorial restrictions concerning data and samples beyond national boundaries. In *Ethical Issues in Governing Biobanks. Global Perspectives.* Edited by B. Elger, N. Biller-Andorno, A. Mauron, and A. M. Capron. London: Ashgate.

Buseh, A. G., P. E. Stevens, S. Millon-Underwood, L. Townsend, and S. T. Kelber. 2013a. Community leaders' perspectives on engaging African Americans in biobanks and other human genetics initiatives. *Journal of Community Genetics* 4(4):483–494.

—. 2013b. Black African immigrant community leaders'views on participation in genomics research and DNA biobanking. *Nursing Outlook* 61 (4):196–204.

CCNE. (Comité consultatif national d'éthique pour les sciences de la vie et de la santé). 2003. Avis No. 77. Problèmes éthiques posés par les collections de matériel biologique et les données d'information associées. Accessed on August 1, 2009 at www.ccne-ethique.fr/sites/default/files/publications/avis077.pdf.

Charo, R. A. 2006. Body of research: Ownership and use of human tissue. *The New England Journal of Medicine* 355(15):1517–1519.

Council of Europe. 1997. Convention for the protection of Human-Rights and dignity of the human being with regard to the application of biology and medicine: Convention on Human-Rights and Biomedicine. *CETS* No. 164.

ESHG (European Society of Human Genetics). 2003. Data storage and DNA banking for biomedical research: technical, social and ethical issues. *European Journal of Human Genetics* 11(Suppl 2):S8–S10.

Gaffney, E. F., D. Madden, and G. A. Thomas. 2012. The human side of cancer biobanking. *Methods in Molecular Biology* 823:59–77.

Grizzle, W., W. W. Grody, W. W. Noll, M. E. Sobel, S. A. Stass, T. Trainer, H. Travers, V.

Weedn, and K. Woodruff. 1999. Recommended policies for uses of human tissue in research, education, and quality control. Ad Hoc Committee on Stored Tissue, College of American Pathologists. *Archives of Pathology and Laboratory Medicine* 123(4):296–300.

Hagiwara, N., L. Berry-Bobovski, C. Francis, L. Ramsey, R. A. Chapman, and T. L. Albrecht. 2014. Unexpected findings in the exploration of African American underrepresentation in biospecimen collection and biobanks. *Journal of Cancer Education* 29(3):580–587.

Honoré, A. M. 1961. Ownership. In *Oxford Essays in Jurisprudence. First Series*. Edited by A. G. Guest. Oxford: Clarendon Press. 107–128.

Hugo (Human Genome Organisation). 1995. Statement on the principled conduct of genetics research. *Eubios Journal of Asian International Bioethics* 6:59–60.

—. 1999. Statement on DNA sampling: Control and access. *Genome Digest* 6:8–9. Accessed July 20, 2009, at www.hugo-international.org/img/dna_1998.pdf.

Jones, P. 2008. Group rights. *The Stanford Encyclopedia of Philosophy*. Edited by E. N. Zalta. Spring 2014 issue. Accessed on March 17, 2014, at plato.stanford.edu/archives/spr2014/entries/rights-group.

Knoppers, B. M. 1996. Conclusion: human genetic material–commodity or gift? In *Legal rights and Human Genetic Material.* Edited by B. M. Knoppers, T. Caulfield, and T. D. Kinsella. Toronto, Ontario: Edmond Montgomery Publications.

Knoppers, B. M., and M. H. Abdul-Rahman. 2008. Biobanks in the literature. In *Ethical Issues in Governing Biobanks: Global Pers pectives.* Edited by B. Elger, N. Biller-Andorno, A. Mauron, and A. M. Capron. London: Ashgate.

Knoppers, B. M., M. H. Zawati, and E. S. Kirby. 2012. Sampling populations of humans across the world: ELSI issues. *Annual Review of Genomics and Human Genetics* 13:395–413.

Mello, M. M., and L. E. Wolf. 2010. The Havasupai Indian tribe case: Lessons for research involving stored biologic samples. *The New England Journal of Medicine* 363(3):204–207.

Mitchell, R., J. M. Conley, A. M. Davis, R. J. Cadigan, A. W. Dobson, and R. Q. Gladden. 2011. Genomics: Genomics, biobanks, and the trade-secret model. *Science* 332(6027):309–310.

MRC (Medical Research Council). 2001. Ethics Series. Human tissue and biological samples for use in research. Operational and ethical guidelines 2001. November, 2014 version accessed on May 25, 2015, at www.mrc.ac.uk/news-events/publications/human-tissue-and-biological-samples-for-use-in-research.

Nisbet, M. C., and D. Fahy. 2013. Bioethics in popular science: evaluating the media impact of

The Immortal Life of Henrietta Lacks on the biobank debate. *BMC Medical Ethics* 14:10.

OECD (Organisation for Economic Co-operation and Development). 2009. Guidelines on Human Biobanks and Genetic Research Databases. Paris: OECD. Accessed on May 25, 2015 at www.oecd.org/sti/biotech/44054609.pdf

Porteri, C., E. Togni, and P. Pasqualetti. 2014. The policies of ethics committees in the management of biobanks used for research: an Italian survey. *European Journal of Human Genetics* 22(2):260–265.

Pullman, D., and A. Latus. 2003. Reconciling social justice and economic opportunism: regulating the Newfoundland genome. In *Populations and Genetics. Legal and Socio-Ethical Perspectives.* Edited by B. M. Knoppers. Leiden/Boston, MA: Martinus Nijhoff.

Reymond, M. A., R. Steinert, J. Escourrou, and G. Fourtanier. 2002. Ethical, legal and economic issues raised by the use of human tissue in postgenomic research. *Digestive Diseases* 20(3–4):257–265.

Shaw, D. M., B. S. Elger, and F. Colledge. 2014. What is a biobank? Differing definitions among biobank stakeholders. *Clinical Genetics* 85 (3): 223–227.

Steinsbekk, K. S., L. O. Ursin, J. A. Skolbekken, and B. Solberg. 2013. We're not in it for the money-lay people's moral intuitions on commercial use of "their" biobank. *Medicine, Health-Care and Philosophy*, 16(2):151–162.

Switzerland. 2005. Loi fédérale sur la protection des animaux du 16 décembre 2005 (état le 1er mai 2014). Accessed on May 25, 2015 at www.admin.ch/opc/fr/classified-compilation/20022103/index. html.

UK Biobank. 2007. UK Biobank Ethics and Governance Framework. Version 3.0 (October 2007). Accessed on May 18, 2015 at www.ukbiobank.ac.uk/wp-content/uploads/2011/05/EGF20082.pdf.

Waldron, J. 2004. Property and ownership. *The Stanford Encyclopedia of Philosophy*. Edited by E. N. Zalta. Spring 2012 edition. Accessed on March 17, 2014, at plato.stanford.edu/archives/spr2012/entries/ property.

Washington University v. Catalona. 2006.437 F. Supp. 2d 985 (E. D. Mo. 2006), aff'd, 490 F.3d 667 (8th Cir 2007), cert. denied, 128 S. Ct. 1122 (2008).

Weil, C. J., and C. Compton. 2011. Trade-secret model: potential pitfalls. *Science* 333(6049):1574–1575; author reply 1575–1576.

Winickoff, D. E., and R. N. Winickoff. 2003. The charitable trust as a model for genomic biobanks. *The New England Journal of Medicine* 349(12):1180–1184.

Zika, E., D. Paci, A. Braun, S. Rijkers-defrasne, M. Deschênes, I. Fortier, J. Laage-hellman, C. A. Scerri, and D. Ibarreta. 2011. A European survey on biobanks: trends and issues. *Public Health Genomics* 14(2):96–103.

Zika, E., D. Paci, T. Schulte in den Bäumen, A. Braun, S. Rijkers-Defrasne, M. Deschênes, I. Fortier, J. Laage-Hellman, C. A. Scerri, and D. Ibarreta. 2010. Biobanks in Europe: Prospects for harmonisation and networking. JRC Scientific and Technical Reports. European Commission. Accessed on April 10, 2014 at ipts.jrc.ec.europa.eu/publications/pub.cfm?id=3259.

Author

Bernice S. Elger

Studied medicine and theology in Germany, France, Switzerland, and the US and obtained a specialty degree in internal medicine. She is the head of the Institute for Biomedical Ethics, University of Basel, and of the Unit for Health Law, Ethics and Humanitarian Medicine, Center for Legal Medicine, University of Geneva, Switzerland, and obtained several awards for her work, including the Bizot Award for her work on biobanks (2005) and the Swiss Research Award in Primary Care (2010).

Part 6. The Bigger Picture

What else? Development, Gender, and Human-Rights

Philippe Goyens

The issues raised in this book about globalization and commodification of the human body are extremely vast and complex, and have significant human, social, medical, economic, legal, religious, and ethical implications. It is clear from the previous chapters that the questions are many and that much more research is necessary and of crucial importance.

While the four previous parts are dedicated each to one specific topic involving globalization and commodification of the human body, this part approaches the debate transversally. The goal is to consider those same four topics from cross-disciplinary approaches such as development studies, gender studies, and human-rights.

First, Firouzeh Nahavandi discusses the present international context—neoliberal globalization and development of new technologies—within which a new cannibal market is indeed emerging. She establishes a parallel between self-sale into slavery and self-sale of human body parts, both motivated by extreme poverty and distress, and between colonialism and "today's inequality in wealth, and superiority of technological possibilities between world's regions." The author presents the phenomenon of commodification of the human body as a new form of exploitation of international inequalities. She underlines dehumanization and objectification as a key feature of such exploitation, but also as a means of justifying it.

Second, Judit Sándor discusses whether commodification of the human body has gender implications, exploring in detail the hidden mechanisms underpinning the commodification and commercialization processes. The author raises the

question of why the commercialization of human body parts is not prohibited when commodifying human beings—in the form of slavery—is banned by international and national laws: “Unlike slavery, however, the commercialization of certain parts or elements of the human body has never been universally prohibited throughout the world.” She argues that the hidden biases of these issues make it difficult to counter them with legal and policy methods in the same way as many gender issues still influence practices and thinking about women. Discrimination, vulnerability and different forms of exploitation still affect women and women’s bodies. “The question is whether these practices of commodification and exploitation of women’s bodies also influence the uses of tissues that are extracted from women.” She goes on to conclude that “personal rights provide the key to resolving legal questions about the human body in biotechnology.” However, efforts to promote women’s rights as human-rights is a complex issue. For instance, how can one separate women’s right to control their own fertility from their right to sell their own eggs, pay for their cryopreservation, purchase other women’s ova, or rent their womb?

Finally, Debra Budiani-Saberi shows that a human-rights-based strategy is critical and should be “at the center of all efforts to prevent and combat trafficking and assist and protect victims.” This author focuses on the issue of human trafficking for organ removal (HTOR), which “should be tackled from a number of perspectives including public health, economics, migration, and crime control.” She argues however for a prioritization of a human-rights approach and explains the importance of such an approach, the reasons of this prioritization and its scope and impact. The author discusses different mechanisms and tools for implementation and concludes with various recommendations to the international community, the national states as well as health organizations, transplant professionals, social scientists, civil society and human-rights activists.

So whether we are discussing economic inequality, gender differences or a basic human-rights approach, it is clear that the bigger picture of commodification is, indeed, complex.

Author

Philippe Goyens

Pediatrician, head of the Nutrition and Metabolism Unit at the University Children's Hospital Queen Fabiola, Brussels, Belgium. Since 2006, he has been in charge of the Newborn Screening Laboratory at the Université libre de Bruxelles. He has a long-lasting experience of nutritional problems in developing countries (Central Africa and South-East Asia). Since 2013, he has been permanent secretary of the Royal Academy for Overseas Sciences (Brussels).

From Colonization to Neocolonization: New Forms of Exploitation

Firouzeh Nahavandi

Inequality and exploitation of the human body, phenomena as ancient as the world itself

Inequality has existed since the world began. Plutarch already noted in his time, “Disequilibrium between rich and poor is the most ancient and fatal sickness of Republics” (Galbraith 2011, 22). Inequality continues to be a global problem. The last Oxfam Report still states that almost half of the world’s wealth is owned by just one percent of the population, and seven out of ten people live in countries where economic inequality has increased in the last 30 years (Oxfam 2014). In the same way, exploitation of human beings is an old phenomenon.

Slavery and self-sale

Slavery—a condition in which one human being is owned by another—best illustrates the prototype of a relationship defined by domination and exploitation. Furthermore, dehumanization, as a form of objectification, has always been intrinsic to enslavement (Sharp 2000; Patterson 1982). It has been a main component of the past societies, existing as early as eighteenth century before Christ in China or having been treated as a prominent institution in the Babylonian Code of Hammurabi. Greeks considered chattel slavery as a necessity, and Aristotle mentioned the phenomenon in his book *Politics*: "And indeed the use made of slaves and of tame animals is not very different; for both with their bodies minister to the needs of life." In Rome, slaves were individuals without any right, often with a hereditary status. Therefore, slaves have been present in all civilizations for a long time. Slaves were procured in many ways, capture in war being probably the most frequent in ancient times. However, kidnapping, slave-raiding, and piracy expeditions were not unusual. Some people were even enslaved as a punishment for crime or debt and others sold into slavery by parents, sometimes to escape starvation. Also, property rights to slaves could be bought and sold by market transactions.

Along with submission by violence, self-sale into slavery should also be emphasized. It often occurred as a result of poverty, a phenomenon exemplifying what human beings can be pushed to do as the result of inequality and distress, quite similar to self-sale of human body parts.

Colonialism

Colonialism, whereby European nations explored, conquered, settled, and submitted various lands, reflects another example of international exploitation by way of dehumanization and objectification. It has mainly been the disparities in the level of technology that permitted the expansion of European powers, especially the inequality in armaments and ship constructions. This phenomenon can be compared to today's inequality in wealth, and superiority of technological possibilities between world's regions. Colonialism was also a period of violence, when some native people of colonies were constrained to forced labor, especially in colonies such as those held by Belgium under Leopold II, and worked in inhumane conditions.

Slavery and colonialism are paroxysmal examples of commodification of the human body and exploitation of resources. However, each period has its specific features, and nowadays globalization has introduced more insidious and subtle forms of exploitation of inequalities and disarray, a new form of neocolonialism, as will be illustrated below.

In what follows, some features of the commodification of the human body will be reviewed, and then discussed in order to demonstrate why the phenomenon can be considered as a new form of exploitation of international inequalities and why it is a development-related issue.

Some features of today’s commodification of the human body

Hair trade

Although trade and use of natural hair is not a new phenomenon, it has recently become a juicy business, as wealthy consumers are willing to pay enormous prices to fulfill their dream of beauty using either wigs or hair extensions. As a result, the human hair trade has spread across the globe, and the United States (US), China (for treatment and then export), and the United Kingdom (UK) are the biggest importers of human hair in the world (Turner 2011). Most of the latter comes from developing countries, where long natural hair remains a badge of beauty, but where the women are poor enough to consider selling the treasured asset, or giving it away because of traditions.

In Great Britain, hair extensions usually come from India, as Indian women’s hair quality is closer to Western women’s and not altered by coloring or treatment. That is the case at Great Lengths, which supplies hair extensions to more than 1,000 salons in the UK, and has reported a staggering 70% growth in the past five years. *The Observer* (Sunday, June 25, 2006) has uncovered evidence that village women across India are being increasingly targeted for their sought-after waist-length tresses, mainly by unscrupulous agents hired by small-time exporters who are offering husbands less than $10 a time for their wives’ hair and, in more extreme circumstances, forcing women to shave their heads. Out of India, the hair business is also giving way to all sorts of traffic. In Brazil, hair attacks on women are growing. In Russia, there has been evidence of prisoners shaved in order to use their hair. Nowadays, the transnational trade of human hair can be considered as “a business in body parts, multiple strands that contribute to global capitalism’s exploitation of Third World women and their

labor” (Berry 2008, 80).

Surrogacy

Surrogacy is another case whereby women's bodies, mostly from the developing countries, are commoditized to give birth for wealthy couples or individuals. For more than two centuries now, trade with colonized or developing countries has existed, and purchasing cheap labor and goods from abroad as well as outsourcing has become a feature of international relations. However, today, a new type of transaction has entered everyday life: renting out wombs to gestate another's child, which is the sign of a world where increasingly everything has a price, including motherhood and parenthood.

Although a fairly recent phenomenon, in our rapidly globalizing world, increasingly women and couples from the US and elsewhere are traveling overseas, especially to high-tech low-cost countries like India, to hire women at discount rates to gestate and deliver babies for a fraction of what it would cost in their countries. "They are, like companies that outsource labor to other countries, traveling to purchase a cheaper source of reproductive labor" (Twine 2011, 1).

Furthermore, selecting surrogacy instead of adoption as a way for acquiring children is becoming the rule. As a result of a growing demand, commercial surrogacy in developing countries has become a profiteering business. That is the case in India, where there are an estimated 1,000 clinics practicing commercial surrogacy, with an annual earning of $1 billion (some figures mention $2 billion). Furthermore, it entails an organized activity by which most pregnant mothers are kept in "shelter homes"—which are also called "baby factories"—during their days of confinement. Therefore, surrogacy has become a real business with organized services, advertisement, especially sophisticated on the Internet, and competition between agencies.

Examples abound. Among others, Sensible Surrogacy, "employing" women from Thailand and India, presents itself on Internet as "The only agency with complete and affordable service" that makes "in vitro fertilization simple and

affordable for loving couples to create complete families. This includes the best prices for services available in the region, and the best care for you and your new family." The prices are listed on its website. Los Angeles-based Planet Hospital started a surrogacy program in 2006 with the "Indian bundle," advertised as a service that included "an egg donor (often from the United States), four embryo transfers into four separate surrogate mothers, room and board for the surrogate, and a car and driver for the parents-to-be when they travel to India to pick up the baby." However, it had to stop its surrogacy activities in early 2014.

Organ transplant

The success of transplant technology, along with the commercialization of health-care and the increasing polarization between rich and poor, have created conditions for an illegal but thriving trade in human organs that occurs at the crossroads of the neoliberal state and the commercialization of health-care and involves actors like states, media, health specialists, and organ buyers (both recipients and brokers). At the heart of this issue is kidney transplant. All over the world, the national transplant waiting lists, and the waiting time spent on these lists, are growing, and therefore the increasing “shortage” of suitable kidneys available for transplant has led many people on waiting lists to seek kidneys outside of legal channels. Consequently, a black market for organs has developed by way of which slums in developing countries are being transformed into organ farms.

According to World Health Organization experts, 10,000 black-market operations involving human organs take place each year. Patients, many of whom will go to China, India, or Pakistan for surgery, can pay up to $200,000 for a kidney to gangs who harvest organs from vulnerable, desperate people, sometimes for as little as $5,000 (Campbell and Davison 2012). Recently, in Syrian refugee camps in Lebanon, gangs began working in the human organ trade, especially targeting kidneys, and nowadays many groups of refugees compete to provide organs, causing the prices to fall. This is also the case in Bangladesh and the Philippines. According to the United Nations, Egypt is becoming one of the countries most affected by organ trafficking, right after China, Philippines, and India. In recent years, Pakistan has also emerged as one of the largest centers for commerce and tourism in renal transplantation. Prior to the adoption in Pakistan in 2007 of a law prohibiting such surgeries on foreigners, the Sindh Institute of Urology and Transplantation estimated that 75% of the beneficiaries of the approximately 2,000 annual kidney transplants

were tourists. In Turkey, selling organs by Internet is growing. In China, demand is often met by harvesting organs from executed prisoners, despite criticism from human-rights advocates who question the degree of consent (Campbell and Davison 2012). Also the shortage of organs due to the tradition of burying the whole body has given way to a parallel economy. An online plea can put a desperate patient or a donor short of money in touch with agents exploiting a shortage of human organs who deal with corrupt doctors and hospitals.

The Islamic Republic of Iran is the only country that has a regulated market of organs among nationals. People can sell and buy kidneys under the state-regulated surveillance of non-profit organizations as the Charity Association for the Support of Kidney Patients (CASKP) and the Charity Foundation for Special Diseases that facilitate the process by finding potential vendors, introducing them to the recipients, and checking the compatibility of a possible donation. In Iran, there is no shortage of organs, but a lot of competition among sellers. To bypass procedures, non-official direct negotiations have transformed the Iranian system into a kidney market where would-be sellers advertise their kidneys by writing their blood type and phone number on posters or walls in the streets close to several of Tehran’s major hospitals. Economic crisis has increased such behavior, and donors are not really more protected, as they are deprived of post-operation care and are not able to work for a couple of months (Kamali Dehghan 2012).

Attraction of brains

When, in the context of today's globalization and immigration policies of the wealthiest countries, regulations are designed to attract selectively "brains" from abroad, then attraction of "brains" becomes an issue that can be considered as part of the process of commodification of the body, resulting from disparities between countries and a process by which the strongest and wealthiest regions use the "brain" of citizens of poorest and weakest parts of the world to their advantage and benefit. Nowadays, selective migrations regimes are strong signs of the rise of a global "race for talent" (Shachar 2011) as a way to secure its rank in a growing competing world. The current wave of economic globalization has opened a window of opportunity for human capital to agglomerate where it is already abundant and yet best rewarded, i. e., in the most economically advanced countries (OECD 2002). The percentage of highly educated among the immigrant population has been growing over the past decade in most OECD countries (UN 2013). As it mirrors a global increase in education levels of roughly the same level that is observed among the total resident population in OECD countries, in some countries it also reflects shifts in migration policy with a stronger focus on skilled labor migration (OECD 2012).

Moreover, in contrast to both permanent migration and temporary labor migration, there is a strong tendency to encourage foreign graduate students to stay in developed countries. Recently, many countries have changed their rules in this regard. Since 2011, graduates from Austrian universities may be granted a visa to look for a job in Austria. Family members also receive full labor market access, and New Zealand awards international students points for residence under the skilled-migrant category (OECD 2013). Meanwhile, Canada invites foreign nationals currently studying for a PhD or recently graduated to apply under the Temporary Foreign Worker Program (MacDonald 2013).

A new form of exploitation of international inequalities

Commodification of the body and development theories

Commodification of human body epitomizes all the issues found in development thought. Modernization theories define underdevelopment as a matter of backwardness. As mentioned in the above section, the “global race for talent” is a phenomenon that mostly affects less-developed regions that in some way are backward compared to others in offering job opportunities or better standard of living or optimal conditions for creation and research. Moreover, a lack of education, no state protection, the absence of regulations, and growing poverty add to the possibilities and opportunities offered by globalization and new technologies to facilitate the attraction of talents. For radical theories, underdevelopment is the direct result of the expansion of capitalism. In this interpretation, peripheral societies, mostly former colonies, are exploited and participating in an unequal international economic exchange because colonialism froze their development and transformed them into extravert countries taking advantage of their resources and their labor force and specializing them as primary product producers. For the empirical approach, poverty and inequality remain the core issues of underdevelopment, and dual development a problem to be resolved. The two latter approaches give powerful insights into commodification of the human body as they focus on remaining poverty and inequality and specialization of some areas. In a new distribution of resources, less-developed areas are deprived of one of their most valuable resources to the benefit of the wealthiest areas or the wealthiest people mostly in the wealthiest areas. Post-development theories in turn see underdevelopment as a matter of strategy of power and discourse. In light of this approach, the discourses about

remittances, scientific advantages for the donor countries in case of brain drain, and advantages of commodification of the human body for sellers are no more than discourses of power permitting a reallocation of resources and legitimating and normalizing inequality and poverty. The market-driven view and neoliberal stance focusing on privatization, liberalization, deregulation, and flexibility has introduced international rules and market procedures that permit, facilitate, and normalize the spread of phenomena such as the commodification of the human body.

Unequal exchange and exploitation

As we saw above, the migration of highly skilled individuals is both growing and encouraged by rich countries, and furthermore, in the developed world it is taking the form of a global race for talent. This trend could be seen as a serious loss for the source country, and it is still unclear whether the benefits fully compensate the country for the potential negative consequences from the talent migration (Kerr 2013). It thus is a development-related issue stimulated by economic disparities between developed and underdeveloped regions and by the new levels of mobility and marketing produced by globalization.

Many reports emphasize the advantages of brain drain for the donor country while arguing that negative effects are difficult to point out. However, meanwhile, an increasing number of reports detailing how to deal with brain drain and the multiplication of recommendations regarding the issue demonstrate that it cannot be ignored and that it is considered as a problem. Notwithstanding, the ongoing race for talent is a phenomenon that is debilitating for the education and training of professionals in the developing world. The gains from money sent back home (remittances) or from expatriates coming back later in their careers and educational links that they establish may be of some benefit and considered as brain gains, but it’s hard to imagine how it would replace or be more useful than doctors, nurses, and teachers staying in place where they are lacking, as there can be little question that the emigration of physicians is also a loss to the health systems in the source countries.

The Indian subcontinent provides the largest absolute number of physicians to the recipient nations, but the relative draw on nations, as measured by the emigration factor, is actually greater for sub-Saharan Africa and is very pronounced for Caribbean countries. It entails the transfer of scarce human resources for health from the least developed countries in the world with the greatest health needs to the richest countries with the most health resources. Sub-

Saharan Africa harbors about 14% of the world's population, but has only 3% of the world's health professionals (WHO 2006; Clemens and Pettersson 2008). The paradox is that at the same time, to fill the gap created by skills shortage, African countries spend an estimated $ 4 billion annually to employ about 100,000 non-African expatriates. Analyzing the process, some authors (Boeri *et al.* 2012) have factored many externalities for developing countries: increase of the burden on those left behind, negative impact on low-skilled workers' productivity and wages (intragenerational spillover), and increase of domestic inequality, negative impacts on a country's growth prospects, inasmuch as human capital formation is now viewed as a central engine of growth (intergenerational spillover), and contribution to the concentration of economic activities in specific locations, at the expense of origin regions.

