



TRAFFICKING IN HUMAN BEINGS FOR THE PURPOSE OF ORGAN REMOVAL

A Comprehensive Literature Review

Assya Pascalev - Bulgarian Center for Bioethics, Bulgaria

Jessica de Jong - Central Division of the National Police, the Netherlands

Frederike Ambagtsheer - Erasmus MC University Hospital Rotterdam, The Netherlands

Susanne Lundin - Lund University, Sweden

Ninoslav Ivanovski - University of St. Cyril and Methodius, Macedonia

Natalia Codreanu - Renal Foundation, Moldova

Martin Gunnarson - Lund University, Sweden

Jordan Yankov - Bulgarian Center for Bioethics, Bulgaria

Mihaela Frunza - Academic Society for the Research of Religions and Ideologies, Romania

Ingela Byström - Lund University, Sweden

Michael Bos - Eurotransplant International Foundation, The Netherlands

Willem Weimar - Erasmus MC University Hospital Rotterdam, The Netherlands

December 2013



This report is published with the financial support of the Prevention of and Fight against Crime Programme European Commission – Directorate General Home Affairs.

The HOTT project has been funded with the support of the European Commission. This publication reflects the views only of the authors, and the European Commission cannot be held responsible for any use which can be made of the information contained therein.

This review is the first delivery of a series of reports, to be published as a book (forthcoming in 2016) under the HOTT project:

1. **Literature review (December 2013)**
2. A report on prosecuted cases (October 2014)
3. Empirical report on patients who travel overseas for alleged illegal transplantations (October 2014)
4. Indicators to help data collection and identification of trafficking in persons for the purpose of organ removal (August 2015)
5. Recommendations to improve non-legislative response (August 2015)

This literature review can be cited as follows:

Pascalev A, De Jong J, Ambagtsheer F, Lundin S, Ivanovski N, Codreanu C, Gunnarson M, Yankov J, Frunza M, Byström I, Bos M, Weimar W, Trafficking in human beings for the purpose of organ removal: a comprehensive literature review. Online at www.hottproject.com (December 2013).

Report feedback:

Comments on the report are welcome and can be sent to:

Erasmus MC University Hospital Rotterdam

Department of Internal Medicine, Section Transplantation and Nephrology

P.O. Box 2040

3000 CA Rotterdam

The Netherlands

Phone: +31 (0)10 7033002

E-mail: hottproject@erasmusmc.nl

Website: www.hottproject.com

Acknowledgments

The authors wish to thank the following persons for the final editing of this report:

Linde van Balen, Erasmus MC University Hospital Rotterdam, The Netherlands

Marian van Noord, Erasmus MC University Hospital Rotterdam, The Netherlands

The authors are grateful for the useful remarks given to this report by:

Kristof Van Assche, Vrije Universiteit Brussel, Belgium

Tihomir Bezlov, Centre for the Study of Democracy, Bulgaria

Sergio D'Orsi, Europol, The Netherlands

Luuk Esser, Bureau of the Dutch National Rapporteur on Trafficking in Human Beings and Sexual Violence against Children, The Netherlands

Steve Harvey, Project Coordinator ICMDP, Independent Consultant, United Kingdom

Rutger Rienks, Central Division of the National Police of the Netherlands, The Netherlands

Annika Tibell, Karolinska University Hospital, Sweden

The authors wish to thank the following persons for their help with the literature searches:

Wichor Bramer, Biomedical Information Specialist, Erasmus MC University Hospital Rotterdam, The Netherlands

Aron Lindhagen, Librarian, Lund University

Consortium

This project is executed by the following partner organizations who are beneficiary of the financial support:

- Erasmus MC University Hospital Rotterdam, The Netherlands (Coordinator)
- Lund University, Sweden
- Bulgarian Center for Bioethics, Bulgaria
- Academic Society for the Research of Religions, Romania

The partners are supported by a network of associated partners and advisers:

- University of St. Cyril and Methodius, Macedonia
- Central Division of the National Police of the Netherlands, The Netherlands
- Eurotransplant International Foundation, The Netherlands
- Renal Foundation, Moldova
- Europol, The Netherlands
- United Nations Office on Drugs and Crime, Austria
- Utrecht University, The Netherlands
- European Society for Organ Transplantation, The Netherlands
- European Platform on Ethical, Legal and Psychosocial Aspects of Organ Transplantation, The Netherlands
- Organs Watch, United States of America
- Karolinska Institutet, Sweden
- Directorate of Priority Crime Investigation, South Africa
- Special Prosecution Office of the Republic of Kosovo

Abbreviations and acronyms

APOV	–	Abuse of a position of vulnerability
EU	–	European Union
NGO	–	Non-Governmental Organization
THBOR	–	Trafficking of Human Beings for Organ Removal
UN	–	United Nations
UNODC	–	United Nations Office on Drugs and Crime
UNTOC	–	United Nations Convention against Transnational Organized Crime
WHO	–	World Health Organization

Contents

CONTENTS	6
1. Introduction.....	8
1.1 Background.....	8
1.2 Objectives	8
1.3 Research questions.....	9
1.4 Methodology	9
1.5 Scope and use of terms	10
2. Trafficking in Human Beings for the Purpose of Organ Removal as a Violation of Ethics and Bioethics	16
2.1 Introduction.....	16
2.2 Method	16
2.3 General ethical arguments against THBOR	17
2.4 THBOR as a violation of biomedical ethics	17
2.5 Ethical responses to THBOR	18
2.6 Conclusion	19
3. Causes of Trafficking in Human Beings for the Purpose of Organ Removal	20
3.1 Introduction.....	20
3.2 Organ scarcity.....	20
3.3 Global processes and asymmetries.....	24
3.4 Local causes.....	26
3.5 Reflections on causes for THBOR	27
4. The network of trafficking in human beings for the purpose of organ removal.....	28
5. Organ Recipients.....	29
5.1 Introduction.....	29
5.2 Situation and background	29
5.3 Means of organ retrieval.....	30
5.4 Role, process and facilitation of THBOR.....	31
5.5 Gaps in the literature	32
6. Organ Suppliers	34
6.1 Introduction.....	34
6.2 Background, situation and common characteristics.....	34
6.3 The organ supplying process.....	36
6.4 Discussion – THBOR or not?	38

6.5	Gaps in the literature	40
7.	Brokers	41
7.1	Introduction.....	41
7.2	Background and common characteristics	41
7.3	Modus operandi	42
7.4	Involvement in THBOR	43
7.5	Gaps in the literature	45
8.	Transplant Professionals	46
8.1	Introduction.....	46
8.2	The involvement of transplant professionals in THBOR	46
8.3	Gaps in the literature	48
9.	Other Facilitators	49
9.1	Introduction.....	49
9.2	Hospitals	49
9.3	Service providers	50
9.4	Translators.....	51
9.5	Law enforcement officials	52
9.6	Gaps in the literature	52
10.	Degree of Cooperation	53
11.	Other Criminal Activities	54
12.	Financial Aspects of Trafficking in Human Beings for the Purpose of Organ Removal.....	55
12.1	Introduction.....	55
12.2	Amounts of money received by organ suppliers	55
12.3	Amounts of money paid by organ recipients	58
12.4	Illegal profits obtained by facilitators	59
12.5	Gaps in the literature	60
13.	Conclusion	61
	REFERENCES	63
	APPENDIX I: LITERATURE SEARCH STRATEGY.....	76

1. Introduction

Frederike Ambagtsheer, Willem Weimar, Assya Pascalev, Susanne Lundin, Martin Gunnarson, Ingela Byström and Jessica de Jong

1.1 Background

Trafficking in human beings for the purpose of organ removal (THBOR) is prohibited worldwide, yet a growing number of reports indicate its increase across the globe. Many countries in and outside the European Union (EU) have implemented proper legislation against THBOR. However, information regarding the incidence of THBOR and the non-legislative response to it is practically non-existent and unavailable to judicial and law enforcement authorities in the EU member states. Transplant professionals, human rights NGOs and international organizations also have little knowledge and awareness of the crime (1). This knowledge gap hampers the development of a structured and effective action to this repugnant form of human trafficking, which brings physical and psychological harms to vulnerable individuals.

1.2 Objectives

The HOTT project has four objectives aimed at addressing the knowledge gaps and improving the non-legislative response to THBOR. These objectives are:

- to increase knowledge about THBOR
- to raise awareness among target groups
- to organize an expert meeting where organ trafficking experts and competent authorities can express their views on project results
- to provide recommendations to improve the non-legislative response

This report contributes to the first objective: to gather information and increase knowledge about THBOR. It does so by describing the state-of-the-art of literature on the ethical aspects, causes and the actors involved in THBOR.

1.3 Research questions

This review follows the structure of our research questions.

Research Questions

Question 1:

What are the ethical aspects and causes of trafficking in human beings for the purpose of organ removal?

Question 2:

- a. What is the existing information on the incidence and nature of trafficking in human beings for the purpose of organ removal?
- b. What knowledge do we have from existing research regarding the role and modus operandi of the actors involved; i.e., recipients, suppliers, brokers, transplant professionals and other facilitators?

Question 3:

What are the knowledge gaps which should be filled by future research?

1.4 Methodology

The authors performed thematic literature searches on the subject of their respective chapters. The searches were carried out in databases that contain literature on the trafficking of human beings for organ removal from a wide range of disciplines. The following data bases were searched: EbscoHost, Library of Congress Catalog, OAlster, PubMed, Scopus, EthxWeb, GoogleScholar, Web of Science, Medline OvidSP and Cochrane.

The searches were based on key words provided by the project partners. The key words were: 'commercial transplants', 'buying organs', 'kidney sales', 'organ trade', 'organ trafficking', 'organ tourism', 'organ brokers', 'organ trafficking chain', 'organ sales', 'selling organs', 'trafficking in persons for the purpose of organ removal', 'transplant tourism', 'recruitment', 'organ market', 'organ vending'.

Records were assessed based on eligibility criteria. The following records were excluded: off-topic records including tissue, blood, gamete, cell, bone marrow and all other articles not related to organ donation and transplantation; non-English titles; and all records published before 1 January 2000.

Appendix 1 enclosed to this report presents the detailed search strategy.

Priority was given to scientific works that present data based on qualitative and/or quantitative study methods. Studies that lacked (a clear description of) methodologies were carefully scrutinized and used only if they could be backed up by secondary, scientific sources. Care was also taken with the use of media sources, such as website contents and newspaper articles. We only used these sources if they could be confirmed by scientific studies.

1.5 Scope and use of terms

1.5.1 Introduction

The HOTT project is a response to the call by the European Commission Directorate General Home Affairs for project proposals against *trafficking in human beings*. This call prioritized research into new forms of human trafficking, including human trafficking for the purpose of organ removal (2).

The primary scope of this project is *trafficking in human beings for the purpose of organ removal*. Consequently, this crime is the main focus of this report. We do not focus on other definitions and forms of the organ trade.

THBOR is defined and prohibited in Article 4 of the Council of Europe Convention on Action against Trafficking in Human Beings (3) and the Directive 2011/36/EU of the European Parliament and of the Council (4). THBOR is also criminalized in Article 3 of the United Nations (UN) Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children (hereafter Palermo Protocol) (5) which supplements the UN Convention against Transnational Organized Crime (UNTOC) (6). THBOR is further prohibited by the Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography (7).

Trafficking in Human Beings for the Purpose of Organ Removal

The definition used in this report, and according to Article 3 of the Palermo Protocol is as follows:

Article 3 Palermo Protocol

“For the purposes of this Protocol:

- (a) *“Trafficking in persons” shall mean the recruitment, transportation, transfer, harbouring 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 or of a position of vulnerability or 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. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labour or services, slavery or practices similar to slavery, servitude or the removal of organs;*
- (b) *The consent of a victim of trafficking in persons to the intended exploitation set forth in subparagraph (a) of this article shall be irrelevant where any of the means set forth in subparagraph (a) have been used [...].” (5)*

From discussions during the development of the Palermo Protocol and, more recently, in the Working Group on Trafficking in Persons, it is clear that organs envisaged by the Palermo Protocol include *kidney, liver, heart, lung, and pancreas*. The removal of human cells and tissues is not covered by the Protocol (8).

The definition of THBOR includes three key elements:

- an **action** being recruitment, transportation, transfer, harboring or receipt of persons;
- a **means** by which that action is achieved: threat or use of force, or other forms of coercion, abduction, fraud, deception, abuse of power or abuse of a position of vulnerability, and the giving or receiving of payments or benefits to achieve consent of a person having control over another person;
- a **purpose** of the intended action or means: exploitation (5).

Under international law, all three elements must be present to constitute ‘trafficking in persons’. The only exception is when the victim is a child; in such cases it is not necessary to prove that one of the acts was accomplished through the use of any of the listed “means” (9).

Furthermore, article 3(b) of the Palermo Protocol emphasizes that the consent of the victim to the intended exploitation shall be *irrelevant* where any of the means set forth in subparagraph (a) have been used (5). In other words, it is legally impossible to consent to being exploited for the purpose of organ removal, when the consent has been obtained through threat or use of force, coercion, abduction, fraud, deception, abuse of power or vulnerability, or giving payments or benefits. Trafficking can take place within as well as between countries, and for a range of exploitative purposes including organ removal (10).

1.5.2 Commentary on the definition

We acknowledge the ambiguity of the definition of THBOR, including its elements. The parameters around what constitutes ‘trafficking’ are not firmly established in the literature (9). Various definitions are given of ‘coercion’, ‘abuse of a position of vulnerability’, ‘exploitation’ and other relevant terms (8). These definitions are broad and vague, adding to the complexity rather than clarifying the terms.