In turn, the resurgence of trafficking has prompted the World Health Organization to suggest that humanity is being undermined by the vast profits involved and the division between poor people who undergo "amputation" for cash and the wealthy sick who sustain the body parts trade. That said, organ transplant is a life-saving technology, and organ trafficking is supplying people with the money to pay for a new life. Yet, the phenomenon involves the harvesting and sale of organs from unwilling donors or donors who sell their organs out of despair and poverty. In Indonesia, after the tsunami, many inhabitants of Banda Aceh sold a kidney in order to rebuild their house. This is happening in many places throughout the world and is transnational, as organs are traded across borders of countries. A national survey in Pakistan (Naqvi *et al.* 2007) relates that most kidney vendors belonged to Punjab, the agricultural heartland, where 34% of people live below poverty line; 90% of the vendors were illiterate, 69% were bonded laborers, 12% laborers, 8.5% housewives, and 11% unemployed; 93% vended for debt repayment, 88% had no economic improvement in their lives, and finally 98% reported deterioration in general health status. For the authors, kidney vendors from Pakistan, many in bondage, are examples of modern-day slavery.

The key issue is exploitation. Bodies of the poor in developing countries are

being turned into raw materials, thus extending the exploitation of some regions through the process by which the impoverished populations become suppliers of the wealthiest, mostly from the Western world. Economic constraints cause the seller to give up organs to the scientifically advanced and powerful developed nations' citizens or the wealthiest in the developing world. Furthermore, it is an unequal transaction as the price paid to the sellers is ridiculously low compared to what the receivers pay, and as selling may affect them adversely. And last, the market being often underground, it is not subject to institutional regulation that could ensure proper pre-transplant and post-transplant for donors.

Commodification of the human body as neocolonialism

Since the end of the twentieth century, in addition to neoliberal globalization, emergence of new technologies of information and communication and new international regulations, we can conclude that a new form of exploitation, more insidious and subtle, has appeared: commodification of the human body. Facilitated by the opening of borders and unprecedented progress of science—particularly in medicine—phenomena such as attracting talents, transplant of vital organs, and using surrogate mothers are becoming "normalized." The first deprives donor countries of people who could contribute to the development of their homeland while benefitting wealthier countries; the latter two allow rich people to use organs taken from the poor and often leads to more poverty and worsening of health of the donors: a form of neocolonialism. To the extent that the current system permits an unequal exchange to the advantage of those who are strongest, commodification of the human body is a development-related issue. Therefore, in the name of free trade, and freedom of movement and work, today's market system has implemented new forms of exploitation of vulnerabilities and inequality, which are the extension of the commodifications of nature (Mrozowsky 1999) and of human labor that have always existed and are embedded in the culture of capitalism, and in the process whereby through colonization land became an abstract space that was measured and then sold and people became commodities for exchange.

Bibliography

References

Berry, E. R. 2008. The zombie commodity: hair and the politics of its globalization. *Postcolonial Studies*. 11(1):63–84.

Boeri, T., H. Brücker, F. Docquier, H. Rapoport, eds. 2012. *Brain Drain and Brain Gain. The Global Competition to Attract High-Skilled Migrants*. Oxford: Oxford University Press.

Campbell, D., and N. Davison. 2012. Illegal kidney trade booms as new organ is "sold every hour". *The Guardian*, May 27.

Clemens, M. A., and G. Pettersson. 2008. New data on African health professionals abroad. *Human Resources for Health* 6:1. Accessed at www.human-resources-health.com/content/6/1/1.

Galbraith, J. K. 2011. *L'Art d'ignorer les pauvres*. Paris: Les liens qui libèrent.

Kamali Dehghan, S. 2012. Kidneys for sale: poor Iranians compete to sell organs. *The Guardian*, May 27.

Kerr, W. R. 2013. U.S. high-skilled immigration, innovation and entrepreneurship: empirical approaches and evidence. Working paper presented at World Intellectual Property Organization (WIPO). Experts Meeting on Intellectual Property, the International Mobility of Knowledge Workers and the Brain Drain. Accessed at www.people.hbs.edu/wkerr/Kerr_HighSkillImmEmpirics-8-26-13.pdf.

Macdonald, A. 2013. Canada seeks immigrants who fit better. *Wall Street Journal*, August 31.

Mrozowsky, S. 1999. Colonization and the commodification of nature. *International Journal of Historical Archæology* 3(3):153–166.

Naqvi, S. A., B. Ali, F. Mazhar, M. N. Zafar, and S. A. Rizvi. 2007. A socioeconomic survey of kidney vendors in Pakistan. *Transplant International* 20(11):934–939.

OECD (Organisation for Economic Co-operation and Development). 2002. International Mobility of the Highly Skilled, Policy Brief. Accessed at www.keepeek.com/Digital-Asset-Management/oecd/employment/international-mobility-of-the-highly-skilled_9789264196087-en#page1.

—. 2012. International Migration outlook 2012. Accessed at www.npdata.be /BuG/165-NV-A-migratie/0ECD-Migration-Outlook-2012.pdf.

—. 2013. Economic Surveys: New Zealand. Accessed at

www.oecd.org/eco/surveys/OVERVIEW%20-%20New%20Zealand%202013.pdf

Oxfam. 2014. Working for the few: Political capture and economic inequality. Briefing paper. Accessed at www.oxfam.org/sites/ www.oxfam.org/files/bp-working-for-few-political-capture-economic-inequality-200114-en.pdf.

Patterson, O. 1982. *Slavery and Social Death. A Comparative Study*. Cambridge, MA: Harvard University Press.

Shachar, A. 2011. Picking winners: Olympic citizenship and the global race for talent. *Yale Law Journal* 120:2088–2139.

Sharp, L. A. 2000. The Commodification of the Body and Its Parts. *Annual Review of Anthropology* 29:287–328.

Turner, L. 2011. Human hair trade soars on celebrity hairdo envy. *Reuters*, August 3. Accessed at www.reuters.com/article/2011/08/03/us-human-hair-trade-idUSTRE7723U520110803.

Twine, F. W. 2011. *Outsourcing the Womb. Race, Class, and Gestational Surrogacy in a Global Market*. New York, NY: Routledge.

UN (United Nations). 2013. *Population Facts*. 2013(2). Accessed at esa.un.org/unmigration/documents/The_number_of_international_migrants.pdf.

WHO (World Health Organization). 2006. The World Health Report 2006. Working together for Health. Geneva: World Health Organization Accessed at www.who.int/whr/2006/en.

Author

Firouzeh Nahavandi

PhD in social sciences. She is full professor at the Université libre de Bruxelles (ULB), where she is in charge of the Research Center on International Development and Cooperation (CECID). She currently is the director of the Graduate School of Development Studies of the French community of Belgium, and a regular member of the Royal Academy for Overseas Sciences (Brussels). Her research focuses on development issues, particularly in Islamic countries.

Commodified Bodies: Is It a Gender Issue?

Judit Sándor

At the beginning of the twenty-first century, the human body has become an ambiguous concept. Not only have questions arisen such as when does life begin and end, but even the boundaries of the body have become blurred. As Carole Pateman noted already in 2002: “Where lines are to be drawn about property and commodification, what should be alienable and inalienable, and where the balance should be between the two are some of the most pressing issues of the new century” (Pateman 2002). And indeed, in the first decade of the twenty-first century, numerous, unprecedented, and constantly evolving uses of human tissues, cells, stem cells, and DNA have emerged and changed our thinking about the human body and its legally defined boundaries. [1] Components of the human body also carry important information about the whole body: for instance, DNA can be used to identify a victim, a genetic test may reveal susceptibility to a not-yet-manifested disease, and stored human gametes can be used for reproduction even posthumously.

All this has led to the phenomenon already pointed out in 1996 by E. Richard Gold when he stated that we value not only the body as a whole but also its components, such as organs, tissues, cells, and DNA (Richard Gold 1996, 12). This fragmentation of the body for biomedical use, including the granting of independent value to detached components of the human body, inevitably raises the issue of the commodification and commercialization of the human body and its components. Certain uses of the body may even lead to exploitation. Commodification and commercialization are intertwined, but they reflect slightly different aspects of the consequences of this fragmentation. An

increasing number of court cases indicate that the human body and its components have become a contested legal field (Curry 2002).

In this chapter, I would like to argue that fear of the commodification and commercialization of the human body constitutes the main pillar of biomedical law in Europe. Furthermore, I would like to argue that commodification and commercialization have hidden gender implications that often make it difficult to explore whether we are faced with exploitation based on discrimination against women or a new form of commodification resulting from new biotechnologies.

European law, commodification and commercialization

The law applies the notion of commodification to separate between *things* and *persons*, and argues that the person cannot be commodified or treated as a proper object for sale and purchase. This prohibition has been extended to the human body as a whole and even to its component parts as a general principle, based on the integrity of the human body and the person to whom the body belongs. When human genes and tissues are in question, the notions of commodification and commercialization have to be re-interpreted. They become salient in biomedical law and even criminal law when genes, organs, and tissues are exchanged for financial benefits.

A major European instrument in this field is the Convention on Human-Rights and Biomedicine (the Oviedo Convention), [2] which imposes a categorical ban on the commercialization of any part of the human body. Its Article 21 specifically stipulates that "[t]he human body and its parts shall not, as such, give rise to financial gain." The convention enjoys widespread support in Europe. Several important court cases have elaborated this principle more fully and in different fields—not solely in organ donation but also in stem-cell research and reproduction. It is especially remarkable that, to date, no European or other signatory country has expressed any reservation about the Oviedo Convention's categorical ban on financial gain, despite the fact that in several contemporary fields of biotechnological interventions, it is rather difficult to draw any clear distinction between non-commercial and commercial domains of activity.

Although the Oviedo Convention has not been ratified in all European countries, its influence is far greater than it seems for at least two reasons. One is that an increasing number of cases before the European Court of Human-Rights refer to

the Oviedo Convention, and the other is that the European Commission included compliance with the Oviedo Convention as a precondition for European Commission funding of research projects in the field of biomedicine. In some countries, however, the Oviedo Convention has not been regarded as providing sufficient guarantees for protection of the human embryo.

The norm against commodifying human beings can be traced back to the elimination of slavery. Slavery—and other institutions under which the whole human body has been historically degraded into an instrument for the arbitrary use by the "owners" of this "property"—has long been banned by international and national laws. Unlike slavery, however, the commercialization of certain parts or elements of the human body has never been universally prohibited throughout the world. As new scientific advances and technological developments have emerged involving components of the body rather than the whole body—in the fields of assisted reproduction, surrogacy, genetic testing, biobank collections or stem-cell research, for example—sharp lines between therapy, research, and commodification have become more and more difficult to draw.

Gender implications of commodifying the human body

Looking at certain specific components of the human body I will show that commodification and commercialization contain both hidden and explicit gender implications. Although the body is often ignored in biotechnological interventions (“the lady vanishes”) [3] , and although the fragmentation of the human body may also turn the male body into a source of raw material, it is still worthwhile analyzing how gender differences become salient in such biomedical interventions. Gender differences seem to be less relevant in cases of organ donation, DNA sampling, or recruitment of donors for biobanks. But when one refers to human gametes both in reproduction and in biomedical research, gender differences seem to be highly germane. Eggs are needed in large quantities not only in the processes of assisted reproduction but more and more in the domain of regenerative medicine. “Unimaginable until the twentieth century, the practice of clinically transferring eggs and sperm from body to body is now part of a multi-billion dollar market” (Almeling 2011). Since a sufficient number of eggs can be harvested only by using hormonal stimulation for some weeks before the intervention and because eggs cannot be harvested as often as sperm, the two procedures differ both biologically and emotionally. Moreover, the in vitro fertilization industry targets mainly women, just as infertility still casts different social stigma on men and women, and most medical interventions are done on women’s bodies. Hormonal stimulation before harvesting human eggs, egg donation, embryo implantation, amniocentesis, [4] chorionic villus sampling, [5] pregnancy monitoring, prenatal testing, and birth all contribute to the medicalization of the female body. The male body is affected to a much lesser extent. Such biological differences may result in eggs being considered a scarce resource.

Old debates about sexualized and gendered bodies have been renewed due to contemporary biotechnological developments since not only the frontiers of life and death have become problematic (when patients are in persistent vegetative state, or a pregnant woman in coma, etc.), but even the boundaries of the natural human body have become increasingly ambiguous (e.g., in the status of the cryopreserved embryos, gametes, mitochondrial "mothers," human DNA in biobank, etc.) (Sándor 2007). Do cryopreserved gametes, tissues, DNA, and umbilical-cord blood stored for the purposes of the donor's own therapeutic use, or for the use of other family members or for others or for research constitute a part of the human body? What kinds of rights over these samples can be retained by those persons to whom these tissues used to belong? Donna Dickenson describes these changes by stating that the human body has become "much *more fluid*. On the one hand, bodily functions can be replicated or enhanced by objects originally extraneous to the subject, machines such as ventilators and pacemakers… on the other hand, human biomaterials extracted from the body enter into research and commerce as objects…" (Dickenson 2007, 5).

Dismemberment of the human body and subsequent exploiting of its detached elements for research and analysis may eradicate existing gender differences. Fragmentation of the human body, however, may also renew the experience of vulnerability previously known only to women. Donna Dickenson argues that "women were much more likely than men to be treated as commodities in non-slave-owning systems" (Dickenson 2009, 163–164). In the Anglo-American legal system the concept of "coverture" was the main rule governing marriage, and it followed that husbands had the rights to manage women's income and labor. Rape in marriage was not regarded as a crime in several other jurisdictions, as well. In marriage contracts, unlike other types of contract, continues Donna Dickenson, "the enforcement mechanism worked almost entirely in one party's favor: the husband's" (Dickenson 2009, 164). She sees an analogy between these traditional marriage arrangements and contemporary agreements on using biological tissues and cells for research: only one party can benefit, and it is not the one who is in the more vulnerable situation. The patient

waives any financial benefits that may arise after his or her tissues are used in research. Based on this analogy, Dickenson goes further and argues that current biotechnological practices, especially collecting human cells and tissues on a mass scale, have resulted in the feminization of the human body. Taken together, all these practices have resulted in the "fear of feminization of property in the body" (Dickenson 2009, 165).

In history, women were more often identified with their bodies but without possessing ownership over them and over their reproductive capacities. This delicate relationship between body and identity, body and control historically was an important experience of women and was reflected upon and challenged by feminist theory. It is easy to recognize a parallel trend in contemporary biotechnology, where in the time of biobanks and stem-cell banks human tissues and cells are being used more and more in the same way as women's bodies were before. Human tissues and cells are now objectified, alienated but considered as a gift or donation from the donor. Furthermore, it is assumed that human biological materials are used for noble common purposes, such as for science and for public health. Similarly, previously women were assumed to be born altruistic and to be able to sacrifice themselves for children, for family and for the patriarchal society, but without having basic rights, such as liberty and property. So we can agree with Dickenson, in this sense, that in biotechnology human cells have been feminized. Rights are asymmetrical and altruism is assumed in donation.

Debates on the body as an intrinsic good or as part of the human personality have become far more complex due to new biotechnological interventions, and because we value not only the human body but also its components as forming part of our identity. Sometimes we value its components, such as DNA, because they represent or signal our uniqueness; and sometimes we value our body parts because they represent physical integrity and health. Loosing a leg or a kidney interferes gravely with bodily integrity and also presents serious health risks. Some other body parts, such as blood or plasma, usually do not raise such issues, although we do feel that a coercive taking of such specimens violates our right to

bodily self-determination. Disassociated body components have also become more and more significant. DNA is an obvious example that symbolically represents the whole biological person. But egg and sperm, too, refer to important features of personhood and may be used for discovering important information or, in the case of gametes, can be used for reproduction.

A second question follows from the first: If personal rights provide the key to resolving legal questions about human body in biotechnology, then does gender make a difference? In other words, do men and women face different legal problems when their organs, gametes, and DNA are in use in biotechnology? The distinct experience of women in health-care and reproduction has been broadly studied and elaborated. Works of Emily Martin (1987), Judith Butler (1993), Barbara Duden (1991), Ann Oakley (1984), and Margaret Lock and Sarah Franklin (2003) can be cited in this regard. The association of femininity with materiality, according to Butler, "can be traced to a set of etymologies" (Butler 1993, 31), a link between *mater* and *matrix* (uterus, womb) and *mater* and *materia*. Furthermore, Aristotle emphasized (in *On the Generation of Animals*) that while in reproduction men provide the "form," women provide only the "matter," which is inferior to the form. While, according to him, men supply the substance of a human being, the soul, women contribute only with nourishment (the matter). The materiality of the body, in other words, seems to have long been associated with femininity.

Many gender issues concerning the body—such as the limitation of any right to bodily self-determination, vulnerability, and repeatedly suppressed reproductive rights—indicate that discrimination and misogyny still influence practices and thinking about women. This syndrome is the primary target of progressive emancipatory policies and laws. The hidden biases that associate women's bodies with raw materials are much more difficult to counter with legal and policy methods because, for one thing, they often remain unconscious practices and routines. Discrimination, vulnerability, and society's expectations about reproduction often place women in situations where their bodies are exploited. Sex slavery and prostitution predominantly affect women. Moreover, economic

crises inevitably push women into these forms of exploitation. Bride kidnapping and child brides still occur despite repeated efforts to promote women's rights as human-rights. The question is whether these practices of commodification and exploitation of women's bodies also influence the uses of tissues that are extracted from women.

None of the above-mentioned problems have ever been fully solved. In most parts of the world, although to a lesser and lesser extent, they still influence thinking about male and female bodies. To many other scholars it seems that gender differences are still relevant even if it is at the level of genes and chromosomes (Rapp 1988). One conspicuous example of this continued trend is the way that sex-based migration patterns are studied in population history: different methods are applied when looking for female or male ancestors. Since genetic studies in population history provide comparisons of mitochondrial DNA and the Y chromosome, they ultimately provide insight into gender differences as well. So while mitochondrial DNA is maternally inherited and shapes female demographic history, the non-recombining portion of the Y chromosome reflects male demographic history. In contemporary biobanks, researchers collect samples both from males and females. While so called "gene donors" are assumed to provide their biological contribution free of charge, gift and donation rhetoric seems more problematic in the field of reproduction. Egg donation for instance requires hormonal treatment and an invasive medical intervention for harvesting the eggs. When egg donors are recruited for research purposes the meaning of "gift" is seriously questioned.

While, in many fields, women's rights have significantly developed in the United States (US), no progress has been made in the field of reproduction and related new technologies. One may observe recurrent infringements of pregnant women's rights. Donna Dickenson claims that US market forces have proven irresistibly powerful, and that those who wanted to argue against commercialization were unable to do so because they had relied on it themselves in the "abortion wars." Because of the highly politicized and polarized abortion debates, other fields of reproduction, such as infertility treatment, egg donation

and surrogacy have been neglected by the US federal regulations. As a consequence, it has become difficult to assess women's rights in two distinct fields: in the classical field of reproduction, such as in the field of abortion and sterilization, and in the field of new reproductive technologies (Goodwin 2005). In an accurate legal analysis, liberty and privacy rights in reproductive decisions —though closely connected—should still be separated from issues of commodification.

Commodification of gametes

Egg selling has been deemed controversial since the beginnings of in vitro fertilization. In vitro fertilization is offered at for-profit private clinics in many parts of the world. But patients' rights dictate non-commodification in this sector as well. Some tension between remunerative practices and the outlawing of financial gain was doubtless inevitable. What we have seen is increasing commercialization in the egg market, as well as price differentiation between the gametes and even advertising.

Individuals' expectations differ radically in relation to their own body, to biological specimens and to the cells, tissues, organs borrowed, used, bought, or received from the others. While dignity and privacy with regard to our own body assumes the unity of person and body, in case of using surrogate mothers, egg and semen donors, embryos, embryonic stem-cell products and even the quality of these products all suggest a property-like treatment of the human body.

Using human oocytes as raw materials for reproduction and research purposes poses perhaps even more complicated legal questions. Should women be compensated because they contribute their eggs to scientific development? If they cannot claim benefits after egg donation, could companies and researchers use eggs for profitable research? Should the limited number of eggs be taken into account? What about the physical and psychological suffering that harvesting human eggs may involve?

In the years following the Hwang scandal [6] in Korea in 2005, an international debate arose among bioethicists, researchers and feminists regarding oocytes for research, particularly concerning the acceptability of payment (Dickenson 2007; Waldby and Cooper 2008). In 2009, Hwang was convicted of misusing research funds and illegally buying human eggs for his research. His team persuaded women to donate their eggs (oocytes) for their somatic cell nuclear transfer

(SCNT) research. Investigations revealed that many of the women who provided eggs had not given valid, informed consent, and nearly 75% of them reported that they were given cash or were enticed by various financial incentives (Baylis 2009).

According to Ingrid Schneider, if stem-cell therapy is eventually introduced and the technology still requires human eggs, then “every woman in the US aged 18–44 (around 55 million) would have to endure two cycles of ovarian hormone hyper-stimulation and then undergo laparoscopic surgery” in order for a sufficient number of eggs to be available for treating Parkinson’s, diabetes, and Alzheimer’s diseases. When eggs are used for research and when eggs are bought, donors are thought to receive payment for risking their health. It is as if commodification of gametes could mask the fact that we are dealing with a medical intervention where risks should be minimized and the well-being of patients (donors) should be prioritized. Commercial donors are often not treated as patients. Money is often interpreted as payment for the risk involved. It allegedly justifies harvesting rather than treating the human body. Those who argue in favor of commodification, on the other hand, often claim that, in the absence of payment, the whole “donation” process may degenerate into one-sided altruism.

Payment for egg donation is a challenging question precisely because egg donation requires a substantial contribution from women. It not only involves a genetic contribution; it may also diminish the donor’s future reproductive chances, as well as inflicting pain and suffering, and risking the medical complications that hormonal stimulation and egg retrieval may potentially entail. True, spare eggs may be accessed in the course of an IVF treatment; but it remains important that human eggs are not unlimited resources and that harvesting human eggs includes a variety of physical and psychological commitments. Harvesting human eggs requires hormonal treatment, and the procedure is a surgical operation carrying significant health risks. Certain biological differences between gametes have already posed significant legal challenges in the *Evans v. The United Kingdom* case (Application no. 6339/05).

In the light of this case, British law and the court's position assume a kind of co-ownership or property held jointly by the parties, as the embryo contains genetic materials from both parties. This joint contribution was regarded as more important than the differences in egg and sperm donation, namely the differences between invasive and non-invasive medical procedures and the importance of vested interest and suffering. Here again, as in many cases involving new biotechnologies, gender has to be reinvented again and again.

Citing Dickenson (2007), Waldby and Cooper (2010) also confirm that in the field of regenerative medicine female bodily productivity is mobilized to support bio-economic research, but this economic value remains largely unacknowledged by claiming that compensation for bodily productivity may contradict the principle of non-commodification. For those scholars who make a distinction between paying for an organ/egg and paying for labor, efforts, and inconvenience argue that payment for egg donation is not paying for the gamete as such, but paying for producing eggs for research or reproductive purposes. Unfortunately this view does not save us from the commodification of the eggs and the possibility of exploitation. If women's eggs are more expensive than donated sperm, than it is inevitable that impoverished women will feel more pressure to sell their eggs in order to help themselves and their families.

Another consequence of egg commodification is the rise of competition among in vitro fertilization clinics. In other sectors of the economy, competition may result in better quality products and faster services, but in the field of infertility treatment, when clinics follow an unregulated business model, better services inevitably mean selecting egg donors and making more effective egg harvesting protocols to acquire more gametes and provide more pre-implantation genetic services. All of these elements of fertility enhancement shift infertility treatment toward eugenic selection and the over-medicalization of procreation and pregnancy.

Commodification and commercialization of the womb

Surrogate motherhood is prohibited in most of the European countries on the grounds that it may lead to exploitation of the surrogate mother. In some other countries, when assisted reproduction is regulated, the law often remains silent on the status of the surrogate mother. In the third category of countries, such as the US, where assisted reproduction is unregulated, case law provides some guidance on the status of the surrogate mother. [7] In the US, one of the most well-known cases was the Baby M case [8] in which the Supreme Court of New Jersey was asked to determine the validity of a contract that aimed to provide a surrogate's help to bring a children into a family, and which is also discussed in Seema Mohapatra's article in chapter 2 of this book. The surrogate mother received a fee of $10,000, and she agreed to be artificially inseminated with the semen of another woman's husband; she was to conceive a child, carry it to term, and after its birth surrender it to the natural father and his wife. The contract provided that through artificial insemination using Mr. Stern's sperm, the embryo would be carried by Mrs. Whitehead (who was also the genetic mother of the child). After delivery she would give the child to the Sterns. Mrs. Stern could thereafter adopt the child. Interestingly, Mrs. Stern was not a party to the contract, but Mrs. Whitehead's husband was. This obvious gender discrimination should have served as an early indication that there were problems with the agreement. While trial court considered the surrogacy agreement valid, the New Jersey Supreme Court came to a different conclusion and invalidated the surrogacy contract because it conflicted with law and public policy. The Court specifically referred to the role of the monetary incentive paid to the surrogate mother, and, as the Court emphasized, the payment "depending on her financial circumstances," served to "make her decision less voluntary." [9]

Furthermore the court argued against exploitation. “Baby-selling potentially results in the exploitation of all parties involved.” [10]

In the United Kingdom (UK), while commercial surrogacy is prohibited, surrogacy agreements without payment are tolerated even though they are not treated as enforceable. Special problems may occur when couples seek to enter into surrogacy agreements elsewhere. In Europe, though not (yet) part of the European Union, Ukraine allows commercial surrogacy. This has already resulted in several legal cases of British and French couples going to Ukraine in order to have babies through surrogacy agreements. In Ukraine, surrogacy is allowed both by the Family Code [11] and by the ministerial decree on the Approval of the Instruction on the Use of Assisted Reproductive Techniques. While Ukraine is a signatory to the Oviedo Convention, it is interesting that the prohibition on financial gain was not seen to contradict the commercial form of the agreement in surrogacy contracts. Under Ukrainian law, would-be parents who initiate an assisted reproductive procedure are considered automatically as parents of the child.

In the case of *X & Y* [2008] [12] in the High Court of Justice, Family Division in London, the main question was how to settle problems arising when twins born from a surrogate mother in Ukraine were not recognized as British citizens, and remained stateless and legally parentless. The applicants in this case paid €235 per month to the surrogate mother during pregnancy and a lump sum of €25,000 on the live birth of the twins. This payment was lawful under Ukrainian law. This payment, however, exceeded legally allowed expenses under English law. As a result, the court had to determine whether the sum paid to the surrogate mother was disproportionate to reasonable expenses and whether the applicants acted “in good faith and without moral taint” in their dealings with the surrogate mother. [13] These cases indicate that, in global surrogacy arrangements, international legal instruments should govern solutions of these hard cases. As it can be seen, prohibition of commodification alone does provide a satisfactory solution in these complex cases, as several questions of human-rights—the rights of the child, reproductive rights, human dignity and gender equality—are also

involved in cross-border surrogacy cases.

Conclusions

We are living in a time when biological samples extracted from men and women have increasingly become raw materials for biotechnological research, for reproduction, and for regenerative medicine. The objectification, commodification and commercialization of the body, which once used to be the experience of women only, have now become a more general practice in biotechnology and even in health-care. Health-care and biotechnology have become more closely connected with each other than ever before. This makes it difficult to argue by invoking classical human-rights principles alone, including the right to health, even in the European jurisdiction where such a right is recognized. As we have seen, the same phenomenon of accelerated commodification can be observed in the field of IVF treatments, egg donation, surrogacy, stemcell therapy, umbilical-cord-blood banking and even in the case of biobanks and patenting. In the field of organ transplantation, similarly, several experts argue for economic incentives and payment for organs, basing their views on organ scarcity, which is itself a concept attached to commodity. The European approach, in general, was to develop a general non-commodification principle, which seems to have become less and less defensible. Like it or not, the current process of objectification of human tissues and DNA may seem inevitable, and donors may have to accept this seeming inevitability regardless of their gender. My brief overview of current practices in biotechnology reveals trends of increasing commodification and commercialization. Imbedding gender in this analysis was helpful to the extent that current commodification trends replicate challenges that have been already identified and debated extensively in gender studies.

Bibliography

References

Almeling, R. 2011. *Sex Cells. The Medical Market for Eggs and Sperm.* Berkeley, CA: University of California Press.

Aristotle. 350 BC. *On the Generation of Animals.* Book 1. Translated by Arthur Platt.

Baylis, F. E. 2009. For love or money? The saga of Korean women who provided eggs for embryonic-stem-cell research. *Theoretical Medicine and Bioethics* 30(5):385–396.

Butler, J. 1993. *Bodies that Matter. On the Discursive Limits of "Sex"*. London and New York, NY: Routledge.

Curry, L. 2002. *The Human Body on Trial. A Sourcebook with Cases, Laws, and Documents*. Indianapolis, IN: Hackett Publishing Company.

Dickenson, D. 2007. *Property in the Body. Feminist Perspectives.* Cambridge: Cambridge University Press.

—. 2009. *Body Shopping. Converting Body Parts to Profit.* London: Oneworld.

Duden, B. 1991. *The Woman Beneath the Skin. A Doctor's Patient in Eighteenth-Century Germany*. Cambridge, MA: Harvard University Press.

Furkel, F. 2013. Women's bodies and biomedicine. In *The Female Body: A Journey Through Law, Culture and Medicine.* Edited by Thérèse Callus, Brigitte Feuillet-Liger, and Kristina Orfali. Brussels: Bruylant. 115–131.

Goodwin, M. 2005. Assisted reproductive technology and the double-bind: The illusory choice of motherhood. *Journal of Gender Race and Justice* 9(1):1–54. Accessed at ssrn.com/abstract=960414.

Lock, M., and F. Sarah. 2003. *Remaking Life and Death. Toward an Anthropology of the Biosciences.* Santa Fe, NM: School of American Research Press.

Martin, E. 1987. *The Woman in the Body. A Cultural Analysis of Reproduction.* Boston: Beacon Press.

Oakley, A. 1984. *The Captured Womb. A History of the Medical Care of Pregnant Women*. Oxford: Blackwell.

Pateman, C. 2002. Self-ownership and property in the person: Democratization and a tale of two concepts. *The Journal of Political Philosohpy* 10(1):20–53.

Rapp, R. 1988. Chromosomes and communication: The discourse of genetic counseling.

Medical Anthropology Quarterly 2(2):143–157.

Richard Gold, E. 1996. *Body Parts. Property Rights and Ownership of Human Biological Materials*. Washington, DC: Georgetown University Press.

Sándor, J. 2007. Body Immortal. In *Ethics, Law and Society*. Edited by Jennifer Gunning and Søren Holm. Aldershot: Ashgate, 123–135.

Waldby, C, and M. Cooper. 2008. The biopolitics of reproduction: Post-Fordist biotechnology and women's clinical labour. *Australian Feminist Studies* 23(55):57–73.

—. 2010. From reproductive work to regenerative labour: The female body and the stem-cell industries. *Feminist Theory* 11(1):3–22.

Notes

1 In 2011 the Nuffield Council on Bioethics has published a report on "Human bodies: donation for medicine and research" in which it states that "[T]he increasing possibilities for using bodily material in treatment and research, and the health effects of changing lifestyles, have led to high demand for all kinds of bodily material." See nuffieldbioethics.org/wp-content/uploads/2014/07/Donation_full_report.pdf, last accessed on January 14, 2014.
2 Convention for the Protection of Human-Rights and Dignity of the Human Being with regard to the Application of Biology and Medicine: Convention on Human-Rights and Biomedicine, Oviedo, 4.IV.1997.
3 The term is applied by Donna Dickenson.
4 Amniocentesis (also referred to as amniotic fluid test or AFT) is a medical procedure used in prenatal diagnosis to detect chromosomal abnormalities and fetal infections.
5 Chorionic villus sampling (or "chorionic villous sampling," CVS) is a form of prenatal diagnosis to determine chromosomal or genetic disorders in the fetus. It entails sampling of the chorion villus (placental tissue) and testing it for chromosomal abnormalities.
6 Hwang was considered as a national hero in Korea for his stem-cell research. His research activities were halted when his success in somatic cell nuclear transfer (SCNT) became mired in scandal, particularly when it emerged that many of his data on SCNT were fabricated. He lost his university position and his two important papers on embryonic stem-cell research had to be retracted from the journal *Science*.
7 There are many cases on the dispute over babies, such as In the Matter of Baby M, 217 N.J. Super 313 (Ch. Div. 1987), In re Baby M, 537 A. 2d. 1227 (N.J. 1988)
8 In the matter of Baby M, 109 N.J. 396; 537 A.2d 1227; 1988 N.J. LEXIS 1; 77 A.L.R.4th 1.
9*Supra* [1242].

10*Supra* [1242].
11 zakon4.rada.gov.ua/laws/show/2947-14 (accessed on 20 January, 2014).
12 X & Y (Foreign Surrogacy) [2008] EWHC 3030 (Fam).
13*Ibid.*, at 21.

Author

Judit Sándor

Full professor at the Faculty of Political Science, Legal Studies and Gender Studies of the Central European University (CEU), Budapest, Hungary. She has participated in many national and international law and policy-making activities in the field of biomedical law and bioethics. In 2004–2005 she served as the head of the Bioethics Section at the UNESCO. She has published seven books in the field of human-rights and biomedical law. Since 2005, she has served as a founding director of the Center for Ethics and Law in Biomedicine (CELAB) at the Central European University.

Trafficking in Persons for the Removal of Organs: A Human-Rights Approach

Debra Budiani-Saberi and Seán Columb

In a growing number of developing countries, destitute individuals are the major or at least a significant source of organs used for transplant procedures. In March 2007, the World Health Organization (WHO) estimated that illicit kidney removals for transplantation account for 5% to 10% of the approximately 65,000 kidney transplants performed annually throughout the world. The WHO estimate is considered the most reliable, albeit conservative, as the number of kidney transplants in China (from executed prisoners) alone in 2006, estimated at 8,000, would have exceeded it (Budiani-Saberi and Delmonico 2008).

This estimate is also based on credible information from countries where this information can be gathered and does not include figures in countries where allegations of organ trafficking occur and where there is little transparency, reporting, or regulation of transplant practices.

The long-lasting negative health, economic, psychological, and social consequences for victims of human trafficking for organ removal (HTOR) have been documented in studies in Egypt, India, Pakistan, the Philippines and Iran (Goyal *et al.* 2002; Zargooshi 2001; Shimazono 2006; Naqvi *et al.* 2007).

Significant progress has been made in recent years to strengthen laws intended to curb organ trafficking in key countries that host the organ trade, such as India, China, Pakistan, the Philippines and Egypt. However, in these and many other countries, renal failure is now reaching proportions similar to that of tuberculosis, in large part because of the astounding growth in diabetes worldwide. With transplants as the preferred therapy for renal failure, demand for kidneys will continue to outpace supplies. Inequalities in this equation are

exacerbated as the world's destitute persons serve as organ suppliers. Until nations can build transparent, reliable, and protective systems of organ donation through altruistic donations from healthy individuals and deceased donors, poor, and vulnerable individuals will continue to be at risk for being targeted to supply organs to privileged patients.

Various initiatives to address HTOR have been developed since the late 1980s. Since 1987, the World Health Organization (WHO 2010) developed and updated guiding principles for human organ transplantation. Since 2006, The Transplantation Society (TTS) has worked in collaboration with the WHO to employ these principles and in 2008 partnered with the International Society of Nephrology (ISN) to develop the Declaration of Istanbul on Organ Trafficking and Transplant Tourism (Declaration of Istanbul 2008). The United Nations Office on Drugs and Crime (UNODC) has principal carriage for human trafficking within the United Nations system and has addressed organ "trafficking" in several of its criminal justice resources on human trafficking, most notably the United Nations Protocol to Prevent, Suppress, and Punish Trafficking in Persons (hereinafter the UN Trafficking Protocol) (UNODC 2000; UNODC 2008). Furthermore, civil society responses have created awareness of what is known about the scope and operations of the organ trade with some efforts to also provide victim [1] assistance (COFS 2011; COFS 2014). These efforts have contributed to improve legal and policy frameworks to prohibit the organ trade in key host countries including Pakistan, Egypt, China and the Philippines, with an aim to harmonize policies in accordance with the WHO Guiding Principles.

Despite these efforts, HTOR still thrives in many countries and will continue to challenge opposition measures as the demand for organs continues to outpace supplies. Improved laws related to transplantation are an important element to both enhance deceased and altruistic organ donation and to counter organ-trade-related abuses. However, as we have seen in countries such as India and Egypt (countries where the authors' affiliate organization has worked and identified many cases of HTOR), even sophisticated legal frameworks regulating

transplantation have loopholes that enable violations and complicate law enforcement (Budiani-Saberi and Columb 2013).

HTOR can and should be tackled from a number of perspectives including public health, economics, migration, and crime control. Prioritizing human-rights however affords a comprehensive response, with commitments to protect vulnerable persons, and to prevent and suppress the organ trade. Such an approach takes into consideration the complex causes and consequences of HTOR, seeking not only legal, but also political, economic and social solutions accordingly. Moreover, centering anti-HTOR efforts within a human-rights framework in analysis and response to this problem enables us to mobilize and employ various international legal instruments to better elicit regional and state obligations to further address the multiple human-rights violations that may occur in the trafficking process. This paper first presents a brief explanation of the importance of a human-rights-based approach to HTOR followed by an explanation of some of the ways this approach can be implemented. Finally, specific recommendations are presented to various related stakeholders. [2]

Importance of a human-rights approach to HTOR

A human-rights-based approach to HTOR infers that any analysis or response to this issue should be guided by human-rights norms and principles, placing the protection of right holders at the center of all efforts/strategies to combat this phenomenon. As conveyed in the United Nations Commentary on Recommended Principles and Guidelines on Human-Rights and Human Trafficking (OHCHR 2010), this approach requires us to consider, at each and every stage, the impact or disregard that a law, policy, practice or measure may have on persons who have been or could be trafficked to better advocate their interests, rights, and freedoms. Moreover, these guidelines and principles as well as other related documents discussed below elaborate state obligations to provide assistance, protection, and other such remedies to victims of crime/human-rights abuses (Gallagher 2010).

Hence, a human-rights-based framework would not only identify and prosecute offenders but would ensure that comprehensive measures are in place to adequately prevent, protect, and assist victims and potential victims against HTOR. Multilateral cooperation at international and regional levels has moved towards such an approach to combat human trafficking, in particular sex trafficking (Council of Europe 2005). HTOR has however remained on the margins of political action, despite the inclusion of “the removal of organs” as an exploitative purpose under article 3 (a) of the UN Trafficking Protocol. Yet, similar to victims of other forms of human trafficking and other crimes, victims of HTOR also require protection from traffickers.

Depending on the circumstances, this may include mechanisms to protect identities and provide shelter, resettlement (especially in the case of asylum seekers and refugees), and immigration relief (i.e., visas, work permits). In the

context of HTOR such mechanisms might also include free legal aid and access to judicial review, post-operative follow-up care, health education (on living with one kidney or a partial liver), and counseling/peer support. To this end, strategic partnerships should be developed and sustained with key human-rights organizations, experts and committees to monitor and evaluate the enforcement of human-rights standards and principles as they apply to HTOR. Critically, by articulating the human-rights violations that occur during the trafficking process pressure can be brought on states to enforce provisions that adequately prevent, protect, and prosecute against this crime. Thus a human-rights-based response to HTOR would start by identifying the human-rights claims and the corresponding rights obligations of states, as well as the underlying social determinants and structural issues behind this abuse. Crime control efforts would be implemented in accordance with human-rights norms and principles ensuring adequate provision for protection and prevention measures.

Implementing a rights-based approach

In consideration of a trafficking offence, it is important to examine the interaction among different branches of law, specifically international/transnational criminal law (ICL/TCL) and international human-rights law (IHRL). Taken together the various provisions outlined in international legal instruments are mutually re-enforceable, applying legal provision to developing norms and principles upon which a rights-based framework can be built (Obokata 2006).

Fundamental human-rights, as enshrined in the Universal Declaration of Human-Rights (OHCHR 1948), substantiated in numerous treaties and codified into national constitutions throughout the world, are non-derogable. This means that they cannot be suspended, limited or compromised, even in a situation of national emergency. State parties who have ratified particular human-rights treaties, such as the International Covenant on Civil and Political Rights (OHCHR 1966a) and the International Covenant on Economic, Social and Cultural Rights (OHCHR 1966b) are legally bound to ensure, respect and fulfill their human-rights obligations. Consequently, any state action or inaction that leads to a human-rights abuse either directly or indirectly through a failure to investigate and apply the rule of law in a situation where a person's or persons' rights have been compromised will be subject to international condemnation.

Under the standard of due diligence, the legal and moral responsibility to uphold the integrity and dignity of the human person extends, via state enforcement under domestic law, to the commission of crimes (tangible to an infraction of one's human-rights, as outlined under the relevant treaties) and other human-rights abuses committed by non-state actors. Thus, although treaty obligations do not directly apply to private individuals, state parties are obliged to pass laws that impose duties to this effect. A treaty only has effective force when codified

into domestic law. Therefore if states are to honor their human-rights obligations, they must ensure that there is a legal process in place to prevent, protect, and prosecute accordingly. While trafficking, in its various forms, is a serious crime that invariably constitutes violations of internationally protected rights, states that are party to the relevant conventions of IHRL (explored in more detail below) have a duty to ensure counter-trafficking measures are enforced in concert with their human-rights obligations.

The UN Trafficking Protocol

The UN Trafficking Protocol supplementing the United Nations Convention against Transnational Organized Crime (hereinafter the Organized Crime Convention) (UNODC 2000) is the principal international instrument establishing provisions against human trafficking, in its various forms. It was developed to promote interstate cooperation to prevent trafficking, protect trafficking victims and prosecute traffickers.

Article 2 (b) affirms that the protection and assistance of trafficked persons "with full respect for their human-rights" is one of the three major purposes of the protocol. Subsequently, Article 6 (a) suggests (albeit weakly) a number of measures to be taken by states to assist and protect victims of trafficking in persons. States are urged to "consider" implementing measures in cooperation with civil society to provide for the physical, psychological and social recovery of victims of trafficking in persons. Article 6 (6) goes further, requiring states to "ensure" that their domestic legal systems provide measures for compensation for damage suffered. However, it is important to note that the UN Trafficking Protocol does not oblige states to guarantee a victim's right to compensation or other such remedies but rather calls on states to adopt all necessary legislative measures, such that remedies can be pursued (UNODC 2004, (1) para. 368).

Regarding repatriation, the protocol provides that, "such return shall be with due regard for the safety of that person and for the status of any legal proceedings related to the fact that the person is a victim of trafficking and shall preferably be voluntary" (UNODC 2000, Art. 8 (2)). Other key provisions include Article 3 (b), which states that the "consent of the victim to the intended exploitation… shall be irrelevant" where any of the listed means are employed. This is critical to redressing loopholes in domestic transplantation laws, which could allow for trafficked persons to be perceived as willing participants in commercial transplants (COFS 2014).

The provisions of the protocol apply to natural and legal persons. Therefore hospitals, clinics or other institutions involved in illegal transplants are liable and subject to penalties, albeit contingent on state interpretation and subsequent enforcement in their domestic penal codes. Further to the provisions above, Article 14 (1) provides that nothing in the protocol shall affect the rights, obligations, and responsibilities of states and individuals under international humanitarian and human-rights law. Essentially then the protocol underlines specific measures to be undertaken by states "in accordance" with the universally accepted principles of IHRL to prevent, suppress and punish trafficking offences.

The main strength of the UN Trafficking Protocol is that it brought states together under a common definition to combat human trafficking in all its forms. However, HTOR remains relatively misunderstood and ill-defined. Regrettably, most countries that have ratified the Trafficking Protocol have not fulfilled their obligation to address HTOR, as most domestic laws on human trafficking do not recognize trafficking for "the removal of organs" as a form of exploitation—these countries include the United Kingdom (UK), the United States (US), China, India, Pakistan, the Philippines and Colombia, among others. This has a direct impact on the ability of states to prosecute HTOR offences. Moreover, this impairs the ability of victims of HTOR to pursue legal redress. For example, in the US, potential victims of HTOR could not avail of the "T" visa as trafficking for an organ removal does not fit the criteria of a "severe form of trafficking in persons" as contained in the Victims of Trafficking and Violence Protection Act (US Department of State 2000).

Existing provisions of international law only apply to human trafficking in general. A more nuanced understanding of this issue needs to inform future legislation. In particular, targeted measures are required to "prevent" HTOR. These might include initiatives to improve primary health-care, awareness-raising about organ failure and donation, steps to identify illegal donors, restricting insurance cover to operations performed in a patient's home state, and logistical development to strengthen existing transplant systems, amongst others.

Critically, there must be more accountable systems for organ procurement. Indicators and benchmarks should be developed to ensure that all organs used in transplant procedures are traceable to a legitimate source.

State obligations under IHRL

The prohibition of human trafficking is firmly established under IHRL. Various human-rights instruments oblige states to prohibit trafficking of human beings and other related acts. They include the Convention on the Elimination of All Forms of Discrimination Against Women (OHCHR 1979, Art. 6), the Convention on the Rights of the Child (OHCHR 1989, Art. 35), and the Optional Protocol on Sales of Children, Child Prostitution and Child Pornography (OHCHR 2000, Art. 3). With regard to HTOR specifically, Article 3 (a) (i) (b) of the Optional Protocol on the Sale of Children, Child Prostitution and Child Pornography (2000) requires all state parties to ensure that the "transfer of organs of the child for profit" are covered under criminal or penal law, "whether [such] offences are committed domestically or transnationally or on an individual or organized basis."

Additionally, it is important to note that HTOR is also an issue of health rights (OHCHR 1966b, Art. 3). Health is not limited to a physical and mental condition; rather the right to health infers an ability to be healthy. Its realization is contingent on other rights, i.e., rights to food, housing, work, education, human dignity, bodily integrity, nondiscrimination, equality, the prohibition against torture, privacy, access to information, and the freedoms of association, assembly and movement (OHCHR 1966b). As discussed, in many countries where HTOR has been identified, such as India and Egypt, medical committees have been established to oversee transplant practices. Nevertheless, organs continue to be commercially sourced from live donors, with a priority on profit rather than the well-being of the donor (or the recipient). As this paper illustrates, socio-economic conditions should not determine an organ removal; such practice discriminates along lines of privileged and disadvantaged individuals and groups.

Most significantly, when human-rights principles are violated, victims have a

right to legal remedies. This right is a critical aspect of the human-rights framework dictating acceptable national responses. A number of human-rights treaties contain provisions to this effect. [3] Where a remedy is provided in a treaty, failure to provide such remedies becomes an additional breach of that instrument. Guideline 9 of the OHCHR principles and guidelines on human-rights and human trafficking (OHCHR 2010) confirm that states have an obligation to provide “effective and appropriate” remedies. That is, remedies must be proportionate to the gravity of the harm done. In the case of HTOR, an effective and proportionate remedy should include: access to medical care, legal aid and compensation payable for physical and mental harm as well as loss of livelihood.

Accordingly, state and civil society organizations committed to antihuman-trafficking measures have maintained a victim focus and provided a range of support services to victims of other forms of human trafficking (counseling, legal assistance, medical care, rehabilitation, shelter). Victims of HTOR must be understood to have similar entitlements and must be provided such services and measures.

Towards the future

Recognition of HTOR as both a human-rights and human-trafficking issue has been long overdue. A new era dawned in 2013 when reports from international organizations on HTOR squarely recognized the issue within these frameworks (OHCHR 2013; OSCE 2013). Beyond recognition, the employment of human-rights and anti-human-trafficking instruments is especially important in a context in which the international legal framework around many of the practices has been silent on these abuses. As the United Nations Special Rapporteur on Human Trafficking expressed in her thematic report to the UN General Assembly in October 2013, her review of cases reveals that the exploitation of persons who are compelled by need or force to provide organs for transplantation to nationals within their own countries or to foreigners falls squarely within the international legal definition of trafficking in persons. As noted, characterizing these cases as HTOR entails state obligations that address individual rights. The Special Rapporteur highlighted that the trafficking legal framework can also be effectively leveraged to tackle transplant tourism by extending the jurisdictional reach of national criminal laws. It is also a central obligation of the UN Trafficking Protocol to establish cross-border cooperation between law-enforcement agencies and an obligation on states to strengthen their capacity for such cooperation and to strengthen border controls to prevent and detect HTOR.

Recommendations for the international community

Relevant United Nations agencies and entities (OHCHR, UNHRC, UNODC, WHO) should engage in inter-agency discussions towards furthering the recognition that HTOR is primarily a human-rights abuse and requires a rights-based approach to address this issue. In so doing, these parties should work in close collaboration to enable lessons learned and best practices developed to address other human-rights abuses (especially other forms of human trafficking) to assist with advancing advocacy towards fighting HTOR abuses. For example, in recent years and months, experts have refined various concepts with the UN Trafficking Protocol (i.e., protection, abuse of a position of vulnerability and other means within the UN Trafficking Protocol). As advocates of anti-HTOR efforts rely further upon human-rights instruments and the UN Trafficking Protocol, it will be important to learn from these experiences and incorporate these refinements.

Recommendations for states

Loopholes in domestic transplant laws that allow for trafficked persons to be perceived as willing participants in commercial transplants must be redressed. Accordingly domestic trafficking laws must include HTOR. Furthermore, apart from consent procedures (usually operated by a hospital or health-ministry committee), a third party must first serve as an advocate for potential organ donors and to assess their vulnerability. This builds on the concept of a psychosocial evaluation to include a broader assessment of vulnerability with a trafficking lens.

States should also develop domestic legislation to prohibit it. Namely, almost every state across the globe has a domestic transplant law that prohibits the buying and selling of human organs. These laws should extend the jurisdiction to ban citizens and residents from purchasing an organ outside of its borders (Budiani-Saberi 2012). For example, patients in North America or Europe should be prohibited from buying an organ in Mexico, China, or the Philippines or elsewhere; patients in Persian Gulf countries should be prohibited from buying an organ in Egypt or Syria or elsewhere. States should also create barriers to transplant tourism by including a prohibition for insurance companies to cover the expenses of immunosuppressant drugs for patients who purchased an organ abroad. [4]

Recommendations for health organizations and transplant professionals

Health organizations and transplant professionals should recognize the importance of linking HTOR to human-rights and human-trafficking instruments in order to better advocate victims' interest, rights, and freedoms. They should also continue to recognize the limitations of the consent procedures and support the advancement of a third-party process to assess vulnerabilities via a trafficking lens.

Recommendations for social scientists, civil society and human-rights activists

Reports on HTOR should no longer be fragmented. Rather reports should be collected, standardized and analyzed towards developing effective responses to protect and advance victims' right and end impunities for organ traffickers. Social scientists, civil society, and human-rights activists should share findings and include relevant information to address and manage cases. COFS' forthcoming online reporting tool to eXpose and Disrupt Organ Trafficking (XDOT) is being developed for this purpose and, in line with the UN Special Rapporteur's recommendations, states should support such efforts to improve current understanding of the nature and extent of HTOR abuses.

Social scientists, civil society and human-rights activists should also work with experts on HTOR to develop a standardized tool that builds on a psychosocial evaluation to also include a broader assessment of vulnerability within a trafficking framework. Again, a third party should then be established to play this role of advocacy and to conduct vulnerability assessments. Relevant human-rights groups should be considered to take on this role.

Conclusion

HTOR is not merely an issue of supply and demand governed by rules of consent and autonomy. It is primarily a human-rights concern. One that violates fundamental human-rights, including the right to life; the right not to be submitted to slavery, servitude, forced labor or bonded labor; the right not to be submitted to torture and/or cruel, inhuman or degrading treatment or punishment; the right to the highest attainable standard of physical and mental health; the right to be free from gender-based violence; and the right to an adequate standard of living, among others. Thus, although it is important that states develop their national transplant systems and introduce measures to achieve national self-sufficiency in the supply of organs, this will only address part of a much broader issue.

It is clear that states have an international obligation to prevent, protect and punish in respect to HTOR. Therefore international/transnational legal instruments (such as the UN Trafficking Protocol) that encourage states to criminalize trafficking activities and cooperate in the investigation and prosecution of serious crimes are vital to the protection of these human-rights. It is critical that states include HTOR in their domestic legislation while taking measures to ensure the primacy of human-rights are “at the center of all efforts to prevent and combat trafficking and assist and protect victims.” [5]

Significantly then, it is incumbent upon states under international human-rights law (IHRL) to ensure, respect, and fulfill their obligations to enforce measures to protect the welfare of their citizens, particularly those vulnerable to exploitation such as HTOR.