The trade in human organs takes on a wide variety of forms. Consequently, the literature on organ trade varies widely. It often consists of vague, broad and loaded terms, such as “donors”, “buyers”, “sellers”, “trade”, “transplant tourism” and “trafficking”. These terms are used interchangeably, which causes confusion rather than clarifying situations and actions.

As a result of the complexity of these terms and definitions, in the literature, it is not always clear whether a certain situation constitutes THBOR. For instance, we encountered articles about persons receiving money after “selling” an organ, yet these articles often lack information about the circumstances under which the “organ sale” took place. There are often no indications whether any of the listed means, such as threat or deception, have been used. Besides the complexity of terms, we recognize that we are not in a position to establish – *legally* – whether an action or situation presented in the literature involves THBOR.

For these reasons, in those instances where the definition of THBOR and its elements fail to clarify concepts or situations, the authors of this report adopt ‘a working definition by description’, describing actions, persons and situations by using as ‘neutral’ terms as possible. In the consecutive chapters these actions and situations are described and analyzed in order to establish whether specific cases constitute THBOR.

Below we present the definitions and terms we use throughout this report. Where possible, definitions are derived from the existing literature, including the Palermo Protocol, the UNTOC, their *travaux préparatoires*,¹ and other national and international instruments. In some cases, examples are given from existing national laws. Others are presented as ‘working definitions’.

1.5.3 Definitions

Trafficked person

Victim of trafficking; any natural person who has been subject to trafficking in persons.

Organ supplier

A person who supplies an organ.

Organ recipient

A person who receives an organ transplant, also known as *patient*.

Organ donor

A person who donates one or several organs, whether the donation occurs during lifetime or after death (11).

Organ seller

A person who benefits financially and/or materially when an organ is removed from that person’s body.

Black market of organs

An illegal market for organs, which market coexists with the legal systems for organ retrieval.

Transplant commercialism

A policy or practice, in which an organ is treated as a commodity by being bought or sold or used for material gain (12).

Travel for transplantation

The movement of organs, donors, recipients or transplant professionals across jurisdictional borders for transplantation purposes (12).

¹ The *travaux préparatoires* ("preparatory works") are the official records of a negotiation. They are often useful in clarifying the intentions of a treaty or other instrument.

Organ advertising

Advertising the need for, or availability of, organs or tissues, with a view to offering or seeking financial gain or comparable advantage (13).

Organ

A differentiated part of the human body, formed by different tissues, that maintains its structure, vascularization and capacity to develop physiological functions with a significant level of autonomy. A part of an organ is also considered to be an organ if its function is to be used for the same purpose as the entire organ in the human body, maintaining the requirements of structure and vascularization (11).

Organ transplantation

A process intended to restore certain functions of the human body by transferring an organ from a donor to a recipient (11).

Abuse of a position of vulnerability

Abuse of a position of vulnerability (APOV) is an additional means through which individuals can be recruited, transported, received, etc. into situations of exploitation. No precise definition is provided in the Palermo Protocol. The *travaux préparatoires* confirms that its exact meaning was disputed during the drafting of the Protocol (9). For the purpose of our study, we use the following definition, taken from the UN Model Law against Trafficking in Persons (14):

APOV shall mean either, “any situation in which the person involved believes he or she has no real and acceptable alternative but to submit”, or: “taking advantage of the vulnerable position, in which a person is placed in virtue of: having entered the country illegally or without proper documentation; pregnancy or a physical or mental disease or disability of the person, including addiction to the use of any substance; reduced capacity to form judgments by virtue of being a child, or having an illness, infirmity; physical or mental disability; promises or giving sums of money or other advantages to those having authority over a person; being in a precarious situation from the standpoint of social survival; other relevant factors” (14).

The commentary attached to these definitions confirms *“the open-ended nature of the list of vulnerability factors, noting that other elements, such as abuse of the economic situation of the victim could also be included” (14).*

These definitions are relevant for our subject matter, for it answers the question whether the scenario where an organ donor consents to sale of his or her organ but does so out of a *position of vulnerability*, constitutes trafficking. Country surveys confirm that ‘recruitment’ is the act most frequently cited in connection with APOV. The key component is *knowledge* of the

offender of the position of vulnerability of the victim, and henceforth *abusing* that position to recruit the vulnerable person for removal of his or her organs (9). Likewise, coercion, abduction, fraud, deception, and the giving or receiving of payments or benefits to achieve the consent of a person having control over another person also constitute cases of THBOR. These terms are further defined below.

Coercion

Coercion is an umbrella term, used in the trafficking context to refer to a range of behaviors including violence and threats, as well as APOV (10). Many definitions of it exist (14). For the purpose of our study, we use the following definition: 'Coercion' shall mean the use of force or threat thereof, and some forms of non-violent manipulation or threat thereof, for the purpose of (including but not limited to) organ removal (8).

Deception

'Deception' shall mean any conduct that is intended to misrepresent information or to give false information to a person (8).

Exploitation

Whereas the UN Model Law defines different instances of exploitation, including 'forced labor', 'slavery', and 'practices similar to slavery and servitude', it lacks a definition of 'removal of organs' in the context of exploitation (14). 'Exploitation of prostitution of others', for instance, is defined as "the unlawful obtaining of financial or other material benefit from the prostitution of another person"(14). For the purpose of this study and in the context of 'exploitation', 'organ removal' is defined as follows: *"Exploitation of a person for the purpose of organ removal shall mean the unlawful gain of financial or other material benefit as a result of the removal of an organ from another person."*

2. Trafficking in Human Beings for the Purpose of Organ Removal as a Violation of Ethics and Bioethics

Assya Pascalev and Jordan Yankov

2.1 Introduction

The practice of trafficking in human beings for the purpose of organ removal is not only a serious legal, policy and social issue. THBOR is also recognized as a major violation of the fundamental principles of secular humanist ethics in general and biomedical ethics in particular. The practice of THBOR has far-reaching implications for the welfare of the trafficked person and the recipient, and for the integrity of the medical profession and the field of transplantation. The ethical challenges posed by THBOR are multifaceted as the issue itself and have been discussed by scholars from a variety of fields such as philosophy (15-28), jurisprudence (27, 29-31), anthropology and medicine (24, 26, 32-38), all of whom condemn the practice. While scholars agree that THBOR as ethically abhorrent, they differ in their accounts of what makes THBOR unethical and what constitutes an ethically appropriate response to it.

In this chapter, we present an overview of the major ethical violations involved in THBOR, the ethical debates surrounding this activity, and the various ethical responses to THBOR proposed in the literature.

2.2 Method

The purpose of ethics is to determine whether a practice is right or wrong using the methods of logic, philosophical analysis and rational justification. The criteria for what is ethically right or wrong are defined in ethical theories, which offer comprehensive accounts of what makes actions good or bad, moral or immoral from a secular point of view. The classical ethical theories are deontology (or duty-based theory), consequentialism and virtue ethics, which were supplemented by feminist ethics and rights-based ethics in the 20th century. Biomedical ethics is a sub-field of ethics, which uses ethical theories to evaluate the ethical permissibility of various medical practices. Biomedical ethics rests on four fundamental principles, on which the different theories converge and which principles are believed to express the nature of medicine. These are: the principle of beneficence giving rise to the obligation to do good, the principle of respect for personal autonomy and self-determination, the principle of non-maleficence prohibiting physicians from harming patients intentionally, and the principle of justice requiring equitable distribution of benefits and burdens in health care (39). The principles of biomedical ethics are codified in various national and international laws, policies, regulations and

professional standards such as the Convention on Human Rights and Biomedicine (40), the Additional Protocol to the Convention on Human Rights and Biomedicine (13), the World Health Assembly's Guiding Principles on Human Organ Transplantation (39), the Declaration of Istanbul on Organ Trafficking and Transplant Tourism (12), EU Directives (4) and the World Medical Association's Code of Medical Ethics (41).

In the literature, THBOR is condemned both on general ethical grounds and on bioethical grounds. Authors who focus on the general ethical aspects of THBOR denounce the practice by appealing (explicitly or implicitly) to one of more of the dominant ethical theories (17, 26, 27, 33-35, 42, 43), while those who criticize THBOR on bioethics grounds decry the practice as a violation of the principles of bioethics, the ensuing requirements of informed consent (15, 16), and the integrity and ethos of medicine (15-17).

2.3 General ethical arguments against THBOR

In the ethics literature, the arguments against THBOR which appeal to general ethical theories can be grouped into several categories listed here in no particular order:

1. THBOR is morally wrong because it violates the ethical principles of equity, justice and respect for human dignity (26-28).
2. THBOR objectifies and dehumanizes the trafficked individual and reduces him/her to a source of organs (27, 44).
3. THBOR commoditizes organ procurement and transplantation (30). Commodification is "the production of a good or service for money" (Dennis Soron & Gordon Laxer 2006 as cited in Panjabi) (43). Commodification provides incentives to perpetuate human trafficking (28).
4. THBOR is a form of exploitation of those who are already socially disadvantaged (27, 30, 44).
5. THBOR violates the autonomy of the trafficked individual by coercing vulnerable persons into giving up an organ and deceiving them by not paying (35).
6. THBOR has harmful consequences to: (a) the trafficked person (35, 37, 38); (b) the medical profession, and (c) to the organ recipient, who may receive a suboptimal or damaged organ.

2.4 THBOR as a violation of biomedical ethics

Those who analyze THBOR from the perspective of biomedical ethics, stress that the practice violates a number of bioethical principles and values, namely:

1. THBOR violates the bioethical principle of non-maleficence (16, 27).
2. THBOR violates the bioethical principle of autonomy (15, 27).

3. THBOR violates the requirement for voluntary, free informed consent (15, 33). Many authors argue that those who agree to sell an organ, do so on the basis of bound rationality due to dependency and vulnerability (15).
4. THBOR violates the principles of justice by placing the burden exclusively on the trafficked person without a benefit to that person and at a great cost to him or her (15, 33).
5. THBOR damages the integrity of the medical profession (27).
6. THBOR undermines the public trust in organ transplantation (45).

2.5 Ethical responses to THBOR

While there is a wide consensus that THBOR is morally reprehensible, certain elements of it such as one's liberty to sell one's organs, compensation for living donors and the creation of regulated markets for organs have been debated and viewed less negatively by certain authors. These differences are reflected in the range of proposed responses to the morally repugnant practice of THBOR. The responses can be grouped as follows:

1. ***Strengthening the legal regulations and enforcement actions.*** Bagheri and Delmonico argue that although there already exists an internationally legally binding agreement against THBOR, a wider legislative response should be adopted against organ trafficking. They write *“that an international legally binding agreement in criminalizing organ trafficking would be a step forward to bring a change in the global picture of organ trafficking and transplant tourism”* (32). Delmonico calls for full implementation of the Istanbul Declaration on organ trafficking and transplant tourism by developing of *“a legal and professional framework in each country to govern organ donation and transplantation activities. It calls for a transparent regulatory oversight system that ensures donor and recipient safety and enforces the prohibitions of unethical practices. Governments should ensure the provision of care and follow-up of living donors be no less than the care and attention provided for transplants recipients”*(25). Banning of organ sales and harmonizing the national and international legislation on THBOR are viewed as necessary steps of the proper response (33).
2. ***Increasing deceased donation and building national self-sufficiently in the sphere of organ transplantation*** are emphasized by Budiani-Saberi and Delmonico (33) in addition to the legislative responses outlined in 1 above.

3. ***Prioritizing the care and protection of the trafficked persons (victims)*** over law enforcement measures and concerns for the state interests is the focus of recent feminist and human rights approaches (31).
4. ***Reducing THBOR by reducing scarcity.*** This point is the most contentious one and several radically different approaches are proposed. It includes the measures proposed in 2 above (increasing deceased donation and national self-sufficiency) but go well beyond capacity building measures. Thus, some authors argue for reducing scarcity by imposing stricter eligibility criteria which excludes infants, those over 70 years of age and patients with a history of organ rejections (32). Others argue for creating a regulated market of organs (12, 38, 46). There is also a growing number of works, which debate the morality of organ sales and commercialism with proponents and opponents on both sides of the issue. A novel and still underexplored proposal is to eliminate THBOR by developing alternative sources of transplantable organs using advanced biotechnology i.e., xenotransplantation, organ cloning and stem cell therapy (25, 47).

2.6 Conclusion

In the ethics literature on THBOR, there is a consensus that THBOR is morally repugnant. The debates concern the different accounts of what makes it so with some authors focusing on the negative consequences of THBOR, and others emphasizing the intrinsic immorality of THBOR because of the violations of ethical principles, values, human rights and professional virtues involved in THBOR.

3. Causes of Trafficking in Human Beings for the Purpose of Organ Removal

Susanne Lundin, Martin Gunnarson, Ingela Byström, Frederike Ambagtsheer, Willem Weimar and Mihaela Frunza

3.1 Introduction

This section presents an overview of the state of literature regarding the causes of trafficking in human beings for the purpose of organ removal. We give a general description of the many and complex reasons underlying THBOR. We highlight three overarching causes:

- Organ scarcity
- Global processes and asymmetries
- Local causes

We conclude with some brief reflections.

3.2 Organ scarcity

Since the first transplant kidney in 1954, solid organ transplantation has extended to include liver, heart, lung, pancreas and bowel transplantation. In 2010 106,879 solid organ transplantations were performed worldwide. Of these, 73,179 were kidney transplantations, 21,602 were liver transplantations, 5,582 heart transplantations, 3,927 lung transplantations, and 2,362 pancreas transplantations (48). However, despite the increasing number of transplantations being performed worldwide, the demand for organs far outpaces the number of organs that become available for donation. With the aging of populations and growth in heart and vascular diseases, demand for transplantation is increasing exponentially. For each of the aforementioned organs, transplant waiting lists exist. For example, at the end of 2010 in the European Union, 47,773 patients were waiting for a kidney, whilst 18712 kidney transplants (both living and deceased) were performed (49). The average waiting time for a deceased donor kidney in these countries is now 3-5 years. An estimated ten people in the EU die every day waiting for an organ. Annual mortality rates range from 15 to 30 per cent (49). In the Eurotransplant region, 15,605 patients were waiting for an organ on January 1, 2011. In this region, a total of 6683 transplants took place in 2010 (50).

3.2.1 Organ scarcity as a cause for THBOR

In the literature, the scarcity of organs is the single most common explanation given for the existence of THBOR (1, 51-57). According to this explanation, the root cause for THBOR is the

existence of a demand for organs far outpacing the supply. Many articles refer to the desperation felt by organ failure patients faced with long waiting times and the uncertainty of whether or not they will receive an organ before it is too late. Such feelings of desperation, the literature suggests, lead patients to take desperate measures, that is, to buy an organ on the illegal market (1, 52, 53, 58). However, this illegal market would not exist, several writers claim, were it not for the existence of persons willing to capitalize on the asymmetry between the demand and supply of organs. Utilizing this asymmetry, so called “organ brokers” emerge who facilitate and organize the transactions of money and body parts both, making extensive profits in the process (52, 59).

3.2.2 Causes for the organ scarcity

Why, then, according to the literature, is there a shortage of organs? And why do patients from some countries to a larger extent than patients from other countries tend to go abroad for transplantation? The first question is a complex one and beyond the scope of this report to fully exhaust. However, we want to briefly mention some of the various standpoints on this matter that are present in the literature. To fully understand these standpoints, however, it is necessary to distinguish between those who target the low supply of organs and those who target the high demand. The former far outnumbers the latter. In the literature, it is way more common to be concerned with the low supply of organs than the high the demand thereof.

There is, however, as we saw in the chapter on the ethics of THBOR, far from any consensus among scholars about why there is a low supply of organs for transplantation. Some see it as an informational and organizational problem (60, 61); people simply do not have enough knowledge about the life-saving capacity of organ transplantation and there is not any efficient system in place for informing citizens about it and confronting them with the decision of whether or not to donate.

Others contend that the potential of deceased donation is not utilized fully. Not all countries even perform deceased donor transplants, especially developing countries. Akoh et al. refer also to the lack of suitable legislation and infrastructure in developing countries, which includes scarce dialysis facilities, lack of vascular access service, and lack of manpower to perform transplants (61). Of the 91 countries worldwide that perform kidney transplants, 67 perform transplants from deceased donors. 88 countries perform living kidney transplants (46). In developing countries, living donors are the major source of transplantable kidneys (61). Added to this is the problem of the lack of registered donors in countries that do perform deceased donor transplants. This is a shortage that almost all such nations struggle with, which leads some to argue for the implementation of an opt-out system or a presumed consent system, where it is assumed that people want to donate their organs unless they have registered their desire not to (62). Research shows, however, that there are countries with a presumed consent

system with much lower rates than countries with opt-in systems, which means, as Rithalia et al claim, that only the legislative system is not enough in improving organ donation rates (63).

Several scholars furthermore see the low supply of organs as a consequence of the fact that living donation is not carried out to its full potential. In these scholars' view, across countries, there exist legal barriers to live donation (64). Consequently, they argue for an expansion of the criteria under which such donations may be performed. This argument in itself, however, accommodates several standpoints. While some favour the expansion of 'indirect' and 'unspecified' (65) live donations, others argue for the implementation of a regulated market for the buying and selling of organs from living persons (66-68). The latter is a highly contested issue. But the establishment of such a market is often assumed, both by its proponents and opponents, to drastically increase the supply of organs for transplantation (69). Thus, without having exhausted the subject, we can see that there exist many different views on what may cause the low supply of organs for transplantation.

Much less discussed, however, are the causes for the high demand. The successful development of transplant medicine and its capacity to expand its activities to include an ever-growing number of patients is instead often taken as an unquestionable point of departure for the discussion on the low supply. There are however some writings concerned with trying to explain the high demand for and big appeal of organ transplantation. These are not infrequently written by social scientists interested in the sociocultural contexts and consequences of biomedical practices, scholars who claim that medical technologies such as organ transplantation are charged with ideological and cultural meanings. One such meaning, which according to anthropologists Kierans and Crowley-Matoka has gained global spread, is the image of organ transplantation as a straightforward, mechanically routine treatment, which not only saves the patient's life but also brings it back to normal again (70, 71). Added to this image, Lock and Nguyen amongst others emphasize, is furthermore the dream of the ever-reborn, of the regenerative body, which is one of the most fundamental conceptual structures that pervade today's Western society, they contend (72-75). Within this conceptual structure, Waldby and Mitchell argue, transplantation comes to function as a "hope technology," through which the hope of the regenerative body is nourished (60). Thus, what these scholars claim is that, in the contemporary, organ transplantation becomes more than a life-saving treatment. It becomes a symbol for the potential of medicine to, in a not so distant future, completely eradicate disease. Accordingly, the cause for the high demand for transplantable organs is to be found, these writers contend, not just in the notion of the life-saving and normality-restoring capacity of transplantation, but also in its role as a hope technology, fuelling the dream of the regenerative body.

Now to the second question with which we began this paragraph, which concerned the issue of why it is that citizens of some countries seem more likely to become organ buyers than citizens of other countries. Again, according to the literature, this has to do with the scarcity of organs. As a consequence of cultural and religious taboos, deceased donation has long been almost non-existent in several countries, causing severe shortages of organs. In Middle Eastern countries, for example, religious teachings discourage and in certain areas even prohibit cadaveric organ donation. Islamic teachings emphasize the need to maintain the integrity of the body at burial. In Israel – one of the largest organ buying countries – organ donation rarely occurs because the (Jewish) idea of having a deceased relative whose body is incomplete prior to burial or cremation is associated with misfortune. So too, Asian concepts of bodily integrity, the respect to elders and objections to brain death standards make cadaveric organ donation in countries such as Japan scarce (76).

However, some qualifications need to be made here since, although the literature provides distinct examples of the connection between the low supply of organs and sociocultural patterns, it is necessary to take into account the complex situation in most countries worldwide regarding organ transplants. Very few countries and religions officially disapprove of organ donation. Thus it is necessary to make a distinction between what a religion officially states, as for example being open towards organ donation, and some religious practices that hamper organ donation (63, 77, 78).

3.2.3 Voices critical to the scarcity explanation

As illustrated above, a lot has been written about the scarcity of organs for transplantation as a cause for THBOR. Some scholars have however criticized and attempted to nuance this explanatory model. Scheper-Hughes, for instance, argues that the shortage in organs is in fact an artificial need, an invented scarcity, created by the global medical community by promising an ever-growing population of patients the life-saving capacity of organ transplantation (36, 79, 80). The “discourse on scarcity” that is thus the result, with its focus on a deficient supply rather than an excessive demand, is what fuels the demand for organs, Scheper-Hughes contends (79)p.198). In line with several other scholars, such as Budiani (81), Mendoza (82-84) and Vora (85), Scheper-Hughes furthermore points out that the discourse on scarcity fails to account for the surplus of organs and willing donors that exist in certain parts of the world. In some countries, she writes, “the real scarcity is not of organs but of transplant patients of sufficient means to pay for them” (79) p.199). Similarly, Budiani addresses “the global economic split” between affluent countries, where there tend to be waiting lists for potential organ recipients, and poor countries, where there are sometimes waiting lists for persons willing to donate or sell an organ (81). Thus, in the literature, several voices are raised criticizing and attempting to nuance the scarcity explanation.

3.3 Global processes and asymmetries

In the following we present causes of THBOR that concern global processes and asymmetries. Next after the scarcity explanation, these are the most common causes indicated in the literature. Accounting for these in their entirety is however beyond the scope of this report. Consequently, we have selected writings that represent two perspectives: cultural analytical and criminological.

3.3.1 Cultural analytical perspectives

A majority of the writings that employ a cultural analytical perspective, first of all, supplement the scarcity explanation given above with one that addresses the inequalities that increasingly define our world. “The flow of organs follows the modern routes of capital,” anthropologist Nancy Scheper-Hughes writes, with which she means that the same global structures that allow first-world companies to capitalize on third-world natural assets and cheap labour also facilitate the trade in human organs. In the wake of the modern “neoliberal globalization” and its “global economy,” she writes, the bodies of the poor are increasingly turned into commodities possible to circulate on an international market (79, 86), see also (60, 87-91).

However, in the case of THBOR, the literature indicates, market forces are not a sufficient explanation. In order for THBOR to take place, the commercialization of body parts, fundamental to it, has to pair itself with the powers of contemporary biomedicine (92). According to several scholars, in diagnosing, treating and successfully curing disease, biomedicine inevitably objectifies and fragments the human body. Organ transplantation is a perfect example of this, Sharp and Lock and Nguyen argue, since it fragments the human body into a number of replaceable organs defined by their function (72, 90). Here, the introduction on the market of the immunosuppressive drug cyclosporine, some writers suggest, has been instrumental in freeing the bodies of potential organ recipients and donors from their local dwellings, allowing the exchange of organs to become truly global (91, 92).

Thus, it is only when contemporary market forces are paired with the objectifying and fragmenting healing powers of biomedicine that the organs of the poor become “bioavailable,” as anthropologist Cohen puts it (93). According to the scholars presented in this paragraph, hence, the joint forces of the globalized market and contemporary biomedicine not only cause the realization of the phenomenon of THBOR as such but also determine its nature. It is through this particular configuration that the flow of organs from poor people from the southern and eastern hemispheres to rich people from the northern and western hemispheres is facilitated.

3.3.2 Criminological perspectives

Criminological theories of the trade in human organs emphasize the influence of globalization processes. Beck and Camiller refer to globalization as *“the processes through which sovereign national states are criss-crossed and undermined by transnational actors with varying prospects of power, orientation, identities and networks”* (94). According to these theories globalization has helped establish numerous licit (and illicit) global enterprises that flourish within a new global, capitalist economy. Market prices are determined by supply and demand. States are becoming increasingly dependent on the global market and on each other, as economic gains are realized through trade (95). The growth of the new global capitalist economy however has surpassed the development of a mediating global society equipped with necessary moderating and regulatory functions to safeguard human rights. The neoliberal paradigm, that is to say the ideology that endorses power of a competition-driven market model is dominant (96).

The argument here is that the expansion of a global capital market does not involve the expansion of legal markets alone. As corporate and other actors become increasingly transnational, so do illegal enterprises (97, 98). Passas maintains that different forms of cross-border crime produce asymmetries with complex criminological effects. In other words, criminal activities occur when criminogenic asymmetries are present. He defines these asymmetries as ‘structural disjunctions, mismatches and inequalities in the spheres of politics, culture, the economy and the law’ (99). Firstly, asymmetries are criminogenic in that they cause or strengthen the demand for illegal goods or services. Secondly, they generate motives for particular actors to participate in illegal businesses. Thirdly, the asymmetries decrease the ability (or willingness) of authorities to control the illegal activities (99).

The fuzzy line between legal and illegal corporations is referred to as *black markets*. A black market is an underground economy of both *legal and illegal* goods and services that exists parallel to legal markets. In these economies income is not reported and consequently taxation and detection is evaded, either through money laundering, payments in cash or other means. In black markets goods (contraband) and services are obtained illegally (i.e. stolen), which are then moved and sold to resellers or end users (100). Another essential element of black markets is that licit and illicit exchanges overlap. In this regard Passas argues: *“If the goods or services happen to be outlawed, then illegal enterprises will emerge to meet the demand. In this respect, there is no difference between conventional and criminal enterprises. Very often, all that changes when the business is illegal are some adjustments in modus operandi, technology and the social network involved. In some cases we have a mere re-description of practices to make them appear outside legal prohibitive provisions”*(101) (p.56).

Black markets do not merely flourish because goods or services are or have become outlawed. They also exist because there may be a *scarcity* of legal goods. This happens when the demand for a good exceeds the supply, such as with human organs for transplantations. Black markets thrive because there is a remaining demand for what they offer. For this reason Taylor has argued that, *“if we are concerned about reducing the abuses of the black market for human kidneys, we should favour the legalisation of kidney markets, not their continued prohibition.”* (102). Ambagtsheer and Weimar emphasize the resilience of demand-driven crime to prohibition. They claim that prohibition of organ trade may drive up prices, provides illegal income, displaces crime to other regions and may go underground, resulting in higher crime rates and victimization (103). In black markets conventional crime often meets and becomes friendly with legal actors. Ruggiero stresses the importance of partnerships in this regard . He writes that criminal groups both teach and learn criminal activities from their legitimate counterparts rather than the other way around (98).

3.4 Local causes

Several scholars emphasize, however, that attending to global processes does not suffice if one wants to understand the causes for THBOR. One also has to take into account local conditions and contexts (91, 92, 104). Therefore we will briefly present three such conditions that are recurrently mentioned in the literature as causes for the existence of THBOR in particular national or regional settings. The first of these is corruption. According to Mendoza, for example, the existence of THBOR in Colombia can to a large extent be assigned to corrupt law-enforcement officials and other authorities turning a blind eye to the illegal activities of brokers and hospitals (82-84, 105). The second local condition that frequently emerges in the literature is the absence of laws regulating organ transplantation in general and organ trade in particular (52, 105). Several countries that have been deeply involved in the illegal trade in organs have only recently passed such laws, for example, Pakistan, the Philippines and Israel (106-108). Since these laws have been passed there are indications that the incidence of THBOR has decreased, at least in Israel and the Philippines (106, 108). In Pakistan the situation seems to be worse (105, 107). The last local condition frequently mentioned in the literature is the relative mundaneness and routineness that has come to characterize the act of selling an organ in some local settings. In the literature, there are several examples of regions or parts of major cities where a significant proportion of the, almost always gravely poor, population has sold a kidney. These places are not infrequently referred to in terms of “kidney-villes,” “villages of half men,” “kidney towns/villages or no-kidney islets,” places where, according to the literature, kidney sale has become an established way of attempting to make ends meet (83, 91, 93, 105). Thus, without nearly exhausting the subject, it is clear that local conditions are, together with global processes, seen as instrumental to the existence of THBOR.