Bibliography

References

Budiani-Saberi, D. 2012. Human Trafficking for an Organ Removal (HTOR): A call for prevention, protection, investigations and accountability. Briefing before the Senate Foreign Relations Committee and the Tom Lantos Human-Rights Commission, United States Congress. Accessed on February 27, 2015 at tlhrc.house.gov/docs/transcripts/2012_1_23_Organ_Trafficking_Briefing/Budiani_testimony.pd

Budiani-Saberi, D., and S. Columb. 2013. A human-rights approach to human trafficking for organ removal. *Medicine, Health-Care and Philosophy* 16(4):897–914.

Budiani-Saberi, D., and F. L. Delmonico. 2008. Organ trafficking and transplant tourism: A commentary on the global realities. *American Journal of Transplantation* 8(5):925–929.

COFS (Coalition for Organ-Failure Solutions). 2011. Sudanese victims of organ trafficking in Egypt: A preliminary evidence-based, victim centered report. Accessed on April 13, 2014, at cofs.org/home/wp-content/uploads/2012/06/REPORT-Sud-Victims-of-OT-in-Egypt-NEW-COVER-16-Jan-20124.pdf.

—. 2014. Human trafficking for organ removal in India: An evidence-based, victim-centered report. Accessed April 13, 2014 at cofs.org/home/wp-content/uploads/2012/06/COFS-India-Report-on-HTOR-on-15th-Feb-2014.pdf.

Council of Europe. 2005. Convention on action against trafficking in human beings. Accessed on April 13, 2014 at conventions.coe.int/Treaty/en/Treaties/Html/197.htm.

Declaration of Istanbul on Organ Trafficking and Transplant Tourism. 2008. Accessed on March 10, 2014 at multivu.prnewswire.com/mnr/transplantationsociety/33914/docs/33914-Declaration_of_Istanbul-Lancet.pdf.

Gallagher, A. T. 2010. The right to an effective remedy for victims of trafficking in persons: A survey of international law and policy. Accessed on March 12, 2014 at works.bepress.com/cgi/viewcontent.cgi?article=1013&context=anne_gallagher.

Goyal M., R. L. Mehta, L. J. Schneiderman, and A. R. Sehgal. 2002. Economic and health consequences of selling a kidney in India. *JAMA* 288(13):1589–1593.

Naqvi, S. A., B. Ali, F. Mazhar, M. N. Zafar, and S. A. Rizvi. 2007. A socioeconomic survey of kidney vendors in Pakistan. *Transplant International* 20(11):934–939.

Obokata, T. 2006. A human-rights framework to address trafficking of human beings. *Netherlands Quarterly of Human-Rights* 24:377–409.

OHCHR (Office of the High Commissioner for Human-Rights). 1926. Slavery convention. Accessed on April 13, 2014 at www.ohchr.org/EN/ProfessionalInterest/Pages/SlaveryConvention.aspx.

—. 1948. Universal Declaration of Human-Rights. Accessed on April 13, 2014 at www.un.org/en/documents/udhr/index.shtml.

—. 1966a. International covenant on civil and political rights. Accessed on April 13, 2014 at www.ohchr.org/en/professionalinterest/pages/ccpr.aspx.

—. 1966b. International covenant on economic, social and cultural rights. Accessed on April 13, 2014 at www.ohchr.org/EN/Professional Interest/Pages/CESCR.aspx.

—. 1979. Convention on the elimination of all forms of discrimination against women. Accessed on April 13, 2014 at www.un.org/womenwatch/daw/cedaw/.

—. 1989. Convention on the rights of the child. Accessed on April 13, 2014 at www.un.org/documents/ga/res/44/a44r025.htm.

—. 1990. International convention on the protection of the rights of all migrant workers and members of their families. Accessed on April 13, 2014, at www2.ohchr.org/english/bodies/cmw/cmw.htm.

—. 2000. Optional protocols to the Convention on the rights of the child on the involvement of children in armed conflict and on the sale of children, child prostitution and child pornography. Accessed on April 13, 2014 at www.un-documents.net/a54r263.htm.

—. 2010. Recommended principles and guidelines on human-rights and human trafficking. Commentary. Accessed on March 10, 2014 at www.ohchr.org/Documents/Publications/Commentary_Human_Trafficking_en.pdf.

—. 2013. Report of the Special Rapporteur on trafficking in persons, especially women and children to the United Nations General Assembly. Accessed on April 14, 2014 at www.ohchr.org/Documents/Issues/Trafficking/A-68-256-English.pdf.

OSCE (Organization for Security and Co-operation in Europe). 2013. Trafficking in human beings for the purpose of organ removal in the OSCE region: Analysis and findings. Accessed at www.osce.org/cthb/103393?download=true.

Shimazono Y. 2006. What is left behind? Presentation at an informal consultation on transplantations at the World Health Organization. Geneva: WHO.

UNODC (United Nations Office on Drugs and Crime). 2000. Protocol to prevent, suppress and punish trafficking in persons, especially women and children, supplementing the United Nations Convention against Transnational Organized Crime. Accessed on April 13, 2014 at

www.uncjin.org/Documents/Conventions/dcatoc/final_documents_2/convention_%20traff_eng

—. 2004. Legislative guides for the implementation of the United Nations Convention against Transnational Organized Crime and the Protocols Thereto. Accessed on April 13, 2014 at www.unodc.org/pdf/crime/legislative_guides/Legislative%20guides_Full%20version.pdf.

—. 2008. Toolkit to combat trafficking in persons. Accessed on April 13, 2014 at www.unodc.org/documents/human-trafficking/HT_Toolkit08_English.pdf.

US Department of State. 2000. Victims of Trafficking and Violence Protection Act. Accessed on April 14, 2014 at www.state.gov/j/tip/laws/61124.htm.

WHO (World Health Organization). 2010. WHO guiding principles on human cell, tissue and organ transplantation. *Transplantation* 90(3):229–233.

Zargooshi, J. 2001. Iranian kidney donors: Motivations and relations with recipients. The *Journal of Urology* 165(2):386–392.

Notes

1 Use of the term “victim” of HTOR in this paper relies upon the United Nations Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power that defines “victims” in the broad sense as persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights through acts or omissions that are violations of national criminal laws or of internationally recognized norms relating to human-rights. The term thus recognizes the crime and perpetrators involved in the abuse. The Coalition for Organ-Failure Solutions (COFS) also uses the term “trafficked persons” or in this case, “person trafficked for organ removal.” Both terms are used in the human trafficking discourse and reflect COFS’ intention to gain legal recognition that these persons have had rights abused by being trafficked for organ removal.

2 This paper is inspired from Budiani-Saberi and Columb (2013) and is printed with permission (© Springer Science + Business Media Dordrecht 2013).

3 Article 2 (3) of the International Covenant of Civil and Political Rights; Article 13 of the European Convention on Human-Rights; Article 7 (1) (a) of the African Charter of Human and Peoples’ Rights; Article 6 of the International Convention on the Elimination of all Forms of Racial Discrimination; Article 14 of the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; Article 39 of the Convention on the Rights of the Child; Article 83 of the International Convention of the Protection of Rights of All Migrant Workers and Members of their Families.

4 Up until 2008, insurance companies provided reimbursement to Israeli patients who had

purchased organs abroad. The Organ Transplant Act (2008) is available at www.declarationofistanbul.org/index.php?option=com_content&view=article&id=267:israel-transplant-law-organ-transplant-act-2008&catid=83:legislation&Itemid=130. According to Dr. Jacob Lavee, over the last few years, it is estimated that about 200 Israelis have traveled to China for kidney transplants and about 15 have sought heart transplants. Several dozen others have bought kidney transplants in the Philippines.

5 In recent recommendations to US congressional committees, the recommendation was made that HTOR should be included in the US Trafficking Victims Protection Act (TVPA). Congressman Chris Smith, sponsor of the reauthorization of the TVPA, has stated his consideration to amend this law to in fact include HTOR. See tlhrc.house.gov/docs/transcripts/2012_1_23_Organ_Trafficking_Briefing/Budiani_testimony.pd

Authors

Debra Budiani-Saberi

Medical anthropologist and the executive director and founder of the Coalition for Organ-Failure Solutions. She has conducted extensive research on trafficking in persons for the removal of organs (TPRO), beginning in 1999 as a part of her study on refugee health. She has provided consultation on TPRO to the Office of the High Commissioner for Human-Rights (OHCHR), the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC), and has worked in alliance with various medical and civil society organizations to combat the organ trade. Dr. Budiani-Saberi has also worked more broadly on health and human-rights in various parts of the Middle East and Asia.

Seán Columb

Lecturer in law at the University of Liverpool. His primary research area is human trafficking and exploitation. In particular, he is interested in the organ trade and the legal expression of exploitation in international law. His current research examines how the organ trade fits into the anti-trafficking framework at national (UK), international and regional (EU) levels; its link to organized crime and the wider political economy. Columb is committed to advancing academic scholarship in this area. His research is empirically driven and takes an interdisciplinary perspective.

Part 7. Mapping National and International Responses

Questions for the future

Edward Kelley

In this last part of the book, the authors examine future developments of these cannibal markets and possible ways to slow down their growth or even limit them to marginal phenomena. Beyond their specificities, we see in each of the areas discussed in this book that in some countries significant efforts are made to reduce the size of these markets. On the other hand, we should not overlook that beyond some statements made by the scientific community (see in particular the Declaration of Istanbul on Organ Trafficking and Transplant Tourism), NGOs or religious leaders (such as the Pope's 2011 statement condemning the trafficking of organs), the general trend today is rather towards a rapid growth in these markets.

Recognizing the existence of significant weaknesses in the international community's ability to better control the situation, the World Health Organization (WHO) has defined a concept—medical products of human origin (MPHOs) [1] —that should facilitate harmonizing national and international legislative frameworks. The WHO Executive Board endorsed the concept on January 2015 [2] and requested the Director General to "support the development of global consensus on guiding ethical principles for the donation and management of the mentioned MPHOs; good governance mechanisms; and common tools to ensure quality, safety and traceability."

Using the concept of "transnational medical practices" that "create markets in human beings, body parts, and substances for medical uses," Carmel Shalev wonders how to move towards human-rights-based instruments to build a minimal global consensus on the non-commercial nature of the human body and its parts. Her chapter describes the key issues of concern and the major international legal instruments and guidelines that have emerged in response to

the various challenges posed by the different medical market practices. Finally, she highlights the fact that the complex issues of transnational medically assisted reproduction have largely been neglected. She adds that cross-border third-party-reproduction practices raise singular and complex issues in respect of the rights of the children, which are beginning to be acknowledged and addressed.

Meanwhile, Luc Noël discusses the concept of medical products of human origin (MPHOs), which he describes as a fundamental tool for professional, national and international governance. In addition, the author insists on the fact that a common biology and physiology enables a transnational movement of MPHOs between human beings transcending culture, race, gender, age, religion, and citizenship. However, he warns that in the absence of effective laws and regulations to protect communities and individuals, procurement and use of MPHOs could reveal the darker side of these cannibal markets: a consumption that may destroy and efface the donor.

Finally Alexander Capron introduces the concepts of “cannibalized commodities” and “markets in human commodities” and asks some key terminological questions such as: What are cannibalized commodities? Which activities involve cannibalized commodities? He stresses that there is a need to understand how markets in human commodities work, and more particularly what roles the professions, governments, and international bodies can play in responding to the phenomenon of human commodification?

Cannibal-market forces are very powerful because there is both a strong demand and an almost unlimited supply. On the one hand, it is an illusion to imagine an outright ban on those activities. Some countries would refuse and that would lead to the development of a black market that would be totally out of control. On the other hand, it is another dangerous illusion to leave such technologies in the hands of market-oriented international trade. This would lead to ethically unacceptable practices and costs that would contribute to the growth of social inequalities in health. So, what are the alternatives? Commercialization and misuses of technologies resulting from advances in medicine is a general phenomenon for which we used the metaphor of “cannibal market.” If these

technologies have many aspects in common, they also have specificities. Therefore solutions must be sought both at national and international level, but also for each of the technologies that address specific issues.

Notes

1 Medical Products of Human Origin (MPHOs) comprise all human derived donated material used for human application and include blood, organs, bone marrow, cord blood, corneas, tissues, reproductive cells and milk. These products have much in common: they are derived from a consenting donor; they carry risks of disease transmission; they may be distributed globally; and they are of unique and often irreplaceable therapeutic value.

2 World Health Organization (2015). Principles for global consensus on the donation and management of blood and other medical products of human origin. EB136/CONF./3. Geneva, 2015.

Author

Edward Kelley

PhD, is director for the Department of Service Delivery and Safety at the World Health Organization. He leads WHO's efforts at strengthening the safety, quality, integration and people centredness of health services globally and manages WHO's work in a wide range of programs, including health services integration and regulation, patient safety and quality, blood safety, injection safety, transplantation, traditional medicine, essential and safe surgery and emerging areas such as mHealth for health services and genomics. Dr Kelley worked for ten years in West and North Africa and Latin America, directing research on the Integrated Management of Childhood Illness in Niger. Recently, he was asked to lead the Infection Prevention and Safety and the Health System Recovery teams for WHO's Ebola Response effort.

Limiting Commodification: International Law and Its Challenges

Carmel Shalev

In recent years a wide variety of transnational medical practices have emerged to create markets in human beings, as well as body parts and substances, for medical uses. These practices include inter alia trafficking in human beings for the purpose of the removal of organs, organ transplant tourism, cross-border third-party reproduction (gamete donations, surrogate-mother arrangements, and transfer of human embryos), and bioproducts of human origin (tissues, cells and blood). All together these seem to indicate a de facto erosion of the accepted principle of non-commercialization of the human body and its parts. However, each practice poses singular ethical, legal, and regulatory challenges.

In the most general terms, the legal and regulatory aspects of the market in human bodies, body parts, and body substances can be classified under four distinct categories: (1) standards of professional conduct that guarantee the efficacy, quality, and safety of medical services and products; (2) rules of distributive justice that govern the allocation of limited medical resources, services and products, and provide for their availability and accessibility; (3) principles of human-rights that are based on respect for all persons and aim to protect them against abuse, especially in conditions of vulnerability; and last but not least (4) issues of criminal justice. While it is often difficult to address one aspect without addressing the others, it is safe to say that markets in human body parts, as distinct from other medical practices, raise issues that pertain mainly to the latter two categories.

This paper describes the key issues of concern and the major international legal instruments and guidelines that have emerged in response to the various

challenges posed by the different medical market practices. It appears that there is broad agreement on the normative framework—the general principles and rules—in the area of organ transplants, which received significant attention both as a matter of professional self-governance and in the literature, and has been included within the scope of the international law on trafficking in human beings. Human tissue and cell transplants have also been the subject of regulation and debate, most markedly in Europe, at least in respect of quality and safety, although there the consensus is less comprehensive. However, the complex issues of transnational medically assisted reproduction (MAR) have largely been neglected. Cross-border third-party-reproduction practices raise singular and complex issues in respect of the rights of the children, which are beginning to be acknowledged and addressed. But the vulnerability of the involved adults, and particularly the women, to human-rights violations and to exploitation, coercion and deception require urgent attention. In this area there is a glaring lack of regulation and a dire need for discussion and deliberation.

The paramount principle

The phenomena associated with markets in human beings, body parts, and body substances for medical uses are offshoots of legitimate medical practices, which depart from a longstanding ethical consensus against the buying and selling of human bodies and body parts. The moral pillars of economic markets are the freedom of the individual to enter into agreements with other free individuals. But there are intrinsic limits to the principle of individual freedom. The principle of liberty according to John Stuart Mill is the right of mature rational individuals to choose voluntarily any course of action, so long as it does not cause harm to others. But personal liberty does not extend to the right of an individual to sell oneself into slavery (Stuart Mill 1859). In this sense liberty is inalienable, and one may not enter into a contract to relinquish it. Such a contract would be considered immoral and hence invalid. The principle that human beings and bodies are not for sale was the rationale underlying the abolition of slavery in the Slavery Convention (League of Nations 1926).

In international medical law and ethics, too, the prohibition against commercializing the human body is a well-established principle. [1] It was first stated in Guiding Principle 5 of the WHO Guiding Principles on Organ Transplantation (WHO 1991) as follows:

> "The human body and its parts cannot be the subject of commercial transactions. Accordingly, giving or receiving payment (including any other compensation or reward) for organs should be prohibited."

The same rule, that organ donation must be voluntary and unpaid, appears again in the revised 2010 version of the WHO guidelines, which extended the prohibition of monetary reward to include human cells and tissues (WHO 2010). The revised Guiding Principles were endorsed by the World Health Assembly, which condemned the buying of human body parts for transplantation, and urged member states to promote "altruistic voluntary non-remunerated donation of

cells, tissues and organs" and to oppose "the seeking of financial gain or comparable advantage in transactions involving human body parts, organ trafficking and transplant tourism" (World Health Assembly 2010).

However, at the same time, the principle of non-commercialization has been somewhat tempered by allowing for the payment of compensation for expenses and loss of income incurred in donation. The current version of Guiding Principle 5 provides that cells, tissues, and organs should only be donated freely, without any reward of monetary value, but goes on to say:

> "The prohibition on sale or purchase of cells, tissues and organs does not preclude reimbursing reasonable and verifiable expenses incurred by the donor, including loss of income, or paying the costs of recovering, processing, preserving and supplying human cells, tissues or organs for transplantation."

In other words, while financial gain should not be an incentive to donate organs, tissues or cells, financial loss should not be a disincentive that discourages individuals from doing so.

International regulation

Clinical standards: quality, safety and efficacy

The WHO Guiding Principles signify the leading role that professional organizations took in the international regulation of organ transplantations. As a matter of self-governance, professional standards of practice integrated concerns for clinical quality, safety, and efficacy with ethical principles. In addition to the principle of voluntary altruistic donations, the current normative consensus includes an ethical preference for donations from deceased persons, or from related live donors. There is also agreement about the need for transparent and equitable allocation of organs, cells and tissues, guided by clinical criteria, to allay concerns about distributive justice. Issues of quality, safety, and efficacy are addressed with two key mechanisms: first, post-transplantation surveillance of adverse events; and second, the traceability of materials of human origin for transplantation at both national and international levels (WHO 2010; WMA 2000, 2006; Council of Europe 2002; EU 2010).

Trafficking in human beings for organ removal

However, the emergence of transnational markets for organ transplants raised additional concerns about human-rights violations and criminal practices, which resulted in another layer of international regulation within the framework of the prohibition of slavery and trafficking in human beings. “Human trafficking” in the sense of the appropriation and control of persons as property or commodities is seen as a contemporary form of slavery. The most important international instrument in this respect is the UN Trafficking in Persons (Palermo) Protocol (UN 2000b), which was adopted as an addendum to the Convention against Transnational Organized Crime (UN 2000a). The focus of the definition of human trafficking in the Palermo Protocol is on elements of coercion, deception and exploitation. And although it addresses mainly sex work and forced labor, especially as regards women and children, it also encompasses trafficking for the purpose of the removal of organs for transplantation.

This and other international legal instruments that prohibit trafficking in human beings for the purpose of organ removal [2] constitute an internationally recognized body of human-rights-based law. The objective of international law is to prevent the human-rights violations associated with trafficking in human beings for the purpose of removing organs, to prosecute and punish traffickers, and to provide for the physical, psychological, and social recovery of victims. The view is that effective action requires a comprehensive international approach in countries of origin, transit and destination, with criminalization of forbidden practices, regardless of the victim’s apparent consent.

Nonetheless, trafficking in human beings for the purpose of organ removal remains a marginal issue relative to the major focus of international law on sexual exploitation and servitude of women and children. What is more, the relevant legal instruments do not address certain issues that relate distinctly to trafficking in organs as such (rather than in human beings).

Trafficking in organs, tissues, and cells

"Trafficking in *organs, tissues, and cells*" and "trafficking in *human beings* for the purpose of the removal of organs" are considered to be two different phenomena and to constitute two different crimes, because the trafficked objects are different. In the one case organs, tissues, and cells are trafficked; in the other, persons. Trafficking in organs does not necessarily involve the cross-border movement of coerced, deceived, or exploited persons. Organs can be removed from a donor in one country and transferred to another for transplant in a recipient. Or the recipient can be the person who travels freely to the country where the donor is located. Although trafficking in human beings for the purpose of organ removal is covered by the general international instruments on trafficking in human beings, it is a small part of the larger problem of trafficking in organs, tissues, and cells, which is not governed by any legally binding international instrument (Council of Europe and UN 2009).

Concern about practices of trafficking in organs, tissues, and cells has been the subject of international debate. In 2005 the United Nations General Assembly adopted a resolution on the subject (UN General Assembly 2005), [3] but it did not lead to any further developments and there is still no sign, at this level, of a legally binding instrument that would set out the principle of the prohibition of making financial gains from the human body or its parts. However, the European community has been more proactive.

As early as 2002, the European Convention on Human-Rights and Biomedicine was supplemented by an additional protocol on transplantation of organs and tissues of human origin (Council of Europe 2002). [4] The Council of Europe Parliamentary Assembly took up the matter in 2003, following a report from its Social, Health and Family Affairs Committee, which indicated that trafficking in organs was a regional problem with "donor" recruitment practices in several countries of Eastern Europe, and that it appeared to be well organized and

extremely mobile, involving networks of brokers, qualified medical doctors, and specialized nursing staff with links to police and customs officials for purposes of passport delivery and “secure” border crossings (Council of Europe 2003). [5] Subsequent discussions suggested that the legal prohibition of commercialization of the human body and its parts be extended to apply to citizens travelling abroad, that criminal sanctions be imposed on medical staff involved in carrying out operations resulting from organ trafficking, and that national medical insurance deny reimbursements for illegal transplants abroad and for follow-up care of illicit transplants, but that paid donors should not be held criminally responsible (Council of Europe Parliamentary Assembly 2003; Council of Europe 2004).

Furthermore, in 2010 the European Union issued a directive on standards of quality and safety of human organs intended for transplantation (EU 2010). The directive leaves the criminal aspects of organ transplantation to the domestic jurisdiction of the member states. Nonetheless, it contributes indirectly to combating organ trafficking through the establishment of competent authorities, [6] in addition to the authorization of transplantation centers and the establishment of conditions of procurement and systems of traceability.

Last but not least, in 2013, the Parliamentary Assembly of the Council of Europe discussed and commented on a Draft Convention against Trafficking in Human Organs that had been prepared by the European Committee on Crime Problems (CDPC 2012; Council of Europe Parliamentary Assembly 2013), [7] and recommended that it be open to signature by states that are not members of the Council of Europe. If adopted, this convention would be the first legally binding international instrument devoted solely to organ trafficking. The underlying approach of the Draft Council of Europe Convention is that trafficking in human organs violates human dignity and the right to life and constitutes a serious threat to public health. As opposed to the EU Directive, it defines trafficking in human organs and introduces new criminal offences to prevent and combat the most serious associated human-rights violations.

Professional self-governance

As already mentioned, professional organizations have taken a lead role in the self-regulation of transnational organ-transplant practices. In addition to the aforementioned WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation (WHO 2010) the World Medical Association also took up the matter (WMA 2000, 2006). Most significantly, professional societies of physicians specializing in transplantation and nephrology took upon themselves the responsibility to combat organ trafficking and transplant tourism, and produced the 2008 Declaration of Istanbul, which states that preservation of "the nobility of organ donation" was one of its purposes (Declaration of Istanbul 2008).

According to the declaration, organ trafficking and transplant tourism violate principles of equity, justice, and respect for human dignity, and should be prohibited (Principle 6). Travel for transplantation becomes transplant tourism if it involves organ trafficking or commercialism, or if the resources (organs, professionals, and transplant centers) devoted to providing transplants to patients from outside a country undermine the country's ability to provide transplant services for its own population. Each country needs a transparent regulatory oversight system that ensures donor and recipient safety and the enforcement of standards and prohibitions on unethical practices. Prohibitions should also include penalties for professional actions, such as medically screening donors or organs, or transplanting organs, that aid, encourage, or use the products of unethical practices. [8]

Emerging norms in relation to organ trafficking

Despite the fact that to date there is no legally binding instrument against trafficking in organs, an overview of the above documents indicates a general consensus that transplantation practices that circumvent the prohibition of making financial gains from human body parts, or involve exploitation, deception and coercion, amount to violations of human dignity and human-rights and should be banned. There also seems to be a degree of agreement on the essential components of an international regulatory regime that aims to prevent unethical organ transplant practices and to protect victims, and recognizes the need to lay down punitive criminal law measures.

A first step is to define trafficking in organs. In addition to the fundamental norm of informed consent to any medical intervention, the paramount principle remains the prohibition of making financial gains from the human body. Thus, the Draft Council of Europe Convention (CDPC 2012) defines the criminal offence of the illicit removal of organs as follows:

> Article 4–Illicit removal of human organs
> 1. Each Party shall take the necessary legislative and other measures to establish as a criminal offence under its domestic law, when committed intentionally, the removal of human organs from living or deceased donors:
> a. where the removal is performed without the free, informed and specific consent of the living or deceased donor, or, in the case of the deceased donor, without the removal being authorized under its domestic law;
> b. where, in exchange for the removal of organs, the living donor, or a third party, has been offered or has received a financial gain or comparable advantage;
> c. where in exchange for the removal of organs from a deceased donor, a third party has been offered or has received a financial gain or comparable advantage.

The Draft Convention also proposes to criminalize the use, storage, and transportation of illicitly removed organs (Articles 5 and 8), and the solicitation and recruitment of organ donors or recipients for financial gain (Article 7). Essentially, the implantation of human organs outside of the framework of the

domestic transplantation regulatory system would also be a criminal offence (Article 6), and there would be extra-territorial jurisdiction over any offence committed by or against nationals of a certain state (Article 10).

A common element of the various attempts to address trafficking in organs is to establish a transparent regulatory oversight system at the national level, with accreditation of medical centers for organ procurement and transplantation so as to ensure donor and recipient safety (including post-transplantation surveillance of adverse events and the collection of information required for organ traceability), and equitable access to transplantation services according to medical criteria. Once such a system is in place, the goal is to attain domestic self-sufficiency for organ transplantation. Any transaction outside the national system would then be considered organ trafficking and subject to criminal penalty, with extra-territorial jurisdiction. [9] It appears, too, that victims' apparent consent to donate organs would not legitimate an otherwise forbidden practice, in accordance with the international law on human trafficking in general.

While there appears to be a consensus that paid donors should not be held criminally responsible, there remains some debate as to whether the ban on paying for organs should apply to transplant recipients who travel abroad to circumvent domestic prohibitions on commercialization. In any event, professional organizations focus the criminal offences on the go-betweens and the involved health-care professionals (WHO 2010; WMA 2000, 2006; Declaration of Istanbul 2008). They seem to be in general agreement about the following:

- The commercial solicitation of organs (i.e., advertisement and brokerage involving payment), should be prohibited.
- Health-care professionals should not offer or receive any undue advantage in connection with the illicit removal of organs.
- Transplant surgeons should not be involved in transplantation procedures if they know or suspect that the organs have not been procured legally or ethically.

- Health insurers should deny reimbursements for illegal transplants abroad and for follow-up care of illicit transplants.

As already mentioned, the 2010 WHO Guiding Principles (WHO 2010) on organ transplants extend also to tissues and cells of human origin. However, as opposed to the broad consensus about the regulation of transnational organ transplantation, there is a relative absence of agreement when it comes to the removal and use of human tissues and cells. [10] The most comprehensive attempt to regulate tissue and cell transplantation is Directive 2004/23/EC (EU 2004), which sets standards of quality and safety for the procurement and use of human tissues and cells and has a very broad scope of application, including inter alia reproductive cells (eggs, sperm), fetal tissues and cells, and adult and embryonic stem cells. However, it does not cover research, which raises sensitive issues around human embryos. Furthermore, questions about the governance of biobanks remain to be resolved (see European Commission 2012; Knoppers 2005). And lastly, regulation of quality and safety is different from regulation of trafficking. [11]

Third-party reproduction

Cross-border third-party-reproduction practices—surrogate-mother arrangements and egg-cell donations—are relatively recent. In Israel, for example, the first instances of children born of international surrogacy occurred in 2005. But there has been a steady increase in the practice, and in 2012, according to Ministry of Interior records, there were approximately 130 cases of requests to register children in the population registry. [12] The subject is now being discussed by the Hague Conference on Private International Law (2011, 2012, 2013), because of issues pertaining to the welfare of the children born from these arrangements, which go to uncertain legal parentage and nationality. At the same time, little attention has been paid to the exploitation, coercion, and deception of women as providers of reproductive services, and existing instruments on trafficking in human beings and organs fail to address reproductive practices, while instruments on tissues and cells typically exclude reproductive organs, tissues, and cells.

Egg-cell donations

The need for egg-cell donation seems to be greater than that for surrogacy. In Israel, for example, the number of requests for approval of domestic surrogacy agreements over a period of fifteen years is in the range of several hundreds, while during the parliamentary discussions of the Egg-Cell Donation Law, 2010, estimates of the number of women seeking egg-cell donations each year were in the thousands (Shalev and Werner-Felmayer 2012). Egg-cells are also in demand for stem-cell regenerative research, and there is evidence of a flourishing global market for egg-cells, where transnational in vitro fertilization (IVF) clinics broker sales between generally poor, female vendors and wealthy purchasers, beyond the borders of national regulation and with little clinical or bioethical scrutiny (Waldby 2008). The problems associated with egg-cell donation go to fundamental issues of informed consent and quality of care and follow-up, given the health risks associated with preparatory hormonal treatments and the invasive procedure of egg-cell retrieval. There have been known instances of illicit medical practices surrounding transnational egg-cell donation that involve forms of exploitation of women, but these have not led to any organized international legal response (Shalev and Werner-Felmayer 2012).

Surrogacy arrangements

The abuses associated with surrogacy are of a graver nature. While egg-cell donation is a largely undetected practice, international surrogacy arrangements usually come to the attention of the authorities when the intending parents request travel documents at consular authorities overseas for the child in order to return “home.” A major concern is to distinguish practices of transnational reproductive collaborations from crimes of trafficking in babies or circumventing the Hague Conventions on international child abduction (Hague Convention 1996) and inter-country adoption (Hague Convention 1993). In at least one case, the trafficking went beyond questions about the welfare of the children and also entailed abuse, deception, and exploitation of the women who were involved. [13] In India, where surrogacy tourism has become a billion-dollar business, social-science studies and human-rights reports describe deprivations of liberty (controlled housing), violations of bodily integrity (non-consensual abortions, high c-section rates), and exploitation of maternal labor (multiple embryo implantations, wet nursing), over and above the inherent health risks (Saravanan 2013; Nadimpally *et al.* 2011; Center for Social Research 2014; SAMA 2012).

International surrogacy raises grave concern regarding exploitation at the hands of unregulated intermediaries. The intending parents are vulnerable, for example, to extortion following the birth in relation to obtaining the necessary documents to allow them to return with the child to the country of origin. However, there is particular concern with regard to the surrogate mothers. The conditions to which they are subjected indicate violations of human dignity and human-rights. Therefore, there is an urgent need to regulate the international market so as to help ensure fair practices, prevent human-rights violations, and initiate a discussion on the criminalization of extreme abuses. Although surrogate mothers are not necessarily transported physically across borders, they are part of

transnational arrangements, which involve the movement of eg-cell donors, the movement of the intending parents, or the transfer of gametes (egg-cells and sperm) and embryos (fertilized eggs) in various permutations. Where such cross-border practices involve exploitation, coercion, and deception, they need to be recognized as a new form of trafficking in women.

Towards a human-rights instrument

Currently international instruments regarding the trafficking in human beings do not cover these practices. As opposed to the field of organ transplantation, in the area of reproduction professional organizations have not laid down clinical standards of efficacy, quality and safety, and neither have they taken a leadership role in terms of ethical self-governance. There are differences between organ transplantation and third-party reproduction. Most significantly, as opposed to the general view that organ transplantation is essentially a beneficial medical intervention, there is a wide spectrum of domestic law on the permissibility of third-party reproduction, and some jurisdictions view it as morally circumspect. Indeed, legal restrictions in countries of origin are a major factor in the growth of infertility tourism.

However, the lack of regulation enhances the vulnerabilities of the adults who are party to the reproductive collaboration to physical and emotional harms, and to social harms that are rooted in the structural injustice of underlying global inequalities. In particular, third-party reproduction is a highly gendered global phenomenon, whereby women from lower-income countries are increasingly acting as egg donors and surrogate mothers for women and men from higher-income countries (European Parliament 2013).

The regulation of cross-border third-party reproduction could draw from two models so as to ensure fair practices and reduce risks of exploitation. On the one hand, as in intercountry adoption, designated central authorities could be placed as “gatekeepers” of the process, while responsibilities may be delegated to competent “accredited” bodies. The two states involved in the particular surrogacy arrangement must both agree before the arrangement can proceed; so that both states would have the power to prevent it from taking place if it is felt to be contrary to their perceptions of proper jurisdiction or the law to be applied. On the other hand, as in organ transplantation, certain minimum safeguards

should be agreed upon as international principles. There is need for medical self-governance and responsibility. There is need for a comprehensive international approach in the countries of origin, transit and destination. There is need to gather and share information. There is need to regulate intermediaries, and protect all the vulnerable adults, including the intended parents. There is need to recognize violations of human-rights as reproductive trafficking, and to criminalize the most egregious instances. Such structures and procedures could enable states to control the process so as to prevent abuses of human-rights and exploitation, and to ensure in advance the certainty of the children’s legal status.

Conclusion

Trafficking in human beings for the purpose of removal of organs is well regulated in international law, but is a minor phenomenon in relation to trafficking in organs as such, for which as yet there is no legally binding instrument. Nonetheless, there is general agreement about the norms that should apply, stemming from the paramount principle of non-commercialization of the human body and its parts. As regards trafficking in human tissues and cells, including for research, there is need for further deliberation, but there too the areas of agreement and disagreement are fairly clear. However, when it comes to third-party reproduction there is a dearth of materials. With the growth of the practice of international surrogacy, issues pertaining to the legal parentage and nationality of the children born from these arrangements are now under discussion. However, little attention has been paid to the vulnerability of the involved adults, and particularly the women who are providing reproductive services (egg-cell donation and gestational surrogacy), to human-rights violations and to exploitation, coercion and deception.

Cross-border medically assisted reproduction, and particularly international surrogacy, is a highly gendered phenomenon and may be seen in the context of globalization, whereby women from lower-income countries are increasingly acting as egg donors and surrogate mothers for women and men from higher-income countries. A key characteristic of third-party reproduction is the fragmentation of women’s reproductive roles. In some cases, transnational practices allow for anonymity, which precludes personal contact and relationships. Anonymity conceals the identity and the face of the individual, and makes it easier to objectify her as an instrument for the fulfillment of the desire to have a child (Shalev 2012).

Issues of transnational third-party reproduction practices are not addressed in the

relevant instruments on trafficking in human beings, and the cross-border transportation of human sperm, egg-cells and embryos are mostly excluded from regulatory directives on tissues and cells. While some attention is now being given to questions arising with regard to the status of offspring, there is a glaring absence of any form of governance with regard to the human-rights of the women involved in these practices. There is an urgent need to start discussing these matters with a view to articulating a code of ethics and drafting an international human-rights convention that would criminalize certain practices as forms of reproductive trafficking. But the highest priority is that professional organizations take responsibility to lay down clinical standards of efficacy and safety that apply internationally.

Bibliography

References

CDPC (European Committee on Crime Problems). 2012. Draft Council of Europe Convention against trafficking in human organs. December 7.

Centre for Social Research. Surrogate motherhood: ethical or commercial. Accessed March 18, 2014, at www.womenleadership.in/Csr/SurrogacyReport.pdf.

Council of Europe. 1997. European Convention on Human-Rights and Biomedicine.

—. 2002. Additional Protocol to the Convention on Human-Rights and Biomedicine concerning Transplantation of Organs and Tissues of Human Origin. CETS 186. Strasbourg, France.

—. 2004. Recommendation Rec(2004) 7 of the Committee of Ministers to member states on organ trafficking.

—. 2005. Council of Europe Convention on Action against Trafficking in Human Beings.

Council of Europe and UN (United Nations). 2009. Joint Council of Europe/United Nations Study, Trafficking in organs, tissues and cells and trafficking in human beings for the purpose of the removal of organs.

Declaration of Istanbul on organ trafficking and transplant tourism. 2008. multivu.prnewswire.com/mnr/transplantationsociety/33914/docs/33914-Declaration_of_Istanbul-Lancet.pdf

European Commission. 2012. Biobanks for Europe: A challenge for governance. Report of the Expert Group on Dealing with Ethical and Regulatory Challenges of International Biobank Research.

European Parliament. 2013. A comparative study on the regime of surrogacy in EU member states.

EU (European Union). 2000. Charter of Fundamental Rights of the European Union.

—. 2004. Directive 2004/23/EC of the European Parliament and of the Council of 31 March 2004 on setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells.

—. 2010. Directive 2010/45/EU of the European Parliament and of the Council of 7 July 2010 on standards of quality and safety of human organs intended for transplantation.

—. 2011. Directive 2011/36/EU of the European Parliament and of the Council of 5 April 2011

on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA.

Hague Conference on Private International Law. Permanent Bureau. 2011. Preliminary Report on the Issues Arising from International Surrogacy Agreements. Prel. Doc. No. 11, March.

Hague Conference on Private International Law. 2013. Questionnaire on the Private International Law issues surrounding the status of children, including issues arising from international surrogacy arrangements. Prel. Doc. No. 3, March.

—. 2012. Preliminary Report on the Issues Arising from International Surrogacy Agreements. Prel. Doc. No. 10, March.

Hague Convention on Parental Responsibility and Protection of Children. 1996.

Hague Convention on Protection of Children and Co-operation in respect of Intercountry Adoption Convention. 1993.

Kiatpongsan, S., and D. Sipp. 2009. Medicine. Monitoring and regulating offshore stem cell clinics. *Science* 323(5921):1564–1565.

Knoppers, B. M. 2005. Biobanking: international norms. *The Journal of Law, Medicine and Ethics* 33(1):7–14.

League of Nations. 1926. Convention to Suppress the Slave Trade and Slavery.

Nadimpally, S., V. Marwah, and A. Shenoi. 2011. Globalisation of birth markets: a case study of assisted reproductive technologies in India. *Globalization and Health* 7:27.

OHCHR. 2002. Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography.

Parliamentary Assembly of the Council of Europe. 2003. Report on Trafficking in Organs in Europe. Doc. 9822. Social, Health and Family Affairs Committee.

—. 2003. Recommendation 1611 on trafficking in organs in Europe.

—. 2013. Recommendation 2009 towards a Council of Europe convention to combat trafficking in organs, tissues and cells of human origin.

Pattinson, S. D. 2008. Organ trading, tourism, and trafficking within Europe. *Medicine and Law* 27(1):191–201.

Saravanan, S. 2013. An ethnomethodological approach to examine exploitation in the context of capacity, trust and experience of commercial surrogacy in India. *Philosophy, Ethics and Humanities in Medicine* 8:10.

SAMA Resource Group for Women and Health. 2012. Birthing a market: A study on

commercial surrogacy. Accessed on March 18, 2014 at www.samawomenshealth.org/downloads/Birthing%20A%20Market.pdf.

Schulz-Baldes, A., N. Biller-Andorno, and A. M. Capron. 2007. International perspectives on the ethics and regulation of human cell and tissue transplantation. *Bulletin of the World Health Organization* 2007 85(12):941–948

Shalev, C. 2012. An ethic of care and responsibility: Reflections on third-party reproduction. *Medicine Studies* 3:147–156.

Shalev, C., and G. Werner-Felmayer. 2012. Patterns of globalized reproduction: Egg-cells regulation in Israel and Austria. *Israel Journal of Health Policy Research* 1(1):15.

Stuart Mill, John. 1859 (1990). *On Liberty*. See David Archard. Freedom not to be free: The case of the slavery contract in J. S. Mill's On Liberty. *The Philosophical Quarterly* 40(161):453–465.

UN (United Nations). 2000a. Convention against Transnational Organized Crime.—. 2000b. Protocol to Prevent, Suppress and Punish Trafficking in Persons, especially Women and Children.

UN (United Nations) General Assembly. 2005. Resolution 59/156 on preventing, combating and punishing trafficking in human organs.

US Attorney's Office. Southern District of California. 2011. Baby-Selling Ring Busted. Press release. August 9. Accessed on March 18, 2014 at www.fbi.gov/sandiego/press-releases/2011/baby-selling-ring-busted.

Waldby, C. 2008. Oocyte markets: Women's reproductive work in embryonic stem cell research. *New Genetics and Society* 27(1):19–31.

WHO (World Health Organization). 1991. WHO Guiding Principles on Organ Transplantation.

—. 2010. WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation.

World Health Assembly. 2010. Human organ and tissue transplantation. Resolution WHA 63.22 of the Sixty-Third World Health Assembly.

WMA (World Medical Association). 2000. WMA Statement on Human Organ Donation and Transplantation. Revised in 2006.

Notes

1 The European Convention on Biomedicine and Human-Rights (Council of Europe 1997), prohibits financial gain from the human body and its parts. The Charter of Fundamental Rights

of the European Union (EU 2000), adopts similar language under the caption “Right to the integrity of the person.” The Additional Protocol to the Convention on Biomedicine and Human-Rights (Council of Europe 2002) speaks of financial gain "or comparable advantage," and goes on to prohibit “traffic in organs and tissues.” The World Medical Association Statement on Human Organ Donation and Transplantation (WMA 2000, 2006) refers to the altruistic basis for organ donation, and notes that access to medical treatment based on ability to pay is inconsistent with principles of justice. Directive 2010/45/EU (EU 2010) on standards of quality and safety of human organs intended for transplantation suggests that “the procurement of organs should be carried out on a non-profit basis.”

2 For example, the Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography (OHCHR 2002) expressly prohibits “offering, delivering or accepting, by whatever means, a child for the purpose of… transfer of organs of the child for profit.” See, too, the Convention on Action against Trafficking in Human Beings (Council of Europe 2005); and the European Union directive on trafficking in human beings (EU 2011), which considers trafficking for the removal of organs to constitute a serious violation of human dignity and physical integrity.

3 The General Assembly expressed alarm at “the potential growth of exploitation by criminal groups of human needs, poverty and destitution for the purpose of trafficking in human organs.” Deploring the commercialization of the human body, it urged member states to adopt the necessary measures to prevent, combat, and punish the illicit removal of and trafficking in human organs.

4 Note, however, that the Convention has been ratified by fewer than half of the member states of the European Union, and the Additional Protocol was ratified by only four (Pattinson 2008).

5 The report suggested that legislative loopholes in national criminal codes and lack of effective enforcement mechanisms pointed to an urgent need for action at national and international levels. It recommended inter alia that the medical profession should bear legal responsibility for tracking irregularities in organ transplants.

6 Under Directive 2010/45/EU (EU 2010), the competent authority should be, preferably, a single non-profit-making body that is officially recognized with overall responsibility for donation, allocation, traceability, and accountability. As we shall see, the establishment of competent national authorities is a key component of the Hague Convention on Intercountry Adoption, which is relevant to the regulation of cross-border third-party reproduction.

7 Note that the Draft Council of Europe Convention does not include in its scope trafficking in human tissues and cells.

8 Similarly, the Draft Council of Europe Convention (CDPC 2012) proposes to impose criminal responsibility on health-care professionals who offer or receive any undue advantage in connection with the illicit removal of organs (Article 7).

9 See Council of Europe and UN (2009) and Council of Europe (2004) Recommendation 7, in which Article 2 (4) defined trafficking in organs so as to include: (1) the transportation of a person to a place for the removal of organs or tissues without his or her valid consent; or with his or her consent but in contravention of legislation or other controls in operation in the relevant jurisdiction; and (2) the transplantation of removed organs and tissues, whether transported or not, in contravention of legislation or other regulations in operation in the relevant jurisdiction or in contravention of international legal instruments.

10 Neither the Draft Council of Europe Convention (CDPC 2012) nor Directive 2010/45/EU (EU 2010) address trafficking in human tissues and cells. The Additional Protocol to the Council of Europe Convention on Human-Rights and Biomedicine concerning Transplantation of Organs and Tissues of Human Origin (Council of Europe 2002) applies to cells, but not to tissues. For a review of the agreement and disagreement around issues of human tissues and human cells transplantation, see Schulz-Baldes, Biller-Andorno, and Capron (2007).

11 Note, in this regard, stem-cell tourism as another outstanding issue. See, e.g., Kiatpongsan and Sipp (2009).

12 The figure is mentioned in a decision of Israel's Supreme Court (HC 566,6569/11 Mamet-Meged v. Ministry of Interior [28/1/2014]) in which the Court, by a majority opinion, admitted a petition by a gay couple who arranged for the birth of a child through surrogacy in the US using the sperm of one of the couple, and ordered that the other partner be registered as the child's father on the basis of her birth certificate and a parental order issued by a court in the US.

13 According to a press release from the US Attorney's Office (2011), Theresa Erickson, a renowned attorney specializing in reproductive law, admitted to being part of a baby-selling ring. In her guilty plea, Erickson admitted that she and her conspirators used surrogate mothers to create an inventory of unborn babies that they would sell for over $100,000 each. They accomplished this by paying women to become implanted with embryos in overseas clinics. If the women sustained their pregnancies into the second trimester, the conspirators offered the babies to prospective parents by falsely representing that the unborn babies were the result of legitimate surrogacy arrangements, but that the original intended parents had backed out.

Author

Carmel Shalev

Professor of law whose work focuses on health and human-rights, bioethics and biopolitics. She is head of the Department for Reproduction and Society at the International Center for Health, Law and Ethics, Haifa University, Israel, and a member of Israel's National Bioethics

Council. In the wake of this symposium she has initiated a long-term project on the Ethics and Regulation of Intercountry Medically Assisted Reproduction (ERIMAR).

Medical Products of Human Origin: Towards Global Governance Tools

Luc Noël and Dominique Martin

The author is a staff member of the World Health Organization. The author alone is responsible for the views expressed in this article and they do not necessarily represent the decisions, policy or views of the World Health Organization.

Medical products of human origin (MPHOs) encompass all substances that are derived wholly or in part from the human body and intended for clinical application. The presence of components of the human body in the therapeutic armamentarium may be thought of as a form of “survivor cannibalism” (Youngner 2003, 720): appropriation by necessity of biological materials without which we could not provide a range of medical products that offer the most effective treatment or indeed the sole remedy for many conditions impairing human health and wellbeing. MPHOs consist in or are derived from anatomical components retrieved from the bodies of living persons or from those of the dead, as well as their secretions and excretions. Examples include: organs for transplantation, blood and plasma products, tissue and cell products such as skin grafts for burns and bone matrix materials used in dentistry, ova and sperm used in assisted reproductive treatments (ARTs), and breast milk used to treat premature infants.

Dependence on human beings to provide the components required for MPHOs distinguishes them from all other medical products. This dependence carries a range of unique responsibilities to ensure ethical and safe procurement, distribution, and use of MPHOs: prerequisites for societal acceptance of the public as source of the necessary human materials. For this reason, the World

Health Organization (WHO) has established an organization wide initiative to develop a framework for global governance addressing the issues of self-sufficiency in MPHOs and the non-commercial nature of the human body and its parts as such. In this article, we explain the importance of this initiative and introduce its core strategic elements and ethical concepts.

Why products?

The word “product” signifies that the component of the human body made suitable for clinical use results from a variable process involving human labor and technological intervention. The process starts with donor recruitment and selection, includes screening tests and possibly interventions to facilitate procurement of the biological materials required, and extends through procurement to testing, refinement, repair, or manufacturing of the product to enhance its quality and safety, as well as its suitability for implantation or use, and to preserve it for storage or transportation. Processing includes various forms of labeling, packaging, and further testing where required, before allocation of an MPHO to a patient directly or through a clinical practitioner or a health-care institution.

Arguably, the term “product” risks alienating these medical resources from their origins in human donors, and fails to capture the common understanding of such things as transplanted organs or donor gametes. However, “product” aptly describes the reality of even these recognizably “human” therapeutic materials, as well as the hundreds of human “biologics” that are routinely used and recognized as products by regulators and clinicians. Importantly, use of the term “product” serves to reinforce the need for quality systems and for regulatory oversight. It emphasizes the responsibilities of “producers,” clinical users, and the national authorities in the domain of product liability. The transmission of infectious agents has been a concern common to MPHOs since the beginning of their widespread application in the early twentieth century. Several public-health crises involving MPHOs have occurred, such as the transmission of HIV through blood products and Creutzfeldt-Jakob disease through dura mater grafts (Eastlund 1995).

MPHOs are by no means mere manufactured “medical products”: they are

explicitly *of human origin*, which places concern for the human sources from whose bodies they are derived at the forefront of discussions concerning them. The human origin of MPHOs is easily overlooked as products are alienated from donors through time, distance, and attenuation of recognizably human features, yet it provides a rationale and common ground for a united approach to governance of all MPHOs, regardless of the many differences between them.

The challenges of failed governance

Insufficient or untimely access to suitably matched MPHOs remains a major challenge within most health-care systems. For some countries, provision of MPHOs such as gametes for use in ART or even organs for transplantation may be a low priority in the face of competing healthcare needs. Nevertheless, shortages are a critical concern for many countries at varying levels of development. The shortage in organs for transplantation is perhaps the best publicized example, yet access to safe blood transfusion still represents a major public-health concern (WHO 2012). Despite estimates of more than 150,000 corneal grafts performed worldwide each year, unmet demand is a major problem in countries from India to Canada (Oliva *et al.* 2012; Lakey *et al.* 2007). Little is known about gamete shortages; prospective recipients may wait for two years for sperm in China (Ping *et al.* 2011), or up to six years for ova in France (Martin and Kane 2014). Demand for human tissue products is also largely unquantified, but sufficiency of supplies remains a concern even in North America where hundreds of thousands of grafts are performed each year (Lakey *et al.* 2007; Shiroff *et al.* 2013).

Where demand for MPHOs exceeds the available supply, this may create opportunities for exploitation of vulnerable prospective source individuals and recipients, especially through commercial activities. The well-being and autonomy of donors and recipients may be compromised where provision of care conflicts with profit making, and equity in access to MPHOs and in donation of materials for MPHO production will be undermined where financial incentives influence donor recruitment or MPHO allocation.

There are many varieties of trafficking in human body parts, some of which involve trafficking in human beings for removal of organs, ova, or other biological materials used in MPHOs. Trafficking activities also include illicit

diversion of legitimately acquired MPHOs, or various illicit activities in procurement, trade or use of MPHOs without trafficking in human beings as such (López-Fraga *et al.* 2014). Among the diverse reports of illicit activities in MPHO procurement and use, violations of laws and regulations are often revealed seemingly by chance, following the deaths of donors or recipients (e.g., Sachan 2014; Reddy *et al.* 2013; Martin 2012, 138), or when scandals are uncovered by investigative journalists, researchers or health professionals (e.g., Scheper-Hughes 2006; Jing 2006). Predators take advantage of individuals and communities at moments of vulnerability due to economic crisis, natural disasters, civil unrest or war, to source materials that may be sold for profit. Recipients of such MPHOs may be unaware or disinclined to question the origin of these precious resources. The human source is easily obscured where linguistic, cultural, geographical and political barriers may impair efforts to trace and identify donors. The increasing use of the internet in MPHO trade and trafficking, and the falsification of documents at the point of procurement, throughout processing and in the labeling of MPHOs further undermine transparency.

A common biology and physiology enables a transnational movement of MPHOs between human beings transcending culture, race, gender, age, religion, and citizenship. In an increasingly globalized world, exchange or sharing of MPHOs may exemplify the reality of a single common humanity. In this setting, “survival cannibalism” may be both justifiable and admirable. Yet, in the absence of effective laws and regulations to protect communities and individuals, procurement and use of MPHOs reveal the darker side of such cannibalism: a consumption that may destroy and efface the donor.