3.5 Reflections on causes for THBOR

As we have pointed out in this chapter, causes for THBOR are varied and not infrequently ideologically charged. The medical development combined with cultural patterns of thought about how technology should be used, gives a complex picture. This means that analysis of what are 'causes' often coincide and are fused with other phenomena that make THBOR possible. One example that illustrates the difficulties to sort out what is what, are the (although quite rare) analyses of the Internet's impact on THBOR. In some writings, for example, Internet is at the same time described as a 'cause' and a 'facilitator' for THBOR.

4. The network of trafficking in human beings for the purpose of organ removal

Trafficking in human beings for the purpose of organ removal involves a number of actors. In the following chapters, we introduce and characterize the known actors in the process of THBOR and describe their modes of operation as identified in the existing literature. These actors are recipients (chapter 5), suppliers (chapter 6), brokers (chapter 7), transplant professionals (chapter 8) and other facilitators such as hospitals, service providers, translators and law enforcement officials (chapter 9). The relations among the different actors are complex and varying, with some individuals occasionally acting in multiple roles, e.g. former suppliers and hospitals may operate as brokers. We also discuss what is known about the degree of cooperation of the actors (chapter 10) and about the extent to which they also profit from other types of crime (chapter 11). The final chapter (chapter 12) provides an overview of the state of the literature regarding the financial aspects (profitability) of THBOR.

5. Organ Recipients

Frederike Ambagtsheer and Willem Weimar

5.1 Introduction

In correspondence with the research questions presented in the first chapter of this report, this section presents a brief overview of the state of literature regarding organ recipients. We selected and analyzed 82 records to describe the background and situation of recipients, as well as their common characteristics. We then assessed how these recipients received organs and whether they received these organs through THBOR. The final paragraph identifies the gaps in the literature.

5.2 Situation and background

The most commonly used term in the literature is ‘patients’ (109, 110) and to a lesser extent, ‘recipients’ (111). Occasionally we encountered the term, ‘buyer’ (86, 109, 112). The majority of articles focus on patients who travel overseas for organ transplantations. All patients are diagnosed with end stage liver- or end stage kidney disease. Patients with renal failure are more likely to travel for transplants than patients with liver failure. Other organs were not identified (75, 109, 110, 112-154).

Recipients who travel for transplantation are often waitlisted for a transplant and undergo dialysis treatments (75, 112, 133, 136, 139, 147, 152, 155). Authors highlight that dialysis and desperation as a result of the long wait are the main reason for traveling abroad to purchase an organ (112, 123, 128, 129, 147). Not all patients who choose to travel for transplantation are waitlisted (113, 114, 122, 147), for instance because they are considered unsuitable and not fit for transplants (129, 136). Others leave pre-emptively (meaning before they undergo dialysis) (123). Yet others leave because their countries do not offer transplants (153, 156). Cronin et al. explain that in the United Kingdom, minority ethnic communities appear to be more likely to go abroad for transplantation, “given that they are least likely to receive organ transplants” (114). Berglund and Lundin refer to patients’ sense of alienation within the domestic health system and their feeling of being discriminated (112). Many studies do not mention the pre-transplant situation of patients (116, 117, 125-127, 129, 150). Patients who travel for transplants are referred to as the “rich” receiving organs from the “poor” (79). Some authors however indicate that this is not necessarily the case (1, 157).

Patients seeking organs abroad travel from countries across the globe. The most commonly reported destination country is China (109, 110, 113-115, 117, 118, 122, 124-126, 128, 133, 134, 139, 144, 146, 151, 152, 158-160), followed by Pakistan (110, 112-116, 123, 125, 126, 131-133, 136, 139, 153-155) and India (75, 114, 116, 133, 134, 139, 141, 145, 153, 161). The majority of studies do not mention the nationality, ethnicity or religion of the patients. Those that do mention one or more of these features, emphasize that patients who go abroad for transplants have an affinity with the country or region they travel to, for instance because the patients were born there (1, 112-114, 123, 124, 139, 162, 163).

Patients returning from transplants abroad are reported to suffer from various forms of post-operative complications, of which infections are the most common (122, 125, 129, 131-136, 140, 150, 164). It must be taken into account however that not all patients who go abroad suffer from such complications. In addition, these risks are not only inherent to transplants performed abroad. Patient- and graft survival of transplants overseas are also commonly lower than domestic recipients (114, 122, 125-127, 129, 152). Patients' medical records contain very limited information about the transplantation, such as the location and name of the transplant unit (125, 131, 146, 155, 160, 161, 165) or the organ source (119). If patients bring back information at all, it regards the operative report, immunosuppression regimen and post-transplant course (125, 131). Of those that do present info about organ suppliers, most studies report that suppliers are "living donors" (113, 115). Some studies highlight that suppliers are "unrelated" (110, 116, 117, 156). Few report that suppliers are "related" (112, 156).

5.3 Means of organ retrieval

Various means of organ retrieval can be identified. Commonly, patients fly on their own accord for transplants to countries that they have an affinity with, because they have the nationality of the country, have friends or family living there, or because they used to work or live there (1, 112-114, 123, 124, 139, 162, 163). Others leave upon recommendations from other patients (75, 147, 151). Some receive logistic and/or financial help from family or friends (1, 112). Those who travel to countries for the first time do so with the help of brokers (86, 147, 148).

Of all studies found, a small number of authors identify patients that "purchased organs". Not all patients travel to buy organs. Some purchase organs in their home countries (149, 154, 166). Patients are known to make payments in return for "organs" or "organ transplantations" to their "donors" or suppliers (112), to brokers (84, 148, 149), to hospitals (161), to "companies" and to doctors (75). The most common form of organ purchase is through a "transplant package" although it is unclear to whom or what the payment is made (75, 86, 109, 147-151, 154). Websites offering transplant packages seem to play an important role in facilitating transplants abroad (1, 109, 151). However the extent to which they are used by recipients

remains unknown. In Israel until 2010, patients could easily pay for transplants abroad, because their transplant costs were covered by their health insurance companies (106).

The studies that present indications of THBOR are further addressed below.

5.4 Role, process and facilitation of THBOR

We did not find any prosecutions and/or convictions of recipients for involvement in THBOR. One paper describes an investigation of a prospective Australian organ recipient who was suspected to have trafficked a woman from the Philippines with the intention of harvesting an organ (8). The Australian Federal Police however dropped the investigation after the patient passed away from her kidney disease (167).

Another study also indicates the active role of recipients in retrieving organs through THBOR. In his study about Bangladeshi “kidney sellers” Moniruzzaman describes how these sellers contact potential recipients, and that recipients then “attempt to convince them by portraying ‘kidney donation’ as a ‘noble act’ that saves lives and does not harm the donor. The recipients promise to bear all the expenses and compensate the ‘donors’ well. The author highlights that “once the sellers are induced, buyers [both recipients and brokers] extract their organs through deception, manipulation and without consent”. He characterizes the deception as “extensive,” meaning that both brokers and recipients do not pay suppliers the promised amount. Recipients further deceive prospective suppliers by telling them a story about the “sleeping kidney”, presenting the ‘donation’ as a win-win situation without any risks or harms involved. Moniruzzaman also describes how one prospective supplier was held captive at his recipient’s house by bodyguards, and that he was physically abused and threatened with jail while disputing the payment with his recipient (58).

From these sources it can be argued that recipients may be regarded as perpetrators of THBOR. However, from other studies such involvement in THBOR is less clear. For instance, newspapers describe the ‘reported arrest’ of an Israeli recipient after undergoing an illegal kidney transplant in Durban, South Africa. The patient was fined US\$800 by the Durban magistrate (168, 169). We did not find supporting sources however that could clarify the possible role of this recipient in THBOR. Berglund and Lundin write about a patient who travelled from Sweden to Pakistan to receive an organ directly from a “total stranger” and who “handed over the money himself” to the “female seller” (112). Scheper-Hughes writes that a patient from the United States was “cleared for a special budget transplant tour to Durban” (South Africa) where she met her “paid living kidney donor” who was “recruited by traffickers” (86). Lundin describes how a victim of trafficking was told that “a wealthy businessman paid a huge sum for her kidney”. In the end however, she received no payment for her organ (170). Whereas these sources present

indications of THBOR, the extent to which recipients are aware and (actively or passively) involved in THBOR remains unclear.

No papers were found that present patients as victims of THBOR. However, the detrimental outcomes of patients transplanted overseas seem to indicate that such transplants do not occur without risk. Because these studies do not present any indications of THBOR (most of them do not indicate any information of illegality), the link between transplants overseas, organ payments and THBOR remains unclear. Having said this, we argue that the risks involved with transplants abroad warrant closer scrutiny.

To conclude, literature about recipient involvement in THBOR is assumptive, inconclusive and rife of gaps. This prevents us from drawing firm conclusions on recipients' common characteristics and processes of facilitation. Other types of research with more in-depth methodologies are required in order to give a more comprehensive account of recipients' involvement in THBOR and their common features.

The limited information that we found on recipient involvement in THBOR does not mean that the crime does not exist. Rather, we argue that the published literature does not function as a sufficient source to explain or describe THBOR, nor does it suffice to describe common features and processes of facilitation of recipients that are involved in THBOR. These implications indicate that a different form of study is required to collect data on THBOR that is reliable and verifiable.

5.5 Gaps in the literature

Literature illustrates that many patients travel for transplantation, and that some pay for their organ transplants, yet there is very little information on whether these transplants involve THBOR. Consequently, we identify the following gaps:

- Knowledge about the incidence, nature and scope of patients' involvement in THBOR remains limited. For instance, it is unclear whether these patients can be regarded as perpetrators, victims or both. Many studies do not indicate the means or actions that patients employ to retrieve organs.
- Studies about patients commonly don't mention who their organ suppliers are. With some exceptions, it is unknown whether the suppliers were trafficked, whether recipients knew their suppliers and whether they have met their suppliers.
- There is lack of data to establish whether there is a link between 'THBOR' on the one hand and 'travel for transplantation' on the other.

- Studies about patients returning from transplants overseas do not mention the transplant unit where the transplant was performed, or information about the doctors that performed the transplant.
- The pre-transplant situation of patients varies. For this reason it is difficult to pinpoint the reason why some patients travel abroad for transplants, and others do not.

6. Organ Suppliers

Susanne Lundin, Martin Gunnarson and Ingela Byström

6.1 Introduction

This section presents a brief overview of the state of literature regarding persons who supply an organ as part of an illicit or illegal transplant scheme. Adopting the methods presented in chapter 1.4, we selected and analysed 38 records to describe the background, situation and common characteristics of the suppliers as well as the process that unfolds when they are recruited or recruit themselves into the transplant scheme. In correspondence with the research questions presented in the first chapter of this report, we then go on to discuss to what extent the cases presented in the literature constitute cases of THBOR. Lastly, we identify and account for the gaps in the literature.

The illicitness or illegality of the transplant schemes referred to in this section generally consists in the commercialism of the organ transfer, defined in chapter 1 as “transplant commercialism”. At present, the majority of the countries in the world prohibit the buying and selling of human organs (15). However, rather than referring to the persons who part with an organ within illicit or illegal schemes as organ sellers – a term that suggests that these persons always gain financially from the explanation – we refer to them as *organ suppliers*.

6.2 Background, situation and common characteristics

In the literature, many different terms are used to refer to persons who supply an organ within illicit or illegal transplant schemes. They are referred to as donors (52, 171, 172) sellers (36, 58) vendors (82-84, 105) providers (91) commercial living donors (173), commercial kidney donors (55), victims (15), compensated kidney donors (174) and so on. Thus, there seems to be little consensus among writers about what one should call persons who supply an organ within illicit or illegal transplant schemes, and, in effect, how one should characterize their role in this.

If one disregards this lack of consensus however, one will notice that the persons described share many characteristics. First of all, a majority of them come from what Yosuke Shimazono has called “organ-exporting countries” (52). These are predominantly poor developing countries – many of which are located in the southern or eastern hemisphere – or countries with a large proportion of the population living below the poverty line (79). A common denominator of these states is also that they frequently lack either the legislative or the non-legislative means to effectively prohibit and prosecute trafficking in human beings for the purpose of organ removal (15, 84, 105).

The organ-exporting countries identified by the literature are India, China, the Philippines, Pakistan, Bangladesh, Kazakhstan, Ukraine, Russia, Iraq, Jordan, Egypt, Romania, Moldova, Kosovo, Turkey, Israel, Brazil, Colombia, Peru and Bolivia (15, 36, 52, 53, 55, 58, 73, 75, 79, 81-84, 86, 91, 93, 104, 105, 112, 147, 170, 172-184). Iran is an exception here, since it is the only nation in the world that has legalized organ sales and implemented a national, regulated market. According to the laws governing this market, only Iranian citizens may receive an organ sold here. Thus, although there are many persons who sell an organ in Iran, it is not essentially an organ-exporting country (171). Similarly, several of the nations listed above are neither solely organ-exporting countries, since not all organs that are sold are bought by foreign citizens (58, 83, 84, 86, 173).

Another characteristic that unites the organ suppliers described in the literature is the severe poverty that the vast majority of them live under. Not only are they typically citizens of poor, organ-exporting countries, they are also ordinarily gravely poor themselves (15, 36, 52, 53, 55, 58, 73, 79, 82-84, 86, 91, 93, 105, 147, 170, 173-177). In a study conducted in Colombia, researchers found that around 83-91 per cent of the persons who sell one of their organs belonged to “the two lowest Colombian income strata” (82, p.69). According to the literature, when asked to report on their motivations for selling an organ, poverty, debt and the inability to provide for their families are constantly the top motivators among the suppliers (52, 53, 55, 82-84, 91, 93, 105, 173). A study conducted in Pakistan, among what the authors refer to as “kidney vendors,” found that as many as 93 per cent sold their kidney in order to repay debts (175).