Governance of MPHOs: a responsibility for national authorities

Although inadequate donation rates—especially of organs—attract significant public attention, the problem of MPHO shortages is multifactorial. In addition to donor recruitment issues, health systems require organizational infrastructure for procurement, processing, allocation, and clinical application of MPHOs. Society, through its governing authorities, has responsibility for the organization and oversight of MPHO services. Measures must be adopted within jurisdictions to enable service delivery during routine and crisis periods. Societal concern for health equity, as well as justice in the distribution of scarce resources contributed by the public, should guide efforts by policymakers to promote equity in access to MPHOs. Objective clinical criteria and ethical norms should inform the allocation of MPHOs, uninfluenced by the economic status of potential recipients or opportunities for financial gain among service providers. Further, authorities must regulate—and where necessary prohibit—practices that could result in harm to donors, recipients, and the public. Legislation is essential but requires an effective implementation and enforcement for protection of donors and recipients. Necessary protective measures include adoption of best practice standards of care, safety, and quality from donor selection and follow-up to assessing long-term outcomes in the recipient.

National authorities should also recognize governance responsibilities that may arise in the setting of transnational activities. Where domestic policies and practices, or the actions of citizens abroad endanger foreign citizens and communities, authorities should strive to address these issues within the domestic jurisdiction and through international collaboration. A variety of international instruments provide tools with which to address particular areas of concern in the transnational setting, notably the Convention against Trafficking

in Human Organs soon to be adopted by the Council of Europe (López-Fraga *et al.* 2014), and the United Nations Protocol to Prevent, Suppress and Punish Trafficking in Persons (UN 2004), which explicitly addresses human trafficking for the purpose of organ removal. There is, however, no comprehensive legally binding instrument to mandate minimum standards of practice with regards to MPHOs, nor to address the issues of commercialism and trafficking that may arise for any MPHO. International scientific and professional societies such as The Transplantation Society and the International Society of Nephrology, which together led the development of the Declaration of Istanbul on Organ Trafficking and Transplant Tourism, have demonstrated the impact of transnational collaborative action in fostering leadership, capacity building, harmonizing global standards, and combatting unethical practices (Danovitch and Al-Mousawi 2012).

The self-sufficiency paradigm

The important role of governing authorities in meeting societal needs for MPHOs must be complemented by societal recognition of responsibility for donation of biological materials where possible. Where equitable allocation programs for specific MPHOs are established, all are potential recipients of MPHOs and thus may rightly be considered potential donors: a reciprocal duty to contribute to efforts in meeting needs arises from the expectation of having one's own needs met. This ethos of shared responsibility and solidarity in meeting needs within a community underpins the self-sufficiency paradigm, which has now been invoked as a goal for policymakers and a foundation for governance of MPHOs in the context of blood (WHO 2012), organs (Delmonico *et al.* 2011) and gametes (Martin and Kane 2014).

Self-sufficiency in a particular MPHO consists in meeting the needs of patients from a given population with an adequate provision of transplantation services and supply of that MPHO derived from the population. Key strategies for the successful pursuit of self-sufficiency were identified in the context of organs for transplantation during the Third WHO Global Consultation on Organ Donation and Transplantation (WHO 2011), which may be applied to all MPHOs:

- government support and oversight, enabling the contribution of all members of society;
- equity in donation among possible donors and equity in allocation;
- donation education and health promotion with prevention of needs and integration with public-health programs;
- trust of all stakeholders including the public, through transparency and professionalism.

Equity, reciprocity, and solidarity are principles inherent to the self-sufficiency paradigm, in the context of a shared commitment to assist in meeting therapeutic

needs while avoiding harm to donors, recipients and the community. These principles are applicable to all MPHOs despite their important differences. Challenges in motivating donation, assuring equity of access, and protecting donors and recipients are common to all MPHOs by virtue of their shared human origins and destinations, although the degree of difficulty in addressing these challenges will vary according to the MPHO concerned and the societal context in which self-sufficiency is pursued (Martin 2010, 388). A population adopting the goal of self-sufficiency in particular MPHOs may be defined by jurisdictional limits or organizational boundaries that are essential to effective procurement and distribution of MPHOs. Transnational agreements may allow small countries to pool their resources and work together to meet needs more efficiently. Furthermore, for some MPHOs meeting needs effectively requires global engagement to assist in matching prospective donors and recipients across the world (Martin 2010, 387).

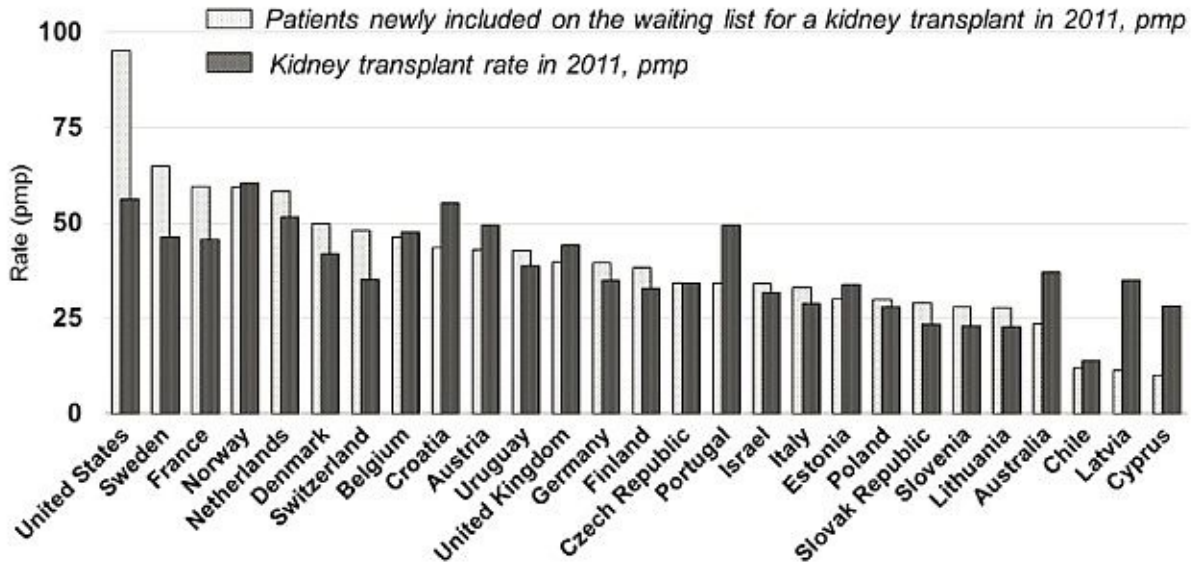
Rejection of financial gain in the human body

The use of financial incentives to recruit providers of biological materials for use in MPHOs is excluded by the self-sufficiency paradigm, as these will exacerbate inequities in the distribution of donors. Conversely, the removal of financial barriers to participation in donation opportunities, for example through coverage of expenses incurred by donors, is recommended as a strategy to promote equity and facilitate donation. Financial incentives would also impair efforts to promote donation as a reciprocal duty to be embraced by all those who enjoy the privilege of access to MPHOs. Furthermore, there are well-founded concerns that trade in MPHOs—whether regulated or illicit—exacerbates risks of harm to potential donors and recipients including coercion, exploitation, commodification, and compromised safety (e.g., Epstein *et al.* 2011; Pfeffer 2011; Pirnay *et al.* 2012). These harms derive from conflicts of interest that arise where donors, donor families, recipients, health professionals and others involved in procurement, use and distribution of MPHOs may derive profits that exceed the recovery of standard costs incurred during these processes.

Claims that financial incentives are necessary to assure sufficient supplies of MPHOs are not supported by the evidence of progress towards self-sufficiency where prohibition of trade has been complemented by strategic efforts to remove barriers to donation, to encourage donation, and to prevent needs for MPHOs where possible. For example, Norway is effectively self-sufficient in renal transplantation, with an annual transplantation rate of 60 per million population matching the annual incidence of patients added to the—notably transparent and equitable—waiting list for transplantation (Figure 1) (Reisaeter *et al.* 2011). The key difference between Norway and the United States—where the gap between supply and demand shows little evidence of shrinking—appears to be the three-fold difference in the incidence of end-stage renal disease in the US. Incentive

proposals frame the organ shortage as a simple problem of “supply and demand” that is best resolved by increasing supplies, and fail to consider that public-health interventions may significantly reduce demand.

Figure 1. Waiting list additions versus kidney transplants performed in 2011 per million population—high-income countries. (Data derived from the Global Observatory on Donation and Transplantation and published in Matesanz 2012).



Note: In many countries the rate of inclusion on waiting lists is not fully reflecting the incidence of transplantable end-stage kidney disease. There are biases such as the trend to keep patients on dialysis and the use of the waiting list to manage scarce supply of transplant. In Norway the waiting list is known to include all candidates to transplantation.

The WHO MPHO initiative

All MPHOs present risks for safety that mandate traceability, vigilance, and surveillance; all present potential ethical hazards in donor recruitment and procurement of materials that mandate legislation, transparent consent policies and standards of care to assure respect for the human-rights of potential donors. These commonalities provide grounds for a shared framework for governance of all MPHOs.

The WHO has developed an initiative on MPHOs that builds on the self-sufficiency paradigm to explore novel strategies and to encourage unprecedented efforts to meet needs, while protecting the human body and its parts as such from becoming the source of financial gain. The initiative is currently undergoing discussion and refinement through consultation with experts, scientific and professional societies and representatives of member states from all regions. It proposes to foster globally harmonized standards of practice for MPHOs and common tools to guide and support services providing MPHOs from donation through to clinical application. Its objective is to address the ethical concerns inherent to the human origin of these medical products while effectively and efficiently meeting patient needs. To achieve this goal, development and implementation of three complementary international resources to harmonize and improve access, safety, quality, and ethics of MPHO services are proposed. First, a set of standards for practice addressing issues inherent to the human origin of these medical products; second, the universal use of a consistent coding system for MPHOs, the Information Standards for Blood and Transplant “ISBT 128” (Warwick *et al.* 2013); third, a set of tools that exploits the global experience of vigilance and surveillance (V&S) for MPHOs for the benefit of all donors and recipients.

Standards of practice

The standards of practice inherent to MPHOs derive from various sources including the WHO Guiding Principles on human cell, tissue, and organ transplantation (WHO 2010), and are currently undergoing development and revision. The aim of these crosscutting standards is to encompass the implications of the human origin of these medical products for their procurement, distribution, and use. The standards recognize features of the self-sufficiency paradigm, such as the responsibility of authorities, and through them, of each member of society, for meeting MPHO needs. Likewise, the standards highlight the importance of equity in donation and in the allocation of MPHOs. The standards require free, informed, and specific consent of living donors and recipients of MPHOs, protection of those incompetent to consent, and a legislative framework to support donation after death. Further, they emphasize the provision of education for children about donation and prevention of needs of MPHOs, as a core component of public-health policy, empowering citizens to participate in future donation opportunities.

In prohibiting financial gain on the human body and its parts as such, the standards affirm the non-commercial nature of MPHOs. Noting that such financial gain is not prohibited in some countries, they emphasize the role of transparency in practice and policy. While protecting the privacy and confidentiality of donors and recipients is critical, transparency establishes and maintains public trust, and facilitates traceability, evaluation of outcomes, vigilance, and surveillance such that quality, safety, and efficiency of MPHO use may be optimized.

Universal coding with ISBT 128

ISBT 128 is a global coding system for MPHOs used in 75 countries, in all regions of the WHO, by more than 4,600 establishments responsible for MPHO management. The International Council for Commonality in Blood Banking Automation (ICCBBA), a non-governmental organization in official relations with WHO, manages ISBT 128 to ensure a unique identifier is available for each MPHO and for each MPHO establishment in order to provide traceability for each product. ICCBBA maintains a globally consensual terminology of thousands of well-described MPHOs that can be translated in any language and coded with ISBT 128 to create identifying labels of universal readability.

Harmonization of coding in this way enables information about products, and their characteristics and qualifiers to be transferred without risk of human error thanks to established formats and tables. The use of ISBT 128 strengthens safety and traceability and transparency concerning the origin and nature of MPHOs within a country and internationally. A common, consistent language and identification system facilitates data collection and analysis, including rapid tracing of recipients at risk, or sourcing of urgently needed MPHOs.

Optimizing global vigilance and surveillance

Under the oversight of health authorities and in close collaboration with professionals, vigilance and surveillance (V&S) enables recognition and management of risks, many of which are common to all types of MPHOs. A risk recognized for the first time with one type of MPHO may be anticipated with others. By sharing V&S data, the global community thus has the opportunity to learn from experiences of adverse events elsewhere in the world, or in different clinical contexts. For instance, the NOTIFY project associates WHO and the Italian National Transplant Centre (CNT), a WHO collaborating center on V&S for human cells, tissues, and organs (Fehily *et al.* 2013). NOTIFY maintains tools to promote development of national V&S systems and to optimize the use of V&S data by the global community through engagement with scientific and professional societies. The NOTIFY website (www.notifylibrary.org) hosts the NOTIFY library, a public database currently containing more than 1,800 references corresponding to 949 case reports of adverse occurrences wherein a risk was identified or harm incurred.

Conclusion

The WHO initiative aims to promote recognition and respect for MPHOs as exceptional therapeutic resources through the universal adoption of a globally transparent coding system, ISBT 128, the mutualization of V&S information and tools, and the harmonization of standards of practice as applied to all MPHOs. The initiative also aims to foster global consensus on the non-commercial nature of the human body and its parts as such, and to develop the ethical framework of the self-sufficiency paradigm to assist societies as they strive to meet their needs for these resources responsibly. Insufficient supplies of MPHOs result in premature deaths, missed opportunities to restore health and additional costs for health-care systems. Common origins in the human person distinguish these from all other medical products, and provide grounds for a common approach to governance and strategy in their procurement, distribution, and use.

Bibliography

References

Danovitch, G. M., and M. Al-Mousawi. 2012. The Declaration of Istanbul: Early impact and future potential. *Nature Reviews Nephrology* 8(6):358–361. doi:10.1038/nrneph.2012.59.

Delmonico, F. L., B. Domínguez-Gil, R. Matesanz, and L. Noël. 2011. A call for government accountability to achieve national self-sufficiency in organ donation and transplantation. *The Lancet* 378(9800):1414–1418. doi:10.1016/S0140-6736(11)61486-4.

Eastlund, T. 1995. Infectious disease transmission through cell, tissue, and organ transplantation: Reducing the risk through donor selection. *Cell transplantation* 4(5):455–477. doi:10.1016/0963-6897(95)00035-V.

Epstein, M., D. Martin, and G. Danovitch. 2011. Caution: deceased donor organ commercialism! Transplant International 24(9):958–964. doi:10.1111/j.1432-2277.2011.01294.x.

Fehily, D., D. M. Strong, D. Minutoli, E., Chatzixiros, H. Araya, L. Noël, L., and A. Nanni Costa. 2013. Sharing vigilance experience and knowledge globally: a preliminary overview of the Notify Library. *Organs, Tissues and Cells* 16(2):117–125.

Jing, S. 2006. Fluid labor and blood money: The economy of HIV/AIDS in rural central China. *Cultural Anthropology* 21(4):535–569. doi:10.1525/can.2006.21.4.535.

Lakey, J. R., M. Mirbolooki, C. Rogers, and J. Mohr. 2007. Supply of human allograft tissue in Canada. Cell and Tissue Banking 8(2):135–150. doi:10.1007/s10561-006-9015-y.

López-Fraga, M., B. Domínguez-Gil, A. M. Capron, K. Van Assche, D. Martin, E. Cozzi, and F. L. Delmonico. 2014. A needed convention against trafficking in human organs. *The Lancet* 383(9936):2187–2189.

Martin, D. 2010. Medical travel and the sale of human biological materials: Suggestions for ethical policy development. *Global Social Policy* 10(3):377–395. doi:10.1177/1468018110379979.

—. 2012. Perilous voyages: travel abroad for organ transplants and stem cell treatments. In *Risks and Challenges in Medical Tourism. Understanding the Global Market for Health Services*. Edited by J. R. Hodges, A. M. Kimball, and L. Turner. Santa Barbara, CA: Praeger. 138–166.

Martin, D., and S. Kane. 2014. National self-sufficiency in reproductive resources: an innovative response to transnational reproductive travel. *International Journal of Feminist*

Approaches to Bioethics 7(2):10–44.

Matesanz, R. (ed.). 2012. International data on organ donation and transplantation activity, waiting list, family refusals and transplantation of vascularised composite allografts: Year 2011. *Transplant Newsletter* 17(1):33–50. Accessed at www.transplant-observatory.org/Documents/NEWSLETTER2012.pdf.

Oliva, M. S., T. Schottman, and M. Gulati. 2012. Turning the tide of corneal blindness. *Indian Journal of Ophthalmology* 60(5):423–427. doi:10.4103/0301-4738.100540.

Pfeffer, N. 2011. Eggs-ploiting women: A critical feminist analysis of the different principles in transplant and fertility tourism. *Reproductive Biomedicine Online* 23(5):634–641. doi:10.1016/j.rbmo.2011.08.005.

Ping, P., W. B. Zhu, X. Z. Zhang, Y. S. Li, Q. X. Wang, X. R. Cao, Y. Liu, H. L. Dai, Y. R. Huang, and Z. Li. 2011. Sperm donation and its application in China: a 7-year multicenter retrospective study. *Asian Journal of Andrology* 13(4):644–648. doi:10.1038/aja.2011.20.

Pirnay, J. P., A. Vanderkelen, N. Ectors, C. Delloye, D. Dufrane, E. Baudoux, M. Van Brussel*et al.* 2012. Beware of the commercialization of human cells and tissues: situation in the European Union. *Cell and Tissue Banking* 13(3):487–498. doi:10.1007/s10561-012-9323-3.

Reddy, M. S., G. Narasimhan, P. T. Cherian, and M. Rela. 2013. Death of a living liver donor: Opening Pandora's box. *Liver Transplantation* 19 (11): 1279–1284. doi: 10.1002/lt. 23731.

Reisaeter, A. V., A. Foss, A. Hartmann, T. Leivestad, K. Midtvedt. 2011. The kidney transplantation program in Norway since 2000. *Clinical Transplants* 2011:111–118.

Sachan, D. 2014. Family and charities demand investigations after death of egg donor. *British Medical Journal* 348:g2163. doi:10.1136/bmj.g2163.

Scheper-hughes, N. 2006. Alistair Cooke's bones. *Anthropology Today* 22(6):10–15. doi:10.1111/j.1467-8322.2006.00471.x.

Shiroff, A. M., S. C. Gale, M. A. Merlin, J. S. Crystal, M. Linger, A. D. Shah, E. Beaumont, E. Lustiger, E. Tabakin, and V. H. Gracias. 2013. Enhancing the tissue donor pool through donation after death in the field. *Prehospital and Disaster Medicine* 28(2):187–190. doi:10.1017/S1049023X13000058.

UN (United Nations). 2004. Protocol to prevent, suppress and punish trafficking in persons, especially women and children, supplementing the United Nations Convention against transnational organized crime. Accessed on May 15, 2014 at www.unodc.org/documents/treaties/UNTOC/Publications/TOC%20Convention/TOCebook-e.pdf.

Warwick, R. M., J. Chapman, T. L. Pruett, and H. Wang. 2013. Globally consistent coding systems for medical products of human origin. *Bulletin of the World Health Organization* 91(5):314–314A. doi:10.2471/BLT.12.116988.

WHO (World Health Organization). 2010. WHO guiding principles on human cell, tissue and organ transplantation. *Transplantation* 90(3):229–233. doi:10.1097/TP.0b013e3181ec29f0.

—. 2011. The Madrid resolution on organ donation and transplantation: national responsibility in meeting the needs of patients, guided by the WHO principles. *Transplantation* 91(Suppl. 11):S29–S31. doi:10.1097/01.tp.0000399131.74618.a5.

—. 2012. Expert Consensus Statement on achieving self-sufficiency in safe blood and blood products, based on voluntary non-remunerated blood donation (VNRBD). *Vox sanguinis* 103(4):337–342. doi:10.1111/j.1423-0410.2012.01630.x.

Youngner, S. J. 2003. Some must die. *Zygon*® 38(3):705–724. doi:10.1111/1467-9744.00530.

Authors

Luc Noël

Charge of the Hematology and Transfusion Centre of Versailles and part-time advisor at the French Blood Agency. In 1999, he joined the World Health Organization (WHO) as coordinator, for Blood Transfusion Safety and later Clinical Procedures. He developed the topic of transplantation with WHO updated Guiding Principles on Human Cell, Tissue and Organ Transplantation. He led the WHO initiative for medical products of human origin and is now an independent part-time advisor on issues pertaining to medical products of human origin.

Dominique Martin

Lecturer in health ethics at the Centre for Health Equity, School of Population and Global Health, University of Melbourne, Australia. Her bioethics research focuses on ethical issues related to procurement, distribution and use of medical products of human origin, particularly where these arise in the transnational setting. She is a member of the Council of the Declaration of Istanbul Custodian Group, and cochair of the Ethics Committee of The Transplantation Society.

Human Commodification: Professions, Governments, and the Need for Further Exploration

Alexander M. Capron

To explore the roles that the professions, governments, and international bodies can play in responding to the phenomenon of human commodification, we need first to understand the activities in question and second be clear about how, why, and by whom regulations are created. As to the former, the 2014 international research symposium “Globalization and Commodification of the Human Body: A Cannibal Market?” allowed us to compare human organ transplantation, medical uses of human tissues, the “brain drain” of health-care professionals, and assisted reproductive technologies; a comparative approach helps to illuminate important concepts that must be appreciated before we examine the means of regulating activities in these four fields. The first chapter reviewed the various activities that would be examined at the symposium as a way to begin reflecting on some basic conceptual issues. In my opinion, this comparative analysis is worthwhile primarily because it reveals that the movement of something from one body (or place) to another—which might explain the idea of “cannibalized” commodities—is actually not what is most important. Rather, what matters are the relationships underlying these activities when they occur in particular markets within actual cultural contexts.

After comparing the four areas addressed at this symposium, I will turn to the ways that regulations have been or could be imposed on them, paying particular attention to the role played by the health professions, since all four fields depend upon health-care professionals and institutions to operate. I will argue that the

different mechanisms used both nationally and internationally to regulate the use of human gametes, wombs, organs and tissues, and the international movement of health-care professionals have produced markedly different results. In particular, I will contend, first, that no single normative framework exists for the four fields, and second, that given the special role that physicians (and other health-care professionals) play in these activities, the considerable success achieved in several areas (particularly in protecting vulnerable persons as sources of organs and tissues) has depended heavily on the creation of a normative (and not merely technical) professional consensus, framed in terms of Hippocratic obligations and developed through collective action by the profession and through the profession's interaction with international organizations.

Classifying the four fields as [market] commodities

Why, then, might it be fruitful to examine these four fields as potential examples of a single phenomenon? Most basically, in all four, we find instances of something being bought and sold; that is, all involve markets, though as we shall see, all four could in theory—and, indeed, do—also occur at least in part outside the context of commercial relationships (Table 1).

Human organs and tissues

A more basic question is whether all four areas involve commodities. Certainly the first two (organs and tissues) have many characteristics that fit within the traditional two-part definition of a commodity as "a raw material or primary agricultural product that can be bought and sold, such as copper or coffee" (Oxford English Dictionary). [1] Some people would insist that both factors—the item is used in its existing state to create something more complex and the item is traded in a market—must be present to label something a commodity; in this view, a kidney that is removed for transplantation would become a commodity only if the person from whom it is removed received money for it. Other people would claim that a kidney that is given rather than sold still qualifies as a commodity, albeit one that exists outside a market, perhaps in a domain where the coin of the realm is allegiance to one's friends or the larger community (Radin 1996). Furthermore, if the phrase "commodification of the human body" is taken to imply that the act of profiting financially from body parts, such as the sale of a kidney, commodifies the whole body—and hence, perhaps, the human person—then we will need to be clear whether, and why, the phenomenon of commodification would be avoided when the transfer of a kidney from one person to another does not involve money but does involve both (1) an objective evaluation of the particular kidney similar to what would occur with any other therapeutic product (e. g., for safety and suitability) and (2) the bestowal of certain non-monetary benefits on the donor (perhaps of a psychological or social sort). I will come back to this point because I believe that a major goal of regulating organ donation is precisely to try to instantiate the differences in attitude toward the human body in these two circumstances.

Table 1. Classifying potential human "commodities".

	Transfer?	**"Raw**

Activity	(Cannibalization)	material”?	Market?
Human organs for transplantation	Body to body [by physicians] (Donor → Recipient)	Yes	No (no payment “for the human body and its parts as such”) Yes (on black market)
Human tissues for medical treatment	Body to body [by physicians & morticians] (Donor → Processors → Recipient)	When given: Yes When used: No (processed)	Donation: No & Yes (some payments to procurers) Distribution: Yes
Movement of MDs & RNs (*et al.*) between poor and rich countries	Country to country [directly]	No (service & time) (complex item)	Yes
Artificial reproductive technologies	Complex transfer [by physicians] (A → B → A)	Gametes: Yes Gestation: No (service) (product: child)	Gametes: Yes Gestation: Yes

MD medical doctor; RN registered nurse.

Another characteristic shared by these first two activities implicates the question posed by this symposium: is this a setting in which we can say that one person cannibalizes another? In both cases—organs for transplantation and tissues used for therapy—something derived from one human body is incorporated in another. It seems significant, however, that the recipients in both cases are at least one step detached from the procurement, so that any cannibalization is undertaken by physicians and medical organizations as skilled intermediaries.

“Cannibalization” suggests two more things that may be relevant. First, it reinforces a central aspect of commodification, that one thing is valued not in

and of itself but as a source of material to benefit another, as when a repairman salvages parts from one computer to obtain replacement parts for others. Second, “cannibalization” brings to mind victimization and dehumanization. Some commentators have found both of these tropes at work in the acquisition and therapeutic use of human organs and tissues, particularly in contexts involving payments for organs or tissues, which are usually acquired from the bodies of the poor.

“Brain drain”

While a plausible case thus exists that organs and tissues can be cannibalized commodities, it is difficult to deem it so for the third activity, namely, the cross-border movement of health-care providers from low-income countries where they were educated to high-income countries where they go to work. Clearly, with such “brain drain” something is transferred, not from a human body, of course, but from one country to another. Yet several problems arise in calling this a commodity.

First, while this activity definitely involves a market—health-care professionals usually do expect to be paid—the thing that is being bought and sold is a service, not a good: what is transferred is a person’s labor not his or her body. Once the transaction is complete, the purchaser does not possess the thing that has been transferred (the healthcare professional’s time and effort) but rather owns whatever has been created through the person’s labor. Second, even were we to conceptualize that which has been transferred as a “thing,” it is not a “raw material” for making other products, but a form of complex labor provided by a nurse, physician, or other health-care professional. Nor is such labor usually regarded as a commodity in the sense of being fungible, since purchasers draw distinctions between one physician or nurse or another—indeed, the particular level of education, training, and demonstrable skill and expertise of each individual typically matters a good deal to the purchasers (who, by the way, are health-care institutions, not individual patients).

Third, the entity from which something has been “cannibalized”—that is, removed for use elsewhere—is not an individual but a healthcare professional’s country of origin. Health-care professionals typically move abroad to practice their profession for the same reasons they choose to move from one institution to another within their home country: better income, better working conditions, better general environment for living, and so forth. If cannibalization is

occurring here, it is at the social not the individual level, as the human beings involved are acting as autonomous agents, seeking to maximize their individual welfare under circumstances where they are not usually impelled to act by dire necessity and, indeed, usually have a range of options from which to choose.

Assisted reproduction

Finally, where on this spectrum from an easy to a difficult argument for commodification and cannibalization should we place the symposium's fourth topic, assisted reproduction? I believe it has characteristics of both, with the mix of the two varying based on the form of reproductive assistance involved. The earliest type of medically assisted reproduction was the use of "donor" gametes. Beginning in the 1920s, donations of fresh semen were used for what is called "artificial insemination, donor" (AID) when a male partner is infertile or carries a genetic condition that he does not wish to pass on. By the 1980s, donation usually involved freezing the semen in "sperm banks," which now have large collections from which women wishing to become pregnant can pick a "donor" with characteristics that she wants (such as likeness to the general appearance of her husband or partner). The creation of in vitro fertilization (IVF) made possible the use of donated eggs to produce embryos for women who are unable or unwilling to use their own eggs; since the birth of the first child from a donated egg in 1983, the procedure has become increasingly common, and donor egg banks now exist in many places. From the outset sperm donors have been compensated a small amount for each "donation"—today about $60–70 per donation—which could be seen as payment simply for time and inconvenience, since the only risks are social and psychological (United States President's Council on Bioethics 2004). Not surprisingly, when egg harvesting began, it was considered necessary and appropriate that egg "donors" would be paid (and more substantially than sperm donors, since the process is so much more burdensome and physically risky). In countries where payment is allowed, the amount can be quite large—from $3,000 to $50,000, based not merely on the risk but on the characteristics of the women from whom the eggs come. Gametes thus fit into the category of market commodities.

When "surrogate motherhood"—today more commonly called "surrogacy"—

began, it involved artificial insemination of the potential surrogate, meaning that she would be both providing the egg and gestating the fetus. While it is possible to consider the egg as a commodity, even when it remains in place in the surrogate, it is more sensible to regard it as commodified through its role in creating a child. Is the child then a commodity, since the surrogate is paid not merely to gestate it but to give it up to the waiting "social parents" when it is born? And the picture is actually further complicated by so-called "gestational surrogacy," in which an embryo is created through IVF (using gametes either from one or both of the prospective parents or from other persons) and then transferred to the gestational surrogate in whom over the following nine months the embryo is transformed into a child, who is transferred after birth to the custody of the prospective parents. Is the surrogate thereby commodified or is she, like the physicians and nurses in the "brain drain" case, merely providing a service? If being a surrogate is described simply as labor rather than as an object, then it is highly constrained labor, especially in settings in South Asia where many Western couples now seek surrogates, who are enrolled in programs that tightly regulate their pregnancies—even separating them from their other children for the period of gestation, prescribing their diet and activities, and controlling their deliveries (commonly through Cesarean section).

The men and women who provide third-party gametes for AID and IVF are increasingly evaluated for their suitability both by the physicians who make use of them and by the couples who appraise their characteristics and purchase their gametes, such that a true "marketplace," with differential pricing, has begun to emerge. In contrast, it appears that the women who provide gestational services but not genetic material are treated as largely interchangeable, so long as they have been medically screened and are then controlled during their pregnancy by the physicians running the programs; they are selected for basic characteristics, not for skill or knowledge, and are expected to comply, not exercise individual choice. In this way, their labor or service is itself highly commodified and perhaps one can say their bodies are as well.

Regulations of medical practices

How might activities such as these four possible “commodities” be regulated? That is, why, and by whom, are regulations created for activities that involve physicians and other health-care professionals? And in what circumstances do regulations impose prohibitions?

Reasons for regulating

Three basic purposes deserve attention because of their possible application in the present context. First is the long history of regulations as a means to uphold public morality. The roots of this sort of control rest with organized religion, reflecting the close relationship between the state and religious authorities. The bases for such regulation have included not only punishing acts that would violate or undermine fundamental religious or moral principles (such as wrongfully taking human life) but also upholding more minor interests such as forbidding acts that would offend the public's religious or moral sensibilities (or at least the sensibilities of the dominant group within the public, even when most members of the general public are not offended). Such regulation remains a feature of theocratic societies, but in modern liberal societies, public morality is seldom a ground for regulation and especially not for prohibitions, as each individual is assumed to be the best judge of the propriety of his or her own acts and how to balance moral with other considerations.

This hardly means that liberal societies have abandoned regulation, however. Many rules exist to protect safety and promote welfare. In general, such regulations are justified based on the harm principle: that individuals are free to act as they choose except to the extent that their actions impose unconsented or unwanted harm on others or interfere with their important interests. Plainly, regulations that are supported by this second rationale may also uphold important moral or religious values—prohibiting murder serves both a moral goal (protecting the sanctity of human life) and instantiates the harm principle (since loss of life would usually amount to a great harm to one's welfare). More controversial, however, are some public health and safety rules, including regulation of professionals (particularly in the health professions), in situations in which the risk is borne by someone who is willing to encounter it voluntarily. Such cases are criticized as instances of state paternalism: protecting people

from themselves—but they may be more than that—and the harm principle may be satisfied—if the person constrained by the regulation in question imposes a risk of harm not only to him or herself but to others, either directly (the motorcyclist not wearing the required helmet who crashes when hit in the head while riding, causing harm to other motorists as well as himself) or indirectly (the person who suffers extensive injuries caused by the unlicensed health practitioner he chose, resulting in others, including the state, having to bear the costs of a great deal of medical care). In addition to commands backed by criminal sanctions, laws that promote individual and collective well-being and protect people from avoidable causes of harm also take the form of civil regulation (e.g., environmental, workplace and health-care rules), which not only prohibits certain conduct but may aim to steer people to "good" behavior through incentives.

A third major purpose for regulating is to compensate for so-called "market failures". For example, in the field of financial instruments, the issuers of stocks and bonds are subject to many disclosure requirements that are meant to overcome the inequalities that would otherwise exist in access to information. Legislators and regulators have also imposed disclosure rules in the medical field. A second barrier to a smoothly functioning market exists when one party's dominant power in a relationship seriously interferes with other parties' ability to choose or act voluntarily. In a medical as well as a commercial setting, this may result in a contract being rendered unenforceable. For example, most countries now have laws and regulations that prescribe what constitutes "informed consent" to participate as a subject in biomedical research, which aim both to provide information and to deny the validity of consent from those who would find it difficult, because of mental incapacity or being in a dependent or vulnerable position, to say "no" to a researcher.

Prohibitions

Some forms of regulation merely adjust relationships that are shaped by the parties to the relationship, be they in a commercial or noncommercial realm. But, as already mentioned, some regulations also prohibit certain behavior and then punish violations of the prohibition. Sometimes, a market is legal but certain acts within that market are prohibited. Take for example, the sale of stolen cigarettes in circumstances where cigarettes may legally be bought and sold, or the sale of child pornography when making and selling pornographic depictions of adults is legal; in these cases, the prohibition is on selling a good obtained through violation of the rights of another person. The sale of human organs for transplantation could likewise be placed into this "legal market, prohibited product" category. In such a view, organs are usually produced in a "market" in which the price, in terms of payment to the living donor from whom the organ is procured (or the source's family members in the case of deceased donation), is "zero" because legal transfers of organs are always unpaid gifts. The prohibition on putting a non-zero price on kidneys, that is, engaging in "organ commercialism," falls into the category of a prohibition intended to protect against violations of the rights of others because such organs overwhelmingly come from impoverished and otherwise vulnerable people at the bottom of the socioeconomic ladder, a source that "leads inexorably to inequity and injustice" (Steering Committee of the Istanbul Summit). A related basis for the "legal market, prohibited product" category would be when the good is prohibited not because it is obtained in violation of the rights of others but because it violates a fiscal or safety regulation. A medical example would be the sale of fake medications, which would pose harm to consumers, as well as violating the economic interests of the makers of the genuine medication.

An alternative ground for a prohibition is that an activity itself is illicit. In this view, organ sales are prohibited not because they are an illegal product in a legal

market but because they constitute a distinct activity—entirely separate from the non-market arrangements by which freely donated organs are obtained and distributed—that should not be permitted. In other words, unpaid organ donation is not a “market” with a zero price but an endeavor based on a non-economic donation of human organs, whereas people who receive money for their organs are engaged in a financial exchange rather than in a donative act. Thus conceived, the latter activity would be prohibited not because it depends on harming the rights of particular people or violating a safety or other regulation, but rather because treating organs as something with a price denies that they (and by extension, the people from whom they come or could come) possess inherent, non-monetizable value (Sandel 2012).

Application of regulations to “cannibalized commodities”

The topics examined at this symposium lend themselves to metaphorical description, starting with the very notion that physicians and others are involved in “cannibalization.” Yet, we cannot base regulations on metaphors. Rather, regulation must relate to particular harms to people and their interests and values, individually or collectively, that could be prevented through regulating behavior, including prohibitions on the activity in question. Collective action is appropriate when individual action cannot achieve the desired result (or at least not efficiently) or will not be forthcoming because individual actors cannot capture the benefit that would be produced were they to act to prevent the harm.

I will now apply this analytic framework to the field of organ transplantation and leave to other symposium participants to explore its applicability to other areas. While “cannibalism” may be more of a trope when applied to the fields examined in this symposium, “commodity” is an apt description, especially for organs for transplantation, whether from living or deceased persons. So the central question is, for what purpose may such commodities be subjected to regulation?

Regulating to improve markets in human “commodities”

Some prominent commentators have found the impetus for regulation in the need to overcome “market failure.” They concede that brokers in places such as Pakistan and the Philippines have for many years recruited very poor people to sell kidneys for small amounts of money (Working Group on Incentives for Living Donation 2012). Given their lack of knowledge and power, it is not surprising that such organ sellers are often cheated of the full payment they were promised and usually receive no monitoring or medical care on account of their organ “donation.” Although they hope to find relief from financial difficulties, the sellers typically end up worse off, not only physically but also financially (Budiani-Saberi and Delmonico 2008).

The proponents of a regulated market recognize that this is not an instance where disclosure would be enough to remedy the failure of the market; instead, they argue that certain people should be kept out of the market. They propose to accomplish this by replacing those incentives, such as cash, that appeal to the poor with others, such as contributions to a retirement account or donations to an organization that an organ donor supports, that would appeal to potential organ sellers who would be better able to evaluate the risks of having a healthy kidney removed (Working Group on Incentives for Living Donation 2012). Further, contracts for the sale of organs would have to guarantee such benefits as long-term medical follow-up of the donor and provision of free medical care for problems that resulted from the organ donation.

The central problem with regulating under a market-failure rationale is that it presupposes that an agreement to sell an organ is just like any other exchange into which anyone should have the liberty to enter if he or she wishes, subject to the minimal regulation needed to overcome imperfections in the market. Thus, once their highly restricted forms of payment fail to generate enough organs (people who are incentivized to act merely replacing those who would have been

unpaid donors but do not wish to donate once the field has been commercialized), market advocates will not conclude that the market has failed, merely that the type and amount of payment has been unduly restricted. In short order, a remedy will be proposed to change the nature or size of the incentives to produce enough organs to prevent people from “dying on the waiting list” for a transplant (the goal that they present as the moral imperative for allowing as free a market as possible). The result will be to progressively loosen the restriction on incentives until the system arrives at those that we already know generate sellers, namely those that appeal to people who have no real alternative means of meeting a pressing financial need.

Likewise, any restrictions on the manner in which organs are sold will be short-lived or not enforced. For example, a key provision of the regulated market formulated at a meeting on financial incentives held in November 2010 in Manila is that all donations are to be “undirected” and hence available to the organ allocation system for distribution to patients in the same manner as unpaid deceased donor organs at present (Working Group on Incentives for Living Donation 2012). But once organs have been removed from the category of things for which no payment is licit, then why should the person who receives an organ from a relative or close friend be prevented from expressing his or her thanks with a financial reward? Further, why would prosecutors have any incentive to go after kidney recipients who have offered potential unrelated donors some benefit beyond that provided by the official system for designating them to receive their organ? This is exactly what happens in Iran, the one country with a regulated market, where potential recipients make side-payments to kidney donors to speed up the process of getting a transplant.

Regulating to prevent harm

If “market failure” is ultimately unpersuasive (and unworkable) as the basis for successful regulation of organ donation, what about the “prevention of harm” rationale? As already elaborated, it is widely agreed that allowing sales has resulted in harm to the individuals, especially those from poor and marginalized groups, who have parted with their organs for cash, and has also produced less beneficial results for organ recipients than unpaid donation. These well-known harms have resulted in opposition to all organ sales from professional bodies (Declaration of Istanbul Custodian Group 2014) and intergovernmental organizations (Council of Europe 1997; UN 2000; WHO 2010). In this view, only complete prohibition can avoid both the lack of voluntariness inherent in such sales and the injustice that purchased organs come almost exclusively from the poorest and most vulnerable people—as well as the further injustice that commercializing organs means they go disproportionately to the rich.

Further, proponents of prohibition as the correct form of regulation argue that systems of paid and unpaid organ donation cannot exist side-by-side, for the former will always contaminate the latter, not only denying its need to exist (why ask a loved one to donate a kidney when the risk could instead be borne by a stranger who is paid to take it?) but robbing it of its dignity (if organs are market commodities, then the gift of an organ has no special dignity or worth). Further, the effect of a paid market in organs is to divert something that once served as a collective resource, given (heroically) by altruistic living donors and the families of deceased donors for the benefit of all, into a private market (Caplan *et al.* 2009). This diminution of the collective good is a further reason for the prohibition.

Critics of prohibitions on organ sales argue that they must be justified by empirical proof (Satel 2009). Proponents point out that this is a field with a great deal of historical evidence, indeed what amount to natural experiments that

establish the harm of commercializing organ donation (Danovitch 2013). Countries where organ sales have been tolerated or officially allowed have much lower rates of unpaid donation, and countries that have stopped allowing payment have experienced rapid development of unpaid donation claim, including from deceased donors. Moreover, an “experiment” with a regulated market is impossible; once the state declares that there is nothing wrong with treating human organs as such as a market commodity, how can the decision be reversed, either practically or ethically? Having been told that it is appropriate to get money for one’s kidney or one’s deceased relative’s organs, how many would now want to donate them for nothing? Having been told that human organs have a price, who will believe that they that have inherent value that cannot be expressed monetarily? How we describe things defines what they are —in this case, either market commodities or priceless expressions of love and fellow-feeling, offered through a noble and generous impulse to help another human being.

Regulating to protect a relationship

Clearly, the considerations just presented sound like one of the reasons mentioned earlier for regulating conduct—to protect morality—that is seldom invoked today in liberal societies. I believe that would be a mischaracterization of how these considerations relate to banning organ sales, for it is not a question of controlling individual conduct that the majority in society finds offensive or distasteful. Rather, the argument rests on a claim that we are all directly harmed when an aspect of our being is framed in a manner that deprives us—even if we do not ourselves become an organ seller—of a conceptualization of ourselves as human beings and as members of a community. For that reason, opponents of organ sales have also insisted on creating transparent and equitable organ donation and allocation mechanisms to foster the responsibility of members of community, one to another, to create and celebrate this collective resource.

The insistence that organs should be removed for transplantation only as voluntary, unpaid "gifts of life" raises a ground for regulation that is perhaps distinctive to acts that take place within another relationship, that between physician and patient. Sixty years ago, when the first kidney transplant took place between identical twins, the Harvard surgeons who performed the operations were criticized for violating their Hippocratic duties, for in removing a kidney from the donor they had made a healthy person less rather than more well-off. They, and the other transplant physicians who have followed them, have been able to reconcile this act with their ethical obligations, however, because when they are operating on living related donors they are in effect aiding someone who wishes to save (or greatly improve) the life of a loved one with organ failure, a goal that the donor can only achieve with the doctor's aid. That desire serves not only to explain why the loss of the kidney is actually a benefit to the donor but why the donor has every reason to cooperate fully, for example by giving truthful answers during the physical and psychological

screening that potential donors undergo. Not so the paid donor, whose motivation—to make money rather than to help the patient in need of a kidney—puts the physician-patient relationship on an entirely unethical plane. This harsh reality—along with the disregard of paid donors after the transplant—helps to explain the support of more than 100 national and international medical organizations, including the World Medical Association, to prevent using purchased organs in transplantation (Declaration of Istanbul Custodian Group 2014).

Conclusions

Looking across the four fields examined at this symposium, we can see successes and failures in controlling—through regulations or even prohibitions—some of the “cannibalized commodities” (Table 2). I can offer only preliminary conclusions regarding what has happened in the other three fields, but I think that the results in organ transplantation support the conclusion that success is linked to the degree to which the leaders in field have recognized the profession’s responsibilities to deal with the problems raised. In the end, governments must act—these are not practices that the professions alone can control—but they need to be pushed to act, and medical professional in the field are—and should be—effective advocates.

In the past 35 years, and particularly the past decade, the determination of medical leaders to combat organ commercialism, transplant tourism, and trafficking of human beings and transplantable organs has produced remarkable results, especially in Asian and Latin American countries that were major destinations for kidney patients from developed countries seeking a transplant more rapidly than they could obtain one at home. Organizations such as the Declaration of Istanbul Custodian Group brought urgency to the long-held positions of bodies such as the World Health Organization that all countries should strive to become self-sufficient in meeting the transplant needs of their own patients by developing deceased donation programs and prohibiting organ sales to stimulate live related donation. This meant directly lobbying many governments, both “sending” nations that provided financial support to their “transplant tourists” to obtain transplants abroad and “receiving” nations that lacked effective regulations. The medical organizations have also been very effective in putting pressure on physicians by barring reports about transplants that utilized purchased organs from being presented at their meetings or

published in their journals.

Yet, as indicated on Table 2, less success can be reported in the other fields examined at this symposium. In the case of medical tissues for treatment, those that most resemble organ transplantation have considerable regulatory success, such as that produced by the “no compensation” rules enforced regarding the donation of bone marrow for treatment by groups such as the Worldwide Network for Blood and Marrow Transplantation (WNBMT) and the European Tissue Banks Association (ETBA), which has adopted the WHO Guiding Principles for its members. For those tissues that are collected from cadavers and then processed, sorted, stored and distributed, however, there is a strong but not yet fully met need for regulation. In addition to the risk that poor populations will be exploited, a further concern is that when permission is given for deceased organ donation, families may not be fully informed either of the manner in which bones, ligaments, skin and other tissues may be harvested or of the commercial relationships between those operating the donation programs and the processors who obtain the tissues. Countries also need to cooperate in establishing and administering regulations that will allow uniform standards for materials of human origin, including mechanisms for vigilance and traceability.

As to our third “commodity”—the education of health professionals who are then solicited to practice in another country—both nations and international bodies have not been terribly successful in preventing “brain drain.” Part of the problem comes from the current international commitment to trade liberalization, with even poorer countries entering into accession negotiations with the World Trade Organization. Under the General Agreement on Trade in Services (GATS), countries are obligated to permit several modes of trade, including not only the movement of capital and patients but also professionals. Further, regardless of trade agreements, draconian prohibitions on people (who happen to be health professionals) leaving one country for another (which is willing—indeed, eager—to admit them) would run into basic human-rights principles. Thus, the difficulties in establishing effective regulation in this field are well known, not the least because restrictions can easily have the effect of

harming the individual skilled and educated persons who are sought out by a hiring country rather than hurting the hiring country which is the true originator of the harm.

Activity	**Market?**	**Need for Regulation**	**Regulatory Successes**
Human organs for transplantation	No (no payment "for the human body and its parts as such") Yes (on black market)	**Harm-prevention:** exploitation of poor & vulnerable populations **Risks to social values**: placing a price on humans & their parts **Preserving relationships:** citizens to community; physician to patient	***SUBSTANTIAL SUCCESS*** **Professional:** DICG, WNBMT, etc. **National:** sales bans (reinforce each other) **Intergovernmental:** WHO Guiding Principles & UN Protocols
Human tissues for medical treatment	Donation: No & Yes (some payments to procurers) Distribution: Yes	**Harm-prevention:** exploitation of poor & vulnerable populations; traceability & vigilance for safety **Risks to social values**: placing a price on humans & their parts **Preserving relationships:** citizens to community; physician to patient **Market-failure**: inadequate disclosure to donor families regarding tissue harvesting	***STILL DEVELOPING*** **Professional:** ETBA & WHO Guiding Principles (still being developed for medical products of human origin)
Movement of MDs & RNs (*et al.*) between poor and rich	Yes	**Harm-prevention:** to protect country's health capacity **Fairness**: to recoup investment in education of health-care professionals	***MIXED RESULTS*** Regulation is constrained by GATS. **National:** voluntary codes for recruiting & unclear

countries			obligations of health-care employers
Artificial reproductive technologies	Gametes: Yes Gestation: Yes	**Harm-prevention:** exploitation of poor & vulnerable populations Hype to paying patients (beyond evidence)	***UNCLEAR*** (patient payment over formal research)

DICG Declaration of Istanbul Custodian Group; *WNBMT* Worldwide Network for Blood and Marrow Transplantation; *WHO* World Health Organization; *UN* United Nations; *ETBA* European Tissue Banks Association; *MD* medical doctor; *RN* registered nurse; *GATS* General Agreement on Trade in Services.

Finally, the field of medically assisted reproduction has been marked by decades of professional failure to impose strong self-regulation, even in the face of a number of highly publicized "scandals" at assisted reproduction facilities; when ethical standards have been articulated—such as the view that new techniques should be regarded as "experimental" and investigated formally before being used clinically—there has been no response to the widespread failure of practitioners to follow this dictate. Further, when countries have tried to regulate the field, they have tended to adopt half-measures, such as disclosure requirements (about success rates and the like) that aim to protect the people purchasing reproductive services rather than limiting the range of services that can be provided or protecting the women from whom oocytes are harvested or who gestate fetuses as "surrogate mothers." Indeed, the reproductive technology field illustrates that once market commodification is allowed it will grow and, along with it, exploitation inevitably increases, driven by human needs and desires and facilitated by the extreme inequalities in wealth and power that are found not only between high-and low-resource countries but also within those countries.

This review of the regulations is of course preliminary and incomplete. First, more needs to be added about all four fields—especially beyond organ transplantation, as to which I hope to have provided a fairly detailed picture. Second, I have not fully discussed the danger that some regulations—including

prohibitions—raise costs and make activities less visible for monitoring. Further, "freedom of contract," so beloved by market advocates, is not the only value that may constrain the creation and implementation of regulations. For example, one explanation of the difficulties that arise in regulating reproductive technologies is that rules that constrain what childless customers of such clinics can obtain run into the protection of the rights of women (and men) to control their own bodies and reproduction. Similar difficulties can arise in the other three areas, and further reflection on regulations as well as on commodities will be needed.

I return, then, to the conclusion with which I began, that it is less the extent of commodification and more the risk of harm, which is aggravated by economic inequalities, that motivates regulation of these fields, and that success in regulation depends heavily on professionals identifying the steps that they can take—directly or through official rules—to protect the public, to improve access to care, and to honor the nature of their relationships with all who are involved, especially persons at risk of being treated as things rather than as human beings.

Bibliography

References

Budiani-Saberi, D. A., and F. L. Delmonico. 2008. Organ trafficking and transplant tourism: A commentary on the global realities. *American Journal of Transplantation* 8(5):925–929.

Caplan, A. L., B. Domínguez-gil, R. Matesanz, and C. Prior. 2009. Joint Council of Europe/United Nations Study on trafficking in organs, tissues and cells and trafficking in human beings for the purpose of the removal of organs. Accessed on April 11, 2014 at www.edqm.eu/site/Report-1-TO-en-569-1.html.

Council of Europe. 1997. Council of Europe Convention on Human-Rights and Biomedicine. Accessed on April 11, 2014 at conventions.coe.int/Treaty/en/Treaties/Html/164.htm.

Danovitch, G. M. 2013. The high cost of organ transplant commercialism. *Kidney International* 85(2):248–250. Accessed on April 11, 2014 at www.nature.com/ki/journal/v85/n2/full/ki2013466a.html.

Declaration of Istanbul Custodian Group. 2014. www.declarationofistanbul.org.

Oxford English Dictionary, s. v. “Commodity”. Retrieved on January 20, 2014 from www.oxforddictionaries.com/us/definition/american_english/commodity.

Radin, M. J. 1996. *Contested Commodities*. Cambridge, MA: Harvard University Press.

Sandel, M. J. 2012. *What Money Can’t Buy. The Moral Limits of Markets*. New York, NY: Farrar, Straus and Giroux.

Satel, S., ed. 2009. *When Altruism Isn’t Enough. The Case for Compensating Kidney Donors.* Washington, DC: AEI Press.

Steering Committee of the Istanbul Summit. 2008. Organ trafficking and transplant tourism and commercialism: The Declaration of Istanbul. *The Lancet* 372(9632):5–6.

UN (United Nations). 2000. Protocol to prevent, suppress and punish trafficking in persons, especially women and children, supplementing the United Nations Convention against transnational organized crime. Accessed on April 11, 2014 at www.unodc.org/unodc/en/treaties/CTOC.

United States President’s Council on Bioethics. 2004. Reproduction and Responsibility: The Regulation of New Biotechnologies. Washington, DC: President’s Council.