Besides these economic factors, the organ suppliers described in the literature also share a number of socio-demographic characteristics. A majority of the studies report that suppliers regularly have a low level of education (53, 58, 82-84, 91, 105, 173). In a study conducted in Egypt it was found that as many as 62 per cent of the participating suppliers were illiterate (105, 173). A majority of those who part with an organ within an illicit or illegal transplant scheme are furthermore of a relatively young age. In such diverse places as Colombia, Egypt, Pakistan and the Philippines, the mean age of the suppliers was found to be around 30 years of age (81-84, 91, 173, 175). This clearly has medical reasons. On the organ market, “fresh” kidneys from young suppliers are the most desired goods (79, p.199). Another socio-demographic factor that most organ suppliers share is their gender. The vast majority of them are men. Of the 33 persons Monir Moniruzzaman interviewed for his ethnographical study in Bangladesh, only 3 kidney “sellers” were women (58). Similar findings have been made in Moldova, the Philippines, Egypt, Pakistan, Colombia and the Philippines (73, 81-84, 91, 173, 175). The exception here is India, where the majority of suppliers are women (177). According to anthropologist Lawrence Cohen, this has to do with the “operability” of female bodies in India. While women are seen as operable after they have fulfilled their reproductive responsibilities, men continue to be inoperable, since they are the breadwinners (93).

6.3 The organ supplying process

According to the literature, there are several ways in which organ suppliers may be recruited into an illicit or illegal transplant scheme. Most commonly, suppliers-to-be are approached by a third party. These are often “professional” organ brokers, “brokerage firms” (86, p.72) or “fee-based organ scouts” (84, p.378) hired by the brokers, the latter of which are not infrequently former organ suppliers (58, 82-84, 86, 91, 170, 177, 178). In Recife, Brazil, for example, where many suppliers were recruited to undergo nephrectomy in South Africa, two retired military officers functioned as the main organ brokers. These two men, however, soon hired former kidney suppliers to, for a small compensation, assist them with the recruitments (86). On occasion, however, family members, relatives or neighbours also function as recruiters or recommend the prospective suppliers to seek out a recruiter (83, 84, 105, 147, 174). In Pakistan, researchers found that members of families where one or more family member had sold a kidney experienced an intrafamilial pressure to enter the organ market (105). For several prospective organ suppliers however, their way into the illicit or illegal transplantation scheme does not go via a person encouraging them to sell a kidney or part of their liver, but rather through word of mouth or advertisements in newspapers or on the Internet. On some occasions, suppliers-to-be respond to an advertisement posted by a prospective buyer or an organ broker (58, 83, 84). On other occasions, they post advertisements themselves, hoping to find a patient willing to buy their organ (170, 176).

In quite many instances, it seems as though the level of coercion from the side of brokers or recruiters is rather low at the time of recruitment. Several articles report about suppliers stating that they parted with one of their organs voluntarily (83, 84, 91, 174). However, this voluntariness must be viewed in the context of the dire straits and lack of options that suppliers often face, which not infrequently cause them to simultaneously frame their act of selling an organ as an act of last resort (15, 91, 105, 182). Moreover, suppliers who have attempted to pull out after initially having agreed to be suppliers often experience coercion (58, 91, 174). Different forms of deception are also quite common. Not infrequently, brokers or recruiters utilize the “information asymmetry” (84, p.378) that characterizes their relationship to the suppliers to deceive the latter into accepting a low price for their organ and into believing the operation to be risk-free (58, 83, 84). More extreme forms of deception have been reported from Eastern Europe, where several Moldovan suppliers were lured to Turkey with the promise of a job, only to realize, upon their arrival, that the purpose of their recruitment, from the side of the brokers, was to buy or steal their organs (36, 73).

After recruitment, organ suppliers quickly become embroiled in a series of events over which they have little control and which, as we saw, might be hard to pull out from. Before an operation can come into question a number of practical tasks have to be performed. First,

medical examinations have to be conducted in order to assess the supplier's health. Second, if the supplier is going abroad for the operation, legitimate or false visas and passports have to be administered. Third, a matching of the supplier's and the potential recipients' tissues have to be accomplished. Most commonly, one or more brokers, recruiters or intermediaries are involved in ensuring that these practical tasks are performed (82-84, 86, 178). On some occasions, the recipients themselves are also involved at this point (58). It is often at this time that the price is negotiated, or, more frequently, simply communicated to the supplier (82, 86, 147).

According to the literature, some organ-exporting countries also function as destination countries, that is, countries where the actual transplant operations take place. Nations that qualify into this category are, for instance, the Philippines, Colombia, Egypt and India (82, 93, 173, 176). In other organ-exporting countries however, the suppliers primarily go abroad for the operation. Nations that qualify into this category are Bangladesh, Romania, Moldova and Brazil (58, 73, 86). Thus, while some organ suppliers leave their country of residence to undergo the operation, some do not. Those who do are flown to the country of destination, not infrequently together with one or more family member and on the same flight as other suppliers and recipients, and are quartered either in hotel rooms, apartments together with other sellers or at the hospital where the surgery takes place. Here, they stay a few days before and after the operation (58, 86, 147). Generally, however, and this applies also to those who remain in their home country, the persons who supply one of their organs within an illicit or illegal transplant scheme receive none or minimal aftercare. On this point the literature is conclusive, only a few days after the operation, suppliers are returned home to the poor conditions from where they came, without receiving anything but minimal post-operative care and without the financial means to access local health institutions (52, 55, 58, 82-84, 91, 105, 173).

Likewise, according to the literature, suppliers in black market schemes very often receive less money than they were promised before the operation. This has been reported to be case in such diverse places as Moldova, Pakistan, Iran, India, Bangladesh, the Philippines and Turkey (55, 58, 73, 91, 105, 147, 175, 177). The amount of money that suppliers do receive varies extensively. While suppliers from Pakistan and Colombia are reported to receive less than US\$2,000 for a kidney, reports from Israel and Turkey talk of suppliers obtaining between US\$10,000-20,000 (82, 86, 147, 175). A majority of suppliers, the literature furthermore indicates, uses the little money they earn to pay off debts, and, often within a few months after the operation, many have spent everything. Consequently, for a majority of suppliers, selling an organ does not improve their economic situation. Rather, it deteriorates, not least since they have a hard time finding work and struggle with post-operative health problems (52, 55, 73, 82-84, 91, 105, 173-175, 177, 179). Many, the literature reports, also struggle with problems of a psychological nature: they experience existential as well as health anxiety; feelings of hopelessness; violated bodily integrity and depression. Upon returning home after the operation, many also experience social isolation, stigmatization and shame, and hence regret ever selling an organ (15, 36, 52, 55, 58, 73, 82, 84, 91, 105, 173, 177, 179).

6.4 Discussion – THBOR or not?

Despite the relative scarcity of information available, and despite the fact that only a couple of articles (84, 91) discuss the phenomenon in relation to any clear definition of trafficking in human beings, it is quite apparent that many of the cases reported in the literature constitute examples of THBOR. The organ suppliers are recruited, transported, transferred, harboured and/or received by persons – recruiters, facilitators, brokers, recipients, doctors or the like – who abuse their position of vulnerability, frequently deceive them, and on occasion coerce them into parting with one of their organs. Even though the literature reveals little about the identities of the main perpetrators and the purpose with which these initiate or become involved in the illicit or illegal activities described – that their purpose is to exploit the suppliers is central to the definition of THBOR – it is clear that the effect of these activities in a majority of cases is exploitative. The organ suppliers invariably receive a very low remuneration for their organs. They are not infrequently deceived and receive less than they were initially promised. They furthermore receive poor or no aftercare and are in many cases unable to access care once they return to their area of residence. Moreover, despite the vagueness of the concept, it is clear that the organ suppliers' position of vulnerability is frequently abused. This is most evident in the case of the difficult economic situation that the vast majority of them are in, which is one of the defining characters of APOV. But it is also clear, we argue, that the suppliers generally are in "a precarious situation from the standpoint of social survival," to cite the definition of APOV, not least since they are illiterate or have a low level of education, but also because many of them are manual laborers and live in marginalized slum areas, characterized by overpopulation and bad housing (174). In sum, then, from the literature that form the basis of this section it is difficult to say much about who the main perpetrators are and what their purpose of engaging in illicit or illegal transplant activities are. Key to the definition of APOV is the "knowledge of the offender of the position of vulnerability of the donor," about which the literature reveals little. Yet, the majority of cases described above quite clearly constitute cases of THBOR, since the perpetrators use several of the means included in the definition of THBOR to recruit, transport, transfer, harbour and/or receive persons in order to remove their organs. The effect of these actions is exploitative since the perpetrators gain financially from these illicit or illegal operations.

Few of the studies on which this section is based are however sufficiently thorough to explore the nuances and extent of THBOR in each case. Many of them are surveys or articles that aim to summarize the experiences of organ suppliers involved in illicit or illegal transplant schemes, not infrequently on a global scale. This contributes, Sallie Yea points out, to the formation of a "universalizing discourse" around TBHOR, which risks complicating the identifications of cases that do not fit squarely into this discourse. There are important variations globally that do not

become visible through “generalized accounts of a ‘global traffic’,” as Lawrence Cohen puts it (104, p.42), see also (92). It is essential to take these variations into account, not because they necessarily undermine the conclusion that the majority of persons who supply an organ as part of an illicit or illegal transplant scheme are victims of TBHOR, but because they reveal the local conditions that make the activities possible, the varying roles and relations of different actors, the particular means and aims of the perpetrators and so on.

One example of this that emerges from the literature, but which is not discussed in depth, is the varying ways in which suppliers are recruited into the business. Some are recruited or deceived into the scheme by ruthless brokers or recruiters, some by former suppliers or persons in need of an organ who do not tell them the whole truth. Some are encouraged by family members, relatives or neighbours, while others are eager to sell one of their organs and take measures to recruit themselves into the business. Since the consent of a trafficked person is irrelevant in determining whether or not he or she is a victim of THBOR, all of these variations may constitute cases of the crime. However, some may be less exploitative than others and perpetrators may be more or less hard to identify, variations that are important to be aware of in the work of prevention and prosecution. Another example is the varying relations between suppliers and recipients. Cohen, for instance, writes of “Non-Resident Indians” who experience marginalization in Western organ allocation systems and therefore go to India to purchase an organ (104, p.45), see also (112). In several cases, Cohen reports, the organ exchange that takes place between these organ buyers and their suppliers are the start of a longer commitment on the part of the buyers, in which they often act as “additional or substitute parents for donors’ children” (104, p.45). Whether or not these cases constitute THBOR is impossible to determine from Cohen’s account, but they are clearly deviations from the general picture provided by the literature. In summation, then, one can state that, although it is important to keep a broad scope on this global phenomenon, attending to the local variations – even within organ-exporting countries – is key in the work of identifying, preventing and prosecuting the crime.

6.5 Gaps in the literature

The literature on persons who supply their organ as part of illicit or illegal transplant schemes is far from conclusive. Consequently, we identified the following gaps:

- There is more information about the situation and experiences of organ suppliers from some organ-exporting countries than others. We know more about India, China, the Philippines, Pakistan, Egypt, Colombia, Bangladesh and Moldova than about Kazakhstan, Ukraine, Russia, Iraq, Jordan, Romania, Kosovo, Turkey, Israel, Brazil, Peru and Bolivia. However, as Yea and Cohen point out, further research must also be aimed at attending to variations within organ exporting countries.
- Since a majority of the studies that has been conducted on organ suppliers within illicit or illegal transplant schemes is based on interviews with suppliers, the emphasis is on their situation and experiences rather than on how and what practical arrangements are carried out, what events take place and who the supplier meets during the days or weeks around the operation.
- As a consequence of point 2, we know little about the depth and nature of the involvement and contact between different actors. To what extent do organ suppliers and recipients meet? If they do, to what extent do they remain in contact? And what is the nature of this contact? Are all actors aware of the position of vulnerability of the organ supplier? If not, who are and who are not the main abusers of this vulnerability? These are questions that future research will need to address.

7. Brokers

Natalia Codreanu, Frederike Ambagtsheer, Willem Weimar, Jessica de Jong and Ninoslav Ivanovski

7.1 Introduction

This chapter presents a brief overview of the state of the literature regarding the involvement of brokers in human trafficking for the purpose of organ removal. Adopting the methods presented in chapter 1.4, we selected and analyzed 56 articles to describe the background of brokers, as well as their common characteristics. Next, we assessed their modus operandi and discussed whether they organize commercial transplantations through THBOR. The final paragraph identifies the gaps in the literature.

7.2 Background and common characteristics

The existence of ‘brokers’, ‘brokering’ or ‘brokerage’ has been widely reported in relation to human organ trade (52, 53, 149, 159, 173, 179, 185-193) as a prohibited or unethical act (8, 194). Brokers are often referred to as those who arrange or facilitate commercial transplantations (128, 134, 147, 149, 151) and receive the payments (129, 141, 162, 195). They are also called ‘middlemen’ (105, 149, 159, 165, 177, 182, 191, 192, 194), ‘third parties’, ‘corredores’ (84), ‘agents’ (196) and ‘connectors’ (84, 162, 190, 196, 197). Mendoza distinguishes brokers from middle agents though, because of the former’s ‘overt profit motives and organ price control’ (84). There is no international, uniform definition of the term broker. Yea, who distinguishes brokers from recruiters, defines a broker as *“an intermediary between a kidney buyer and seller who connects the two using his/her knowledge of medical personnel and facilities that engage in illegal kidney transplantations. The broker’s key asset in this market is his/her greater knowledge of other stakeholders in the market to whom the seller does not have direct access.”* (91). Mendoza adopts a broader approach, defining brokers as *“individuals or agencies/groups who establish the network.”* (84, 196). According to Scheper-Hughes, brokers define themselves as ‘business executives’ and ‘international transplant coordinators’ (86).