Working Group on Incentives for Living Donation. 2012. Incentives for Organ Donation: Proposed Standards for an Internationally Acceptable System. *American Journal of*

Transplantation 12:306–312.

WHO (World Health Organization). 2010. Human organ and tissue transplantation. WHA63.22, 21 May 2010, approving the WHO Guiding Principles on Human Cell, Tissue and Organ Transplantation.

Notes

1 Although manufactured goods are not traditionally classified as commodities, that label is sometimes applied when products in a group are regarded as generic and interchangeable, such that purchasers select among them on grounds of functionality and price rather than any special qualities; when goods have come to be regarded as "mere" commodities because they are very similar and utilitarian (such as basic laptop computers or coach-class airline seats), manufacturers have to expend great efforts to induce consumers to differentiate among them by brand rather than treating them as fungible and differentiating only on price or accessibility.

Author

Alexander M. Capron

Lecturer in health ethics at the Centre for Health Equity, School of Population and Global Health, University of Melbourne, Australia. Her bioethics research focuses on ethical issues related to procurement, distribution and use of medical products of human origin, particularly where these arise in the transnational setting. She is a member of the Council of the Declaration of Istanbul Custodian Group, and cochair of the Ethics Committee of The Transplantation Society.

Conclusion

Jean-Daniel Rainhorn and Samira El Boudamoussi

> “Science without conscience is but the ruin of the soul.”
> —François Rabelais, 1542

A special feature of this book is to bring together the work of researchers coming from different disciplines and having various themes of reflection or practices in the field of biomedicine. While the general trend of science goes towards increasing specialization, the project of this book is to look at the use of medical advances in a transversal perspective. In other words, it intends to highlight what unregulated uses of some new technologies in the health sector have in common rather than what differentiates them, and to consider the human body not as the sum of more or less independent organs that require increasingly sophisticated specific treatments, but as a coherent set of interdependent functions that are exposed to similar technical, social, cultural and economic environments. At the centre of this reflection are concepts such as the dehumanization of human beings often reduced to mere objects, the growth of social inequalities, the trade of parts or functions of the human body for health or well-being purposes and the role of health professionals progressively moving away from humanistic principles that have guided medical practice over the centuries.

Needless to say that this book, which is the result of a work done by international medical and social-science researchers, is in no way a manifesto against science and new biomedical technologies. It gives credit and recognition to the progress made in many areas in recent decades, which often represent a significant contribution to improving health. We believe that scientific progress should be used in the interest of all—respecting the essential ethical principles of medical practice—and not only for those who, thanks to their financial resources, could benefit from these new medical services at the expense of those

who often have nothing more than their bodies to rent or sell to survive.

The metaphor of “cannibal markets” is proposed to describe various phenomena involving the commodification of the human body for medical and well-being purposes. These phenomena refer to the use of human body parts of people living in poverty or brainpower of people living in poor areas to benefit others, more developed, wealthier or more powerful. They are illustrated by four areas of activities: (1) the unregulated global market of assisted reproduction technology and in particular the development of commercial surrogacy; (2) the “brain drain” of health professionals which reduces the capacity of poor countries to respond to their health challenges; (3) the conditions for organ harvesting feeding the market for transplantation in some countries; and (4) the development of commercial institutions that collect, store and sell human material (gametes, embryos, blood, tissues, etc.). Commodification and cannibalization appear as common features of all four areas. Even if cannibalization may seem not to apply to the mechanisms of looting poor countries of their health professionals, it may rather be considered at a social level in the sense that cannibalisation reinforces a central aspect of commodification, which is that “one thing is valued not in itself but as a source of material to benefit another.”

If the concept of cannibalism, yet used by the great anthropologist Claude Lévi-Strauss (2013, 272), may appear to be offensive to some, the concept of “new forms of slavery” or “modern slavery” that is used by other authors is another controversial denomination. However although these terms could appear as excessive, they reflect situations that are often particularly shocking. In the fields addressed in this book, the violence of words simply illustrates the violence of the conditions in which these markets are developing. As a matter of fact it could be considered that the development beyond the generally accepted ethical limits of some markets in the health sector appears to be nothing but a continuation in more modern forms of ritual cannibalism: a form of cannibalism by incorporating parts of the other by a technological mediation.

With the technological progress the idea that a failing function or organ could be

replaced by a tissue or an organ coming from another person—or by machines—has become a new perspective for curing patients. Today, many parts of the body can be replaced with products coming from other human bodies. This evolution of medicine obviously raises the issue of the origin of the products and the conditions of their collection, conservation and redistribution. An issue of great seriousness as these human products or functions are increasingly coming not from altruistic donations but from an international trade of body parts coming from people belonging to disadvantaged social categories. In this lucrative and poorly regulated market, the idea is promoted that a reasonable amount of money is an adequate way to compensate the loan or the loss of a body part and therefore represents a chance for poor people. In a global environment of growing social inequalities, the respect of human dignity is clearly the key issue for the future of those biotechnologies since the demand of health and well-being products of human origin is increasing whereas the supply side is currently unlimited.

Beyond the assessment of the poorly controlled development of these new medical markets and their consequences, this book intends to contribute to a reflection on relevant strategies to reduce if not eliminate the global trade of the human body for medical purposes. Should an international legislation—a kind of international agreement—be signed by all countries and would it succeed to regulate these markets? Or, on the contrary, should every country be encouraged to ban such practices at a national level? Should any exchange of money be prohibited or should the idea of an “ethical” price be developed? In other words, is donation still viable in an environment dominated by a neoliberal ideology and a market economy that is often working in grey zones? Is a kind of “official” or “legal” compensation a way to limit the abuses of a poorly regulated market? How to convince or to constraint physicians practicing beyond the legality to respect the ethical rules of their profession?

These questions and many others will be at the heart of the debates in various international forums in the coming years. We hope that this book will help finding relevant solutions and that the progress of medical science and

technology will benefit those who need it and not just those who can afford it, in particular through a black market. On such fundamental issues public awareness should be raised. As Piketty wrote recently (2014, 574) “It is all too easy for social scientists to remove themselves from public debate and political confrontation and content themselves with the role of commentators on or demolishers of the views and data of others. Social scientists, like all intellectuals and all citizens, ought to participate in public debate.” We hope this book will contribute to the much needed reflection and debate on these quickly spreading practices. We believe that it is becoming an urgent and major issue.

Bibliography

References

Lévi-Strauss, C. 2013. *Nous sommes tous des cannibales*. Paris: Éditions du Seuil.

Piketty, T. 2014. *Capital in the Twenty-First Century*. Cambridge, MA: The Belknap Press of Harvard University Press.

Authors

Jean-Daniel Rainhorn

Professor of international health and humanitarian action and holds the Social Inequalities, Health and Humanitarian Action chair at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris. Previously he was professor of international health at the Graduate Institute of International and Development Studies in Geneva and director of the Geneva Center for Education and Research in Humanitarian Action. He was also invited professor of development studies and/or humanitarian assistance in various universities, including the Université libre de Bruxelles, Leopold Senghor University of Alexandria, Hanoi School of Public Health and Tel Aviv University, as well as former director of CREDES in Paris, and author of numerous articles, reports and books.

Samira El Boudamoussi

Researcher at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris, and visiting researcher at the Centre of Studies on International Cooperation and Development of the Université libre de Bruxelles (ULB). She earned her PhD in education from the Universitat Rovira i Virgili in Tarragona and conducted various research projects at the ULB and Universitat Autònoma of Barcelona. The overarching theme of her research is science–technology–society: how society relates to scientific knowledge and technical advances, and how these are used in personal and public decision-making.

Biographies of the Contributors

Introduction

Jean-Daniel Rainhorn is professor of international health and humanitarian action and holds the Social Inequalities, Health and Humanitarian Action chair at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris. Previously he was professor of international health at the Graduate Institute of International and Development Studies in Geneva and director of the Geneva Center for Education and Research in Humanitarian Action. He was also invited professor of development studies and/or humanitarian assistance in various universities, including the Université libre de Bruxelles, Leopold Senghor University of Alexandria, Hanoi School of Public Health and Tel Aviv University, as well as former director of CREDES in Paris, and author of numerous articles, reports and books.

Part 1: Trading in the Human Body

Samira El Boudamoussi is a researcher at the College of Global Studies, Fondation Maison des sciences de l'homme in Paris, and visiting researcher at the Centre of Studies on International Cooperation and Development of the Université libre de Bruxelles (ULB). She earned her PhD in education from the Universitat Rovira i Virgili in Tarragona and conducted various research projects at the ULB and Universitat Autònoma of Barcelona. The overarching theme of her research is science–technology–society: how society relates to scientific knowledge and technical advances, and how these are used in personal and public decision-making.

Vincent Barras, doctor in medicine and historian, is professor of the history of medicine at the University of Lausanne, and also teaches sound theory at the Art University of Geneva. He has published books, essays, and articles on the history and theory of the body, medicine and psychiatry, contemporary poetry and music, and has translated works by Galen, Adorno, Cage, and Sanguineti among others. His recent publications include: "Neurosciences et médecine" (*Revue d'histoire des sciences*, 63, 2010), ed. with J.-Cl. Dupont; *Le courrier du corps au XVIII^{e} siècle* (with S. Pilloud and M. Louis-Courvoisier), Lausanne, 2013; *Maladies en lettres, XVII^{e}-XX^{e} siècle*, Lausanne, 2013 (ed. with M. Dinges).

Jean-Jacques Courtine is professor of European studies at the University of Auckland (New Zealand), professor emeritus at the University of Sorbonne Nouvelle (Paris III) and at the University of California (Santa Barbara). He is working in cultural history and anthropology. Among his recent books: *Histoire du corps, XVI^{e}-XX^{e} siècle* (3 vol., Seuil, 2006) and *Histoire de la virilité, de l'Antiquité au XXI^{e} siècle* (3 vol., Seuil, 2011), both in collaboration with Alain Corbin and Georges Vigarello.

Samia A. Hurst is professor of bioethics at Geneva University's medical school, ethics consultant at the Geneva University Hospitals, and a member of the European Clinical Ethics Network, the Central Ethics Committee at the Swiss Academy of Medical Sciences, and the Swiss National Advisory Commission on Biomedical Ethics. Her research focuses on fairness in clinical practice, and the protection of vulnerable persons.

Part 2: Wombs for Rent

René Frydman is professor emeritus at the Faculty of Medicine, University Paris V, and Consultant at Foch Hospital (Paris Suresnes). His special areas of interest in gynecology and obstetrics include infertility and high-risk pregnancy. His work in infertility successively led to the first baby born in France as a result of in vitro fertilization in 1982, embryo freezing in 1986, preimplantation genetic diagnosis (PGD) in 2000, in vitro maturation in 2003, oocyte cryopreservation in 2010, and PGD with human leukocyte antigen (HLA) matching in order to bring about the birth of a savior sibling in January 2011. His other areas of interest are biomedical ethics. His work has led to many invitations to debate the moral issues created by the use of artificial procreation techniques. He actively participated in the preparation on the French law on bioethics. René Frydman is an officer of the French Legion of Honor.

Seema Mohapatra, associate professor at the Barry University School of Law in Orlando, Florida, is an expert in the areas of health-care law, public health law, and bioethics. Her research focuses on the intersection of biosciences and the law, and she has published and presented extensively about international surrogacy, egg freezing, and assisted reproductive technologies. Professor Mohapatra received her JD degree from Northwestern University School of Law. Prior to attending law school, she received her master's degree in Public Health from Yale University, and her bachelor's degree in Natural Sciences (with a minor in Women's Studies) from Johns Hopkins University.

Elisabeth Beck-Gernsheim was professor of sociology at Hamburg University and Erlangen University, and visiting professor of sociology at the Norwegian University of Science and Technology in Trondheim. At present, she is senior research fellow at Munich University's Institute of Sociology, Institute for Cosmopolitan Studies. Her research focuses on migration, gender, family, and

reproductive technology. Her publications include: *Das halbierte Leben* (1980), *Die Kinderfrage* (1988), *Das ganz normale Chaos der Liebe* (1990, with Ulrich Beck), and *Wir und die Anderen. Kopftuch, Zwangsheirat und andere Mißverständnisse* (2007). Her latest book is *Fernliebe. Lebensformen im globalen Zeitalter* (2011, with Ulrich Beck; English edition: *Distant Love*, Polity Press, Cambridge, 2014).

Sarojini Nadimpally has been working on women's health and rights issues for over eighteen years and is one of the founder members of Sama–Resource Group for Women and Health. She was involved in the coordination of two national-level studies on assisted reproductive technologies and their implications on women. Nadimpally has co-coordinated "Reproductive Tourism in India: actors, agencies and contemporary transnational networks", a joint project of Centre for Social Medicine and Community Health, Jawaharlal Nehru University, Sama and Kings'College London. She has coordinated two multisite studies on participant's perspectives in clinical trials in India, and has contributed several articles/papers to national as well as international journals. She was the Social Justice Practitioner-in-Residence in 2013 at University of Massachusetts.

Etti Samama is the director of the Division of Medical Technology Policy at the Israeli Ministry of Health and teaches medical policy at Haifa and Tel Aviv Universities. She holds a BA in nursing, an MA in social work—both from The Hebrew University of Jerusalem—and a PhD in health systems management from Ben-Gurion University of the Negev. Her master's thesis as well as her doctoral dissertation researched the topic of surrogacy in Israel over 15 years. She coauthored a report on the state of surrogacy in Israel, published by the Woman to Woman (Isha L'Isha) feminist organization in 2011.

Part 3: Brain Theft

Alex Mauron is professor of bioethics at the University of Geneva Faculty of Medicine and director of the Institute for Ethics, History, and the Humanities. He initially trained as a molecular biologist. He moved to the field of bioethics during the late nineteen-eighties and initiated the bioethics program at the University of Geneva. He has worked and taught on a wide range of bioethical issues and has been a member of the Swiss National Advisory Commission on Biomedical Ethics.

Delanyo Dovlo was the WHO Representative to Rwanda until July 2014. Prior to this, he was Health Systems Adviser at WHO-HQ in Geneva. He trained as a general practice physician and public health specialist in Ghana, UK and USA, and has had over thirty years clinical and public health practice experience and is an expert in Human Resources for Health issues. He was a former director of Human Resources for the Ministry of Health of Ghana and has consulted widely on this subject and on health-sector reforms. In July 2014, he was appointed to his current position as director of the Health Systems and Services Cluster, at the WHO Regional Office for Africa in Brazzaville, Congo.

Sheila Mburu is currently an MSc candidate at the London School of Hygiene and Tropical Medicine. Prior to this, Sheila worked as a consultant in the WHO Rwanda Country Office. During this time she co-wrote and edited WHO's biennial report, supported national nutrition programs, managed WHO's online communications and participated in implementation of the UN Communications Strategy. Sheila graduated from the University of Nottingham, with an MSci degree in biochemistry and genetics.

Nicola Suyin Pocock is a doctoral student at the Gender Violence and Health Centre at the London School of Hygiene and Tropical Medicine (LSHTM). Her thesis explores the health needs of men trafficked for commercial fishing in

Thailand. Prior to her studies at LSHTM, Nicola was the health systems researcher at the *Asian Trends Monitoring Bulletin*, a Rockefeller-foundation-funded project on pro-poor development based at the Lee Kuan Yew School of Public Policy, National University of Singapore.

Barbara L. Brush is the Lake Professor of Nursing in Population Health and an associate professor at the University of Michigan. Her research focuses on international nurse migration and nurses' work around the globe, including controversial aspects related to racial segregation and immigration policy, for which she is regularly consulted. She completed her baccalaureate degree from the University of Massachusetts and her master and doctoral degrees from the University of Pennsylvania.

Part 4: Organs for Sale

Philippe Steiner is professor of sociology at the Paris-Sorbonne University and senior member of the Institut universitaire de France. He has recently published *La transplantation d'organes: un commerce nouveau entre les êtres humains*, Paris, Gallimard, 2010; *Durkheim and the Birth of Economic Sociology*, Princeton, Princeton University Press, 2011; and *Calcul et morale. Coût de l'esclavage et valeur de l'émancipation*, (with C. Oudin-Bastide), Paris, Albin Michel, 2015.

Jacob A. Akoh, MBBS, FMCS, FRCSEd, FWACS, FRCS (Gen), FICS, is a consultant general/transplant surgeon at Derriford Hospital, Plymouth. He is also associate professor of surgery with University of Plymouth and a member of the Training Committee of the British Transplantation Society (BTS). He was a member of BTS Council, director of the South West Transplant Centre and clinical director of the Surgery and Renal Services, and is an examiner for the Intercollegiate Specialty Board in General Surgery. He is a member of many medical societies and has published many articles and co-edited a book on dialysis access. He is an expert referee for the Health Technology Assessment program.

Rafael Matesanz is founder and director of the Spanish National Transplant Organisation (ONT), and has been president of the Transplant Committee of the Council of Europe for seven years. He has also been president of the Iberoamerican Council of Organ Donation and Transplantation since 2005, and was president of the Public Health Group of the European Union in 2010 and was in charge of the elaboration and approval of the EU Directive & Action Plan for Organ Transplantation. He advises the World Health Organization in the global strategy for transplantation.

Beatriz Mahíllo is a medical doctor specialized in epidemiology, with a

master’s degree in public health and a master’s degree in research methodology in health sciences. After several years working in health technology assessment and HIV clinical research, she joined the medical team of the Spanish National Transplant Organisation (ONT) in May 2006, where she is mainly involved in the management and statistical analysis of the organ donation and transplantation databases. She is chief executive officer of the Global Observatory on Donation and Transplantation.

Mitra Mahdavi-Mazdeh is a professor in the division of nephrology at Tehran University of Medical Sciences. She has been director of the Iranian Tissue Bank Research Center since 2007. Her major research interests lie in the field of tissue engineering and epidemiologic features of renal replacement therapy, especially renal transplantation in developing countries.

Nancy Scheper-Hughes is professor of anthropology at University of California, Berkeley, where she also directs the doctoral program in medical anthropology. Her research and writings focus on violence, suffering, and premature death as these are experienced on the margins of the late modern world. She has written or edited several award winning books including *Death without Weeping: the Violence of Everyday Life, Violence in War and Peace* (with Philippe Bourgois), and *Commodifying Bodies* (with Loïc Wacquant). Scheper-Hughes is the founding director of Organs Watch, a fieldwork-based, medical human-rights and documentation project, based at the University of California, Berkeley. She has participated in the production and filming of several documentaries on the human organ trade.

Part 5: The Human-Product-Banking Industry

Vinh-Kim Nguyen is an HIV physician and medical anthropologist. As both a practitioner and researcher, he is concerned with the relationship between science, politics, and practice in global health. His current work focuses on molecular epidemiology, global health, and social theory. He practices at the Clinique médicale l'Actuel and in the Emergency Department at the Jewish General Hospital in Montreal (Canada). He is associate professor at the Department of Social and Preventive Medicine at the University of Montreal and heads the chair in Anthropology and Global Health at the College of Global Studies in Paris. He is the author of *The Republic of Therapy: Triage and Sovereignty in West Africa's Time of AIDS*; the coauthor, with Margaret Lock, of *An Anthropology of Biomedicine*, and also the co-editor, with Jennifer Klot, of *The Fourth Wave: Violence, Gender, Culture, and HIV in the 21st Century*, as well as numerous articles in biomedical and anthropological journals.

Jean-Paul Pirnay was born in 1967 in Antwerp (Belgium). He graduated a biotechnology engineer at University College Ghent and received a PhD in medical sciences from the Université libre de Bruxelles. In 1993 he completed his military service in the military blood bank, but could not break clear of his military orbit. He is currently head of the Laboratory for Molecular and Cellular Technology, which harbors the human tissue banks and the GMP bio-manufacturing facility of the military hospital in Brussels.

Jean-Daniel Tissot, MD, specialized in internal medicine, hematology and transfusion medicine. He is managing director of Interregional Blood Transfusion SRC, Switzerland. He is professor of hematology at the Faculty of Biology and Medicine of the University of Lausanne. His main research interests deal with iron deficiency, ethical issues in transfusion as well as storage lesions of blood products. He has authored about 200 scientific articles, and co-edited a

book entitled *L'Immortalité – Un sujet d'avenir*.

Olivier Garraud holds a MD and a PhD degree, along with a MSc in anthropology. He trained both in onco-hematology, and infectious diseases. He is tenured professor of immunology with the University of Lyon/Saint-Étienne (France) and specialized in transfusion medicine, with two major topics: transfusion and inflammation, and ethics in transfusion. He headed a regional blood center in France for twelve years and moved a year ago to the (French) National Institute for Blood Transfusion in Paris.

Jean-Jacques Lefrère held a degree in French literature and has contributed several books on French poets by the dawn of the 19th century. Besides, he held a MD and PhD and graduated in hematology, with specialization in transmissibility of viruses by blood and transfusion. He shared interest in humanities and particularly in blood in history (encompassing ethics). He was tenured professor of hematology (Paris V) and was the CEO of the (French) National Institute for Blood Transfusion.

Jean-Claude Osselaer got a MD in 1982. He trained in internal medicine and clinical pathology, and is a specialist in clinical pathology (1993). He also holds special degrees in insurance law and forensic medicine. From 1992 to 2013, he was medical director of Mont-Godinne Blood Transfusion Service. He also was transfusion consultant at MontGodinne University Hospital, Université catholique de Louvain, Belgium.

Bernice S. Elger studied medicine and theology in Germany, France, Switzerland, and the US and obtained a specialty degree in internal medicine. She is the head of the Institute for Biomedical Ethics, University of Basel, and of the Unit for Health Law, Ethics and Humanitarian Medicine, Center for Legal Medicine, University of Geneva, Switzerland, and obtained several awards for her work, including the Bizot Award for her work on biobanks (2005) and the Swiss Research Award in Primary Care (2010).

Part 6: The Bigger Picture

Philippe Goyens is a pediatrician, head of the Nutrition and Metabolism Unit at the University Children's Hospital Queen Fabiola, Brussels, Belgium. Since 2006, he has been in charge of the Newborn Screening Laboratory at the Université libre de Bruxelles. He has a long-lasting experience of nutritional problems in developing countries (Central Africa and South-East Asia). Since 2013, he has been permanent secretary of the Royal Academy for Overseas Sciences (Brussels).

Firouzeh Nahavandi has a PhD in social sciences. She is full professor at the Université libre de Bruxelles (ULB), where she is in charge of the Research Center on International Development and Cooperation (CECID). She currently is the director of the Graduate School of Development Studies of the French community of Belgium, and a regular member of the Royal Academy for Overseas Sciences (Brussels). Her research focuses on development issues, particularly in Islamic countries.

Judit Sándor is full professor at the Faculty of Political Science, Legal Studies and Gender Studies of the Central European University (CEU), Budapest, Hungary. She has participated in many national and international law and policy-making activities in the field of biomedical law and bioethics. In 2004–2005 she served as the head of the Bioethics Section at the UNESCO. She has published seven books in the field of human-rights and biomedical law. Since 2005, she has served as a founding director of the Center for Ethics and Law in Biomedicine (CELAB) at the Central European University.

Debra Budiani-Saberi, PhD, is a medical anthropologist and the executive director and founder of the Coalition for Organ-Failure Solutions. She has conducted extensive research on trafficking in persons for the removal of organs (TPRO), beginning in 1999 as a part of her study on refugee health. She has

provided consultation on TPRO to the Office of the High Commissioner for Human-Rights (OHCHR), the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC), and has worked in alliance with various medical and civil society organizations to combat the organ trade. Dr. Budiani-Saberi has also worked more broadly on health and human-rights in various parts of the Middle East and Asia.

Seán Columb is lecturer in law at the University of Liverpool. His primary research area is human trafficking and exploitation. In particular, he is interested in the organ trade and the legal expression of exploitation in international law. His current research examines how the organ trade fits into the anti-trafficking framework at national (UK), international and regional (EU) levels; its link to organized crime and the wider political economy. Columb is committed to advancing academic scholarship in this area. His research is empirically driven and takes an interdisciplinary perspective.

Part 7: Mapping National and International Responses

Edward Kelley, PhD, is director for the Department of Service Delivery and Safety at the World Health Organization. He leads WHO's efforts at strengthening the safety, quality, integration and people centredness of health services globally and manages WHO's work in a wide range of programs, including health services integration and regulation, patient safety and quality, blood safety, injection safety, transplantation, traditional medicine, essential and safe surgery and emerging areas such as mHealth for health services and genomics. Dr Kelley worked for ten years in West and North Africa and Latin America, directing research on the Integrated Management of Childhood Illness in Niger. Recently, he was asked to lead the Infection Prevention and Safety and the Health System Recovery teams for WHO's Ebola Response effort.

Carmel Shalev is a professor of law whose work focuses on health and human-rights, bioethics and biopolitics. She is head of the Department for Reproduction and Society at the International Center for Health, Law and Ethics, Haifa University, Israel, and a member of Israel's National Bioethics Council. In the wake of this symposium she has initiated a long-term project on the Ethics and Regulation of Intercountry Medically Assisted Reproduction (ERIMAR).

Luc Noël was in charge of the Hematology and Transfusion Centre of Versailles and part-time advisor at the French Blood Agency. In 1999, he joined the World Health Organization (WHO) as coordinator, for Blood Transfusion Safety and later Clinical Procedures. He developed the topic of transplantation with WHO updated Guiding Principles on Human Cell, Tissue and Organ Transplantation. He led the WHO initiative for medical products of human origin and is now an independent part-time advisor on issues pertaining to medical products of human origin.

Dominique Martin is lecturer in health ethics at the Centre for Health Equity, School of Population and Global Health, University of Melbourne, Australia. Her bioethics research focuses on ethical issues related to procurement, distribution and use of medical products of human origin, particularly where these arise in the transnational setting. She is a member of the Council of the Declaration of Istanbul Custodian Group, and cochair of the Ethics Committee of The Transplantation Society.

Alexander M. Capron holds the rank of university professor at the University of Southern California. He directed the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research (1979–1983) and the Department of Ethics, Trade, Human-Rights and Health Law at the World Health Organization (2002–2006). An elected member of both the Institute of Medicine (National Academy of Sciences) and of the American Law Institute, he is the author or editor of six books and more than 300 articles and chapters.