Brokers may include doctors, hospitals and matching agencies (laboratories). They operate individually or work with agencies and organized groups (e.g. criminal syndicates) (15, 44, 52, 81, 83, 86, 149, 196, 198). Brokers function as invaluable connectors between recipients and suppliers and are thereby key players in the organ trade network (15, 79, 148, 149). These networks are often multi-layered (82, 84) and also involve (staff of) hospitals (15, 105, 189), ‘travel agencies’ (15) and government officials (52, 82, 189). Brokers are also the ‘market drivers’ or ‘price setters’ of the organ trade (82, 84, 149, 196). Mendoza explains that the price

of an organ does not only depend on demand and supply, but upon third party brokerage (84). Brokers are claimed to financially benefit the most from these transactions (84, 196).

Testimonies against brokers are very rare (73). As recipients and suppliers do not file complaints against them, many brokers escape law enforcement (73, 91, 149). Moreover, from a criminal justice perspective, if a broker is approached by a supplier it is very difficult to prosecute him, even if there has been resulting exploitation (91). Prosecutions of brokers have taken place in Turkey, Israel, India, South Africa, the United States, Kosovo and Brazil (73, 86, 148, 186, 199, 200).

7.3 Modus operandi

In contrast to the large degree to which 'brokerage' is mentioned in the literature, only a few studies address the modus operandi of brokers. These studies have been performed in Colombia (84), the Philippines (83, 91), India (149), Bangladesh (58), Moldova and Israel (73). Besides, Scheper-Hughes and Finkel both write about brokers from Israel and Brazil who arranged 'transplant package tours' in South Africa for recipients from the United States and Israel (86, 147, 148).

Organ brokers encounter little difficulty in finding impoverished individuals willing to exchange their organ for cash (189). They are known to seek suppliers directly (73, 196) or employ 'scouts' who go into the field and who may, in turn, pay local residents a commission per selected supplier or a small fee to spread the word and set up internet advertisements (82, 91, 196). Suppliers also approach brokers themselves, as they received the brokers' contact details from family, friends or through internet or newspaper advertisements (58, 73, 91, 147-149, 196). After the transplantation, several suppliers become brokers themselves and receive financial bonuses for (facilitating) the recruitment of new potential suppliers (15, 73, 82, 86, 199).

As recipient and supplier often originate from two different countries and travel halfway around the world for transplantation (52, 58), brokers not only help recipients to locate transplant centers and accommodations in hospital rooms and hotels (86, 190, 201), they also arrange transport, medical examination, documents and accommodation for suppliers (58, 73, 83). Moniruzzaman writes that Bangladeshi suppliers are housed in poor accommodations, rooming with as many as 10 others in an apartment permanently rented by a broker (28, 58). Scheper-Hughes and Finkel both write about poor individuals from Egypt, Jordan and Iraq who are housed in a special ward of a hospital in Iraq (35, 147). *'There is never a shortage of sellers. They arrive at the hospitals and are tested, then they live at the hospitals unit until a buyer with a good match appears.'* (147). Moazam reports that Pakistani suppliers live in a hospital room for many days prior to surgery, several of them housed together in one room where they sleep on

the floor until a recipient is found (105). All costs related to medical tests, travel documents and accommodation are paid by the broker and these debts are eventually deducted from suppliers' fee (58, 82, 105, 189, 199).

7.4 Involvement in THBOR

Literature reveals that the presence of a broker is likely to enhance the exploitation of suppliers, and thus increases the likelihood of THBOR. Brokers exploit the vulnerable position of suppliers (poverty and illiteracy) by means of deception, force or other forms of coercion, abduction, or fraud (91).

First of all, brokers do not remunerate organ suppliers fairly or to the agreed amount. They often give them less than the promised amount, if anything at all (24, 55, 58, 73, 79, 84, 91, 105, 147, 177, 189, 202, 203). The illegality of the industry and suppliers' often voluntary participation in it, makes it difficult to pursue any claims for money not received. Deception also occurs in terms of health support: many suppliers do not receive the promised post-operative and longer term care; meaning health checks and other follow up services are not available, or the quality of the check-ups is poor (91). Potential suppliers are also misled about the procedure of organ donation, need for follow-up care (15, 105), its risks and long-term consequences (15, 55, 58, 73, 82, 105), and the psychological and lifestyle impact of donation (55, 58). As a Brazilian supplier put it: *"My broker said I would be healthier with just one kidney."* (86).

Some potential suppliers are recruited by means of false promises of employment to work abroad (73, 199, 204). Brokers are also known to provide misleading and inadequate information to suppliers by telling them the story of the 'sleeping kidney', presenting the 'donation' as a win-win situation without any risks or harms involved (58). Brokers further convince prospective suppliers to sell by portraying the 'kidney donation' as a noble act that saves lives and will be performed by world-renowned specialists, or they guilt-trip them by emphasizing the desperation of the dying recipient (58, 91). Brokers tell suppliers that their choice not to 'donate' diminishes after costs are incurred from medical examinations and expectations on the part of the buyer are raised (91). Some authors report that brokers seize suppliers' passports after they crossed the border, to ensure that they cannot return home before their kidney is removed. Some suppliers who changed their mind about the sale are held captive, threatened and/or physically abused (58, 73, 86). *"Sodrul, a 22-year-old college student, decided not to 'donate' his kidney and asked the broker for his passport so he could return to Bangladesh. The broker and two hired local mustangs (thugs) beat up Sodrul, assaulted him, and threatened him into the operation."* (58). Scheper-Hughes reports that kidney suppliers from Moldova spoke of being 'kidnapped', abused and assaulted by their Russian and Turkish brokers (86).

Some brokers instruct suppliers and recipients how to deceive donation authorization or (ethical) committees. For instance, they familiarize suppliers and recipients with the questions that they will be asked, and instruct suppliers to deny that they receive any kind of payment for the organ (149, 157). Other suppliers are asked to report false details of their place of residence to escape police inquiries (149). Brokers are also known to arrange a proxy 'donor' to make statements on their behalf (157). They forge legal documents that indicate that the person is donating an organ to a relative and advise the supplier not to disclose his true identity, so health care personnel will not reject the case (58, 149). *"I was asked to pose for a photograph with the recipient and act as his wife for a while. I was told that this arrangement will help me in escaping the rules and regulations and will also expedite payments to me. I obeyed."* (149). Moniruzzaman reports that a Hindu kidney supplier underwent circumcision against his religious faith, in order to pass as a relative of his Muslim recipient, who told him: *"We would not be able to complete the deal as Indian doctors could reveal our fake identities, especially during the operation while we would be lying naked."* (58).

Not all suppliers are exploited. As mentioned before, many suppliers approached brokers themselves and some have said to 'put pressure on the broker' to arrange the organ sale. Many are known to be 'disappointed, frustrated or angry' if they fail to pass the required medical tests and therefore are deemed ineligible for providing an organ (91). However, suppliers who voluntarily sell their kidneys may nonetheless face severe vulnerabilities and exploitation (73, 91). The empirical evidence discussed above suggests that (threat of) force is used to induce initial compliance, and coercive techniques like emphasizing the desperation of the dying recipient or withholding of passports are used to ensure that individuals do not back out. Besides, existing studies suggest frequent problems with the accuracy of the information provided to the poorly educated and illiterate suppliers: they are falsely assured with the myth of the 'sleeping kidney' and misled into thinking that they would be paid substantially more than they actually receive (28).

This chapter illustrates that the presence of brokers increases the likelihood of THBOR. However, the literature reveals that not in every case (all) elements of the THBOR definition are present. For this reason, Yea argues that *"trafficking is generally assumed, rather than rigorously established."* (91). However, in order to be able to hold brokers liable under the provision of human trafficking, the only thing that matters is that one of the actions was committed with one of the means with the purpose of exploitation of an individual for organ removal (15).

7.5 Gaps in the literature

The literature on brokers is incomplete. Consequently, we identify the following gaps:

- Many actors and actions are placed under the term 'broker' or 'brokerage'. It is unclear what constitutes a broker or what is the difference between a broker and other actors in the network.
- The process of transportation and accommodation is very vague. How are the recipients and suppliers transported? Where are they accommodated? By whom exactly? Through which agencies?
- It remains unclear how exactly illegally operating commercial organ markets are linked to human trafficking, especially in comparison to other forms of human trafficking.

8. Transplant Professionals

Ninoslav Ivanovski

8.1 Introduction

Adopting the methods presented in chapter 1.4, we selected and analyzed 42 articles to present a brief overview of the state of the literature of the involvement of transplant professionals in THBOR, backed up by media articles. Below, we describe the data on the role of the transplant professionals and identify gaps in the literature.

8.2 The involvement of transplant professionals in THBOR

The first accounts of organ trade date from the 1990s by transplant doctors in the Gulf States and the Balkan region who were confronted with patients for follow-up who had received transplants of purchased kidneys in India (e.g. Calcutta, Bombay, Madras, New Delhi). Most of these recipients were said to be transplanted by a well-known transplant surgeon from India, who allegedly performed 4-5 transplants per day in private hospitals or even in modified apartments. The enormous number of complications during the follow up of the recipients from Macedonia have been reported (132).

The first charges against a transplant professional (nephrologist) were laid in 2004 by a South African court for his involvement in over one hundred illegal kidney transplants involving purchased organs from Brazilian suppliers and Israeli recipients (205). The nephrologist pleaded guilty to ninety counts and was fined 150,000 Rand (\$15,000) (206). Charges were then also laid against two transplant administrative coordinators and four transplant Surgeons (206). At the end of 2012 they were given a permanent stay of prosecution by the Durban High Court (207). This means the legal process in the trial has been halted and no convictions will take place.

In Turkey in 2007, an arrest took place of an Israeli transplant surgeon, Dr. Shapiro, for performing illegal transplant operations in Turkey (208, 209). From the literature it is unclear however under what charges he was arrested, and whether he was convicted or not. Other charges and convictions of transplant professionals took place in India against one transplant surgeon (210, 211), against three doctors in Brazil (211) and five transplant doctors in Kosovo (212-214). An international arrest warrant has been issued against a Turkish surgeon for his involvement in the Kosovo transplant operations (209). Recently, in June 2013, a Costa Rican surgeon was arrested, who is suspected of running an international transplant ring with links to Israel and Eastern Europe (215).

In the literature, it is said that transplant doctors are involved in transplant tourism and organ brokering (52, 146). Scheper-Hughes (35, 86) states for instance that she has *'observed and interviewed hundreds of transplant surgeons who practice or facilitate, or who simply condone illicit surgeries with purchased organs'*. She calls these surgeons 'renegades', 'outlaws' and 'vultures'. Licensed transplant professionals (many of them top-notch) are reported to have the role of brokers, facilitators (44, 83, 86, 91, 107, 196, 216, 217) or even key players in transplant schemes. As Sanal (75) writes: *'Dr. S. is a famous transplant surgeon in the Middle East. He operates "underground" on wealthy patients in different countries, from Israel to Turkey to Russia. The media refer to him as the "Organ Mafia doctor" and patients diagnosed with renal failure speak of him sardonically as "Robin Hood," acknowledging that he takes organs from the poor to give to the rich'* (p. 281). According to Scheper-Hughes (44) these reports are only the tip of the iceberg. Despite official reports made to health and political authorities about transplant professionals involved in illegal transplant practices, only a few surgeons have been investigated and none have lost their credentials (44).

In addition, more and more doctors are confronted with surgical and medical problems in patients who return from transplants abroad. There are many deaths, too. Many authors call transplant tourism a real life threatening venture (139, 218). The number of complications which many times overweigh those observed in local transplant recipients are confirmed by many authors and published everywhere in the world, from the Balkan, to the USA, Canada and Australia (123, 125, 129, 131, 136, 139-141).

The dividing line between the legal and underground transplant system becomes razor-thin, when doctors consciously or unconsciously participate in both systems (83, 196). Commercial organ trade has taken transplant medicine to a troubling moral gray zone, and it is one of the transplant medicine's responsibilities to prevent more severe moral problems from happening. Transplant surgeons have the responsibility to ensure to the best of their ability that the organs they transplant are obtained upholding the highest standards of ethics (53). Tolerating violations of medical ethics will results in more violations (219-221).

8.3 Gaps in the literature

The literature on transplant professionals reveals very little information with regard to THBOR. We identify the following gaps:

- It is unclear under what circumstances, how, and how long convicted transplant professionals performed, facilitated and/or contributed to illegal transplant operations before their arrests;
- It is unknown from existing literature how and under which laws / which charges professionals were arrested and convicted;
- The existing literature does not clarify why many patients suffer from medical and surgical complications after undergoing transplants abroad, and to what extent this is caused by (the ethical standards of) professionals who perform the operations;
- It is also unknown from the literature who these transplant professionals are whom perform transplants abroad, and whether these transplants are performed illegally.

9. Other Facilitators

Jessica de Jong

9.1 Introduction

From the previous chapters it is clear that THBOR requires brokers as well as highly qualified medical professionals to carry out the transplantations. In addition, the procedure requires a setting which provides the necessary hygiene and medical instruments; an operating theatre (15, 86, 204). Adopting the methods presented in chapter 1.4, we selected and analyzed 36 articles to present a brief overview of the state of the literature regarding hospitals and other facilitators of the organ trade: service providers, translators and law enforcement officials. The final paragraph identifies the gaps in the literature.

9.2 Hospitals

As stated in chapter 7.2, hospitals may operate as brokers and provide accommodation for both recipients and suppliers. It is also common for potential organ suppliers to directly approach medical facilities, known for their involvement in the illegal transplantation business (196, 204). Finkel reports that individuals in India and Iraq literally line up at hospitals, willing to sell their kidney (147). Hospitals are also known to have promised higher amounts of money to suppliers than they actually paid (177). Prosecutions of hospitals have taken place in South Africa and Bulgaria. It concerned top hospitals which allowed its employees and facilities to be used to conduct illegal transplantations, with kidneys obtained from foreign impoverished individuals and transplanted into Israeli recipients (206, 222).

Although some authors mention the involvement of state hospitals (75, 190, 196), illegal organ transplantations usually take place in private hospitals (53, 75, 86, 105, 107, 190, 196, 204, 223, 224). Scheper-Hughes writes about a surgeon-broker who has his own private hospital in Istanbul, where he once got arrested (86). With regard to Pakistan, Efrat reports that the prohibition on commercial transplantation resulted in the transfer of some surgeries from hospitals to impoverished clinics in private houses (107). Medical check-ups and illegal transplantations sometimes take place at night – aside from the licit daily business of the hospitals (204, 225). Scheper-Hughes and Finkel both write about Moshe Tati from Jerusalem, who signed up for a ‘transplant tour package’ in a private Turkish hospital. He was ‘*smuggled into the hospital through a dark basement entrance*’ (86), as ‘*the transplant surgeries were performed late at night, when the hospital was on skeleton staff and fewer people could question what was going on.*’ (147). Lundin writes about Victor from Moldova, who was driven to Turkey, forced to sign a consent form for organ donation and operated on in some hospital’s basement (73).

Criminal liability can be established if hospitals or its employees are deliberately involved in THBOR (15, 224). According to its definition, three basic elements are necessary to constitute human trafficking: an action by certain means for the purpose of exploitation (3, 5, 15). If (staff of) a hospital knows about the planned or ongoing trafficking activities or is actually facilitating or actively offering ‘donors’, the action (recruitment and harbouring, as the suppliers may be accommodated in the hospital) and the purpose (exploitation) are established. The third element, the use of illicit means, will often occur if potential suppliers are deceived (for instance about the need for the intervention, the risks or consequences), threatened or taken advantage of their vulnerability (15). However, hospitals and its staff are not by definition involved in trafficking activities. Brokers are known to assist recipient and supplier in coming up with a cover story to mislead hospital personnel into believing that the donation is a purely voluntary act or forge legal documents that indicate that the donation is between relatives (58, 149, 157).

9.3 Service providers

Through our literature research we found that four authors acknowledge the participation of ‘matching agencies’ (laboratories) in the illicit organ trade. Mendoza reports that suppliers were directly approached by or recommended to matching agencies (83), or sought matching agencies themselves (196). As matching agencies and brokers are often closely related or, on occasions, one and the same (149), Muraleedharan and Mendoza both report a conflict of interest among these service providers as they derive their income from transplants and associated medical procedures (82, 84, 149). Tissue matching and other tests that need to be conducted prior to transplantation are often carried out in laboratories attached to hospitals where the transplantations take place, or in laboratories referred to by providers. As an Indian nephrologist states: *“At this stage, it is possible for us to cut corners and lower the norms required for performing transplantation... the lack of standards and economic pressures means that people will cut corners.”* (149). Meyer writes that the quality of pre-screening and blood and tissue matching depends on how professional and thorough an organ trafficking network operates (204), but according to Scheper-Hughes these procedures are often ‘ad hoc, informal, or even non-existent’ for foreign recipients (86).

Five studies report the participation of ‘medical tourism’ companies in the illicit organ trade. Turner writes that Filipino kidneys are available for purchase at government-run hospitals through medical tourism companies. Several of these companies claim that it takes less than two weeks to proceed from initial query to the actual kidney transplant (190). Caplan and Bilgel both state that travel agencies are involved in organ trade (15, 224) and Sanal writes about a Turkish recipient, who underwent a kidney transplantation in Moscow through ‘a small private company’ in Istanbul (75). Scheper-Hughes quotes a broker from Tel Aviv who said to have

discovered ‘a new source of fresh kidneys in the slums of Recife, north-east Brazil’ and to have set up a ‘company’ that organizes transplant tours for Israeli recipients to South Africa. *“Best of all,” she said, the new scheme was ‘dirt cheap’. “I am a low-budget operator,” she told me. “I take on board patients who can’t afford the big company.”* (86).

Last but not least, Scheper-Hughes and Bilgel mention the involvement of health insurance companies in the illicit organ trade (86, 224). Although they both do not provide more detailed information on the role of these companies, other studies reveal that in some countries health insurance companies cover part of recipients’ organ transplantation costs. With the approval of the Ministry of Health, until 2009 Israeli health insurance companies covered part of the costs of overseas transplantations, even though they were prohibited in the countries where they were performed (1, 53, 107) and, according to Scheper-Hughes, despite the general knowledge that the ‘donors’ were arranged and paid by brokers (86). Bramstedt and Xu report in 2007 that insurance companies in the United States are taking steps to encourage policy holders through financial incentives to travel to a foreign country for the purpose of obtaining a transplant as well, as overseas healthcare is considerably less expensive. However, one of their concerns is that these financial bonuses could tempt patients to offer money to poor individuals as a form of coercion to donate (226), or to brokers to recruit them. As reported by Scheper-Hughes, an Israeli surgeon-broker *‘joined forces with brokers knowledgeable about Israeli’s national medical insurance (sick funds) program’* and formed a company that took many Israelis abroad for transplantations with kidneys procured from poor, debt-ridden and/or trafficked individuals (86).

9.4 Translators

As recipient and supplier often originate from different countries and travel halfway around the world for transplantation (52, 58, 86), translators are at times necessary in facilitating the organ trade. Through our literature research we found two studies that mention one and the same translator who consciously participated in an organ trafficking scheme (199, 206). The then 64-year-old Durban salesman and Hebrew/English translator pleaded guilty to acting as a translator for South Africa’s largest private hospital network (Netcare), despite being aware of the fact that recipients and suppliers were not related and were paying or receiving money for the kidneys; and that they were thereby violating the Human Tissue Act (199, 227).

9.5 Law enforcement officials

As many suppliers cross national borders to sell their organs in another country, organ trade networks are often suspected to have excellent connections to official authorities in order to facilitate the movement of people across borders (15, 79, 86, 189, 204, 224, 225, 228). According to Scheper-Hughes, strong links with the police and customs officials have been established through bribes in return for not reporting the violation of the forgery of travel documents or to 'secure' border crossing (36). *'When Moshe's plane landed in Istanbul, there was no need to clear customs, no one asking for passports. "Everything was already taken care of," Moshe says.'* (147). According to many of Mendoza's surveyed 121 kidney suppliers, local politicians and police usually get involved in the trade when their family members and friends function as brokers. These government officials receive contributions from hospitals, doctors and other agencies *'in exchange for recommending them to handle various aspects or phases of kidney transplantation.'* (83). Efrat writes that poor enforcement of the organ trade in Pakistan results from the ties between the physicians and hospital owners involved in commercial transplantation and law enforcement officials. *'The organ mafia is hand in glove with the administration and the police. People have been caught red-handed but have been let off because high-ups are beneficiaries of the huge amounts that the trade generates.'* (107). Shimazono also reports that there have been allegations that embassy officials of certain Middle Eastern countries have facilitated commercial transplants in Pakistan and the Philippines (52, 229, 230).

9.6 Gaps in the literature

From the literature it is clear that all kinds of individuals and agencies transact in both legal and illegal modes of transplantation, which makes the dividing line between the legal and underground transplant system razor-thin (82-84, 196). However, we identify the following gaps:

- The literature does often not provide detailed information about the exact role and actions of hospitals, service providers, translators and government officials within the organ trade business. This makes it difficult to determine how these facilitators operate and if their participation in THBOR is conscious or unconscious, thus if criminal liability can be established.
- The facilitators discussed above are addressed in the literature regarding THBOR, but it is important to note that there could also be other facilitators, which we do not know about from the literature such as religious organizations.

10. Degree of Cooperation

Jessica de Jong

Due to the extremely complex nature of the business, THBOR is often said to require globally active, extensive and highly organized networks (83, 84, 86, 91, 204, 224, 225, 231). While some authors refer to these networks as 'pyramidal schemes' (86, 182) or 'well-organized, yet infrequently hierarchical' networks (224), others refer to them as 'ad hoc groups' (232). Moreover, brokers – including licensed doctors, former kidney suppliers and government officials – are also said to operate individually (83, 84, 91). Whilst the literature does not provide much detailed information on the individual role of most actors involved in THBOR, their degree of cooperation also remains largely unclear. The strongest link seems to be indicated between brokers and hospitals, as brokers are at times tolerated by hospitals or work closely with or at hospitals (105, 149).

11. Other Criminal Activities

Jessica de Jong

The extent to which the actors involved in THBOR also profit from other types of crime is an unknown factor. Geis and Brown (232) state that most of these networks probably concentrate exclusively on organ trafficking activities (86). We only found one article, in which Scheper-Hughes writes about a broker and surgeon-broker from Israel who have been arrested many times for tax evasion and corruption in other kind of business deals (86). In legal cases of human organ trafficking in South Africa, Brazil and Kosovo, several brokers, surgeons and other accomplices have also been charged with murder (233), unlawful medical activity (213), fraud (86, 148), forgery (206), as well as with money laundering (86, 206), and organized crime (86, 213).

12. Financial Aspects of Trafficking in Human Beings for the Purpose of Organ Removal

Jessica de Jong, Michael Bos, Frederike Ambagtsheer, Willem Weimar, Susanne Lundin, Martin Gunnarson and Ingela Byström

12.1 Introduction

The purpose of THBOR is exploitation in order to unlawfully obtain a financial or other material benefit (15, 86, 91, 204, 234). A recent report by Global Financial Integrity, a Washington Institute, roughly estimates that the illicit organ trade generates illegal profits between US\$600 million and \$1.2 billion per year (231). This chapter presents an overview of the state of the literature regarding the profitability of human trafficking for organs. Adopting the methods presented in chapter 1.4, we selected and analyzed 55 articles to present the amounts of money that have been received by those selling an organ and have been paid by those buying an organ, provide insight in the illegal profits gained by facilitators of the trade, and identify the gaps in the literature. Although the definition of human trafficking for organs deems payment (benefits) to the trafficked persons irrelevant, the profitability of this business is connected to the low amounts of money that organ suppliers receive. As explained before, their vulnerability and exploitation are manifested by the fact that they receive little or no payment at all, which is a clear indication of trafficking. Moreover, several qualitative studies indicate that organ selling does not lead to long-term economic benefits. Selling a kidney is associated with a decline in health status and a diminished ability to return to labor-intensive work, which may explain the observed worsening of the economic status of individuals who sold their kidney (58, 79, 83, 105, 148, 175, 177, 203, 235-237).

12.2 Amounts of money received by organ suppliers

The payments that suppliers received varies extensively worldwide. As shown in Table 1, individuals from India, Pakistan, Bangladesh, Colombia and the Philippines reported to have received between US\$1,000 and \$2,500 for their kidney or liver (58, 84, 105, 175, 177, 189). As Iran implemented a regulated organ procurement system which is not available to foreign nationals, 'donors' from Iran receive a standard amount of US\$1,219 from the government. In addition, many receive a rewarded gift from their recipients (1, 53, 171, 203). In contrast, kidney suppliers from Israel and Turkey reported to have received between US\$7,500 and \$20,000 (82, 86, 147). In December 2003, the police in South Africa and Brazil uncovered an Israeli-led international organ trafficking syndicate. Israeli individuals were initially paid up to US\$20,000 per kidney, before the brokers discovered that poor Romanians and Brazilians were willing to

accept less. Although the first suppliers from Brazil were paid US\$10,000, the extensive 'donor waiting list' drove the price almost immediately down to \$6,000 and in the end to as little as \$3,000 (52, 86, 148, 205, 206, 238, 239). Similarly, the average price for a Bangladeshi kidney – which is currently US\$1,400 – has gradually dropped because of the abundant kidney supply from the poor majority (58).² As surveys among Colombian and Filipino kidney suppliers show, many of them indicated a desperate need for cash and lack of pricing information; by their low incomes as a reference point, they were convinced that the price was high enough or could be considered as the 'going rate' (82-84). Suppliers are similarly unaware of how much money is involved outside the fee they are quoted for the sale of their kidney by a broker (91). Moniruzzaman reports that some suppliers have demanded an increase in their share of (less than) US\$1,400 after discovering that their broker was making a profit of \$5,500 (58).

² In some respects, the price difference is proportional to the segments of populations living in poverty. According to the World Development Report 2009, 76 per cent of the population in India, 60 per cent in Pakistan, 45 per cent in the Philippines, and 9 per cent in Turkey live on US\$2 a day (53).

Table 1. Overview of payments to organ suppliers (mean amounts)

Author(s)	N	Type	Origin	Economic status	Payment
Zargooshi et al. (203)	100	kidney	Iran	'abject poverty'	standard US\$1,219
Goyal et al. (177)	305	kidney	India	annual family income: US\$660, six years after surgery: \$420	US\$1,070 (promised \$1,410)
Naqvi et al. (175)	239	kidney	Pakistan	monthly income: US\$15	US\$1,377 (promised \$1,737)
Malakoutian et al. (171)	478	kidney	Iran	'62% below poverty line'	standard US\$1,219
Moazam et al. (105)	32	kidney	Pakistan	'extreme poverty'	US\$1,600 (promised \$2,400), \$240 to broker
Padilla (189) Tanchanco et al. unpublished data	135	kidney	The Philippines	---	US\$2,300 (less than promised)
Awaya et al. (182)	311	kidney	The Philippines		US\$6,368
Moniruzzaman (58)	33	kidney	Bangladesh	'poor'	27 not received full promised amount of US\$1,400
Mendoza (84)	151	kidney liver	Colombia	'below poverty line'	(k) US\$1,712 (l) US\$1,881
Yea (91)	15	kidney	The Philippines	'from the urban slums of Baseco'	US\$2,750; not all received full promised amount
Mendoza (83)	121	kidney	The Philippines	'below poverty line'	US\$2,133

NB: Table 1 only contains studies using samples, other studies (which mention amounts in general or received by one supplier) are presented in the text. N refers to the amount of people who actually responded to the survey.

Cash payments were usually made on an incremental (rather than onetime) basis, with the balance paid after the transplant is completed. However, suppliers often received only part of the amount they were promised (55, 58, 73, 79, 84, 91, 105, 147, 175, 177, 189, 199). As shown

in Table 1, about 25 to 50 per cent of the promised amount seemed to be withheld. For instance, Naqvi et al. describe that none of the 239 Pakistani suppliers obtained the mean agreed price of US\$1,737. After deduction for hospital and travel expenses, they received an amount of US\$1,377 (175). Most of the 33 suppliers who were interviewed by Moniruzzaman did not receive full payment either. Once they had gone home and asked for the remaining money, brokers and recipients deducted numerous hidden expenses and offered them just a sum of the promised payment. For example, supplier Monu received only US\$600 from his recipient, one-third of the promised amount (58). Finkel (147) writes down the story of a 44-year-old Turkish man, who was promised US\$30,000 for his kidney: *'I was told I'd be paid in the hospital, after the operation. There was no contract. Nothing was written down. It was a handshake. I trusted them – it was my neighbor, and it was a doctor. Of course I trusted them.'* The morning of his release a doctor handed him an envelope with only US\$10,000 (147). Lundin writes about a young Moldovan man and a single mother, who both received only half of the agreed upon amount. The man was offered US\$7,000 for his kidney, but only received \$3,500 after the surgery. *'All attempts to get the promised sum were fruitless. Instead he was told that the sale had been illegal and that the result of protests would be that "both of them could be arrested."'* (73). Lundin also mentions some suppliers who even received no money at all (73, 170). For instance, a woman from Lebanon was promised a huge sum of money for her kidney, which a broker sold to a wealthy Spanish businessman. In the end, however, she received nothing at all (170).

12.3 Amounts of money paid by organ recipients

While organ suppliers receive between US\$1,000 and \$10,000, or at the very most \$20,000, those who want to purchase a kidney are charged with enormous amounts of money. According to the Council of Europe (225) and World Health Organization (240), amounts paid for a kidney on the black market generally range from US\$100,000 to \$200,000 (204).

Although the number of reported organ buyers is much lower than reported organ suppliers, through our literature research we found that the amounts of money paid by recipients for kidneys and livers varies extensively. As shown in Table 2, the mean prices range from US\$20,000 to \$75,000 for recipients from Turkey, Egypt and Korea, with an exceptional low mean price of \$7,271 (range \$2,800–\$13,500) paid by local recipients in Pakistan. As Rizvi et al. explain, private centers in Pakistan offered 'transplant packages' of US\$6,000-\$10,000 for locals and \$20,000-\$30,000 for foreigners. These packages are offered through middlemen and include 'vendor payments', immunosuppressive drugs and a one week hospital stay (223). Similarly, Finkel mentioned a kidney patient who travelled from the United States to Iraq and paid US\$20,000 which included *'six weeks in a private hospital room, a furnished apartment, medical fees and payment to the seller'* (147). According to Turner, most medical facilities in the

Philippines charge between US\$65,000 and \$85,000 for commercial organ transplants, arranged by individual brokers, ‘medical tourism’ companies and hospitals. Expenses cover ‘donors’ fee, tests, screening, accommodation and the organ transplantation (190). We also found recipients’ payments of US\$100,000 and more. The previously mentioned Israeli-led *syndicate* of organ brokers in general set a fee of US\$100,000 to \$120,000 for its Israeli recipients (165, 206, 239). In the first organ brokering case in the United States in 2012, the accused broker admitted in federal court that local recipients paid him up to the high amount of US\$160,000 for a kidney, acquired from suppliers for \$10,000 each (28, 238, 241). As is explained in chapter 9.3, until 2009 Israeli health insurance companies covered most of the costs of overseas transplants, making transplant tourism affordable for Israeli recipients (1, 53, 86, 107). However, Lundin mentions two Israeli organ brokers to whom foreign recipients had to pay US\$125,000 to \$135,000 for a kidney as well (73).

Table 2. Overview of payments organ buyers (mean amounts)

Author(s)	N	Type	Origin	Transplant	Economic status	Payment
<i>Erikoglu et al. (150)</i>	6	<i>kidney</i>	<i>Turkey</i>	<i>Iraq/India</i>	---	<i>US\$20,000</i>
<i>Abdeldayem et al. (109)</i>	15	<i>liver</i>	<i>Egypt</i>	<i>China</i>	---	<i>US\$40,000 - \$75,000</i>
<i>Rizvi et al. (154)</i>	126	<i>kidney</i>	<i>Pakistan</i>	<i>Pakistan</i>	<i>monthly income: US\$517</i>	<i>US\$7,271</i>
<i>Yakupoglu et al. (161)</i>	5	<i>kidney</i>	<i>Turkey</i>	<i>Egypt</i>	---	<i>US\$35,000 - \$40,000</i>
<i>Kwon et al. (151)</i>	966	<i>kidney liver</i>	<i>Korea</i>	<i>China</i>	---	<i>(k) US\$42,000 (l) US\$63,000</i>

NB: Table 2 only contains studies using samples, other studies (which mention amounts in general or paid by one recipient) are presented in the text.

12.4 Illegal profits obtained by facilitators

From the literature it is often unclear from whom or what the suppliers received payments and to whom or what the recipients’ payments for organs are made. The few studies that do reveal this kind of information clarify that kidney and liver recipients made payments to their suppliers (58, 112), brokers (73, 84, 148, 149, 165, 182, 206, 223), physicians (75, 182), hospitals (161) and ‘companies’ (75). Some authors do not go beyond assumptions. Erikoglu et al. (150) write that mean costs of transplantation from a living related donor in Turkey are around US\$11,000. Compared to the average expenses of \$20,000 abroad, ‘we think that the difference between the costs is shared among donor, doctor, hospital, and intermediary persons’. Suppliers reported

to have sold their organ to brokers (83, 84, 86, 91, 105, 147, 177, 206), (agents or staff of) hospitals (105, 175, 177), physicians (58, 83, 147), 'matching agencies' (83), or very rarely, because of lack of contact information, directly to the recipient (58).

It is impossible to give a reliable estimate of the profitability of the global organ trafficking industry. However, it is obvious that organ trafficking is a profitable business with millions of dollars changing hands (86, 105, 224). Organ brokers play an important role in facilitating the trade (91, 149) and are claimed to financially benefit the most from these transactions (83, 242, 243). In most instances, pricing is fixed or negotiated by brokers, who benefit from their own greater knowledge of the market and the incapacity of organ sellers and buyers to transact directly (82-84, 91). Brokers use all kinds of tactics to maximize earnings and are criticized for paying substantially less than what they have promised and keeping a large share of the payment themselves. Their presence is likely to enhance exploitation of hope on the one hand and hopelessness on the other (83, 91, 149, 177, 182, 190, 224, 242).

12.5 Gaps in the literature

The available literature on the financial aspects of THBOR is incomplete. Consequently, we identify the following gaps:

- Most studies do not describe from whom or what institutions or actors the suppliers receive their payments and to whom or what the recipients' payments are made. The role of brokers in facilitating the trade seems clear, but this is not the case for other facilitators receiving payments: physicians, (agents or staff of) hospitals and all kinds of companies.
- Besides the financial transactions to organ suppliers – which are mostly conducted in cash, because bank accounts are often nonexistent among poor people – it is usually unclear how the amounts of money with regard to organ transplantations exchange hands.
- Consequently, it is vague how money flows and which amounts of money are earned by all kinds of facilitators. Although it is obvious that it is a lucrative business, it is impossible to give a reliable estimate of the profitability of the global organ trade.

13. Conclusion

Assya Pascalev, Jordan Yankov, Susanne Lundin, Martin Gunnarson, Ingela Byström, Frederike Ambagtsheer, Willem Weimar, Jessica de Jong, Ninoslav Ivanovski, Natalia Codreanu and Michael Bos

Chapter 2 illustrates that in the literature on the ethical aspects of trafficking in human beings for organ removal (THBOR) there is a consensus that THBOR is morally repugnant. THBOR has negative consequences for the persons involved and it violates ethical principles, values, human rights and professional virtues. In chapter 3 the organ shortage is cited as the primary explanation of THBOR. However, there are scholars who address the issue in conjunction with global economic, cultural, political and local causes. The influence of globalization on THBOR is emphasised by criminological perspectives; globalization has led to the emergence of numerous licit and illicit global enterprises. Furthermore, some authors emphasize how prohibition of scarce 'goods' such as organs increases their value and thus makes them more profitable to sell and trade. In this way, prohibition has the unintended effect of driving the trade underground, increasing the likelihood of victimization of vulnerable suppliers and hence making the crime more difficult to detect. It is also important to understand the local conditions and contexts contributing to THBOR: corruption, the absence of laws regulating organ transplantation in general and organ trade in particular, and the relative mundaneness and routineness that has come to characterize the act of selling an organ in some local settings. From this literature review, it can be concluded that both local conditions and global processes contribute to the existence of THBOR.

Chapters 4 until 12 about the network of THBOR reveal that the available information on THBOR is incomplete. Scholarly research in this area is not well-developed. This makes it difficult to assess the true scale and nature of THBOR. As Yea (91, p.360) notes, "*trafficking is generally assumed, rather than rigorously established*". The most useful information on the actors involved in THBOR comes from ethnographic field work about organ suppliers, and from this perspective also contains some information on recipients, brokers, hospitals and other facilitators. Despite the relative scarcity of available information it is apparent that many of the cases reported on organ suppliers constitute *elements* of THBOR. Through these studies much more is known about the 'supply side' than from the 'demand side' (recipients) and 'facilitation side' of THBOR.

From the recipients' perspective however very little is known about the process and facilitation of obtaining organs. It is often implied that patients receive their organs through THBOR but this could not be established from the literature. Although the literature reveals that the presence of brokers increases the likelihood of THBOR, it does not provide detailed information about the role of transplant surgeons, hospitals, government officials and other facilitators. This makes it

difficult to determine how these actors operate, whether their participation in THBOR is active or passive, and if and to what extent their liability can be established. Also, the degree of organization and the extent to which these actors profit from other types of crime remains unclear. Although it is obvious from the literature that it is a lucrative business, it is impossible to give a reliable estimate of its profitability.

We conclude that the existing literature is insufficient in providing information about the scale and true nature of THBOR. Empirical fieldwork seems to be a more appropriate source to gather information about the incidence and nature of THBOR and the role, modes of operation and degree of organization of the actors involved.

In terms of appropriate responses to THBOR, the literature reveals a wide range of proposals. Some authors call for strengthening the legal regulations and enforcement actions. Others argue that prioritizing the care and protection of the trafficked persons (victims) should take priority over and above law enforcement measures or concerns about state interests. Many scholars focus on reducing THBOR by reducing scarcity, but here again, contentions and radically different approaches are put forward. Some authors believe that organ scarcity could be reduced by increasing deceased donation and building national self-sufficiency in the sphere of organ transplantation. Others suggest that reducing organ scarcity should begin with reducing the need for organ transplantation by preventing organ failure in the first place. Yet others argue that THBOR could be prevented by creating a regulated market of organs. Others call for eliminating THBOR by developing alternative sources of transplantable organs using advanced biotechnology including xenotransplantation, organ cloning and stem cell therapy.

At the time of writing our conclusions, ethnographic fieldwork is being conducted in various countries with the aim to fill the gaps that are highlighted in this review. These reports – the first on prosecuted cases and the second on patients who travel overseas for alleged illegal transplantations – will be published in October 2014 under the auspices of the HOTT Project. Recommendations based on this literature review and the empirical reports will be published in 2015.

References

1. Ambagtsheer F, Zaitch D, Weimar W. The battle for human organs: Organ trafficking and transplant tourism in a global context. *Global Crime*. 2013;14(1):1-26.
2. European Commission Directorate General Home Affairs. Prevention of and fight against crime 2007- 2013. Action Grants 2011. Targeted Call for Proposals. 2011.
3. Council of Europe Convention on Action Against Trafficking in Human Beings, Warsaw, 16.V.2005. CETS 197 (2005).
4. The European Parliament and the Council. Directive 2011/36/EU on preventing and combating trafficking in human beings and protecting its victims, and replacing Council Framework Decision 2002/629/JHA, (2011).
5. United Nations Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime, United Nations Office on Drugs and Crime. Vienna. Treaty Series, vol. 2237 (2000).
6. United Nations Office on Drugs and Crime. United Nations Convention against Transnational Organized Crime and the Protocols thereto. Vienna: United Nations 2000.
7. United Nations Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution and Child Pornography, United Nations, Treaty Series, vol. 2171, p. 227 Doc. A/RES/54/263 (2000).
8. Schloenhardt AG, Samantha. Trafficking in persons for the purpose of organ removal: International Law and Australian Practice. *Criminal Law Journal*. 2012;36(3):145-58.
9. United Nations Office on Drugs and Crime. Issue Paper. Abuse of a position of vulnerability and other “means” within the definition of trafficking in persons. Vienna 2013.
10. Office of the High Commissioner of Human Rights. Recommended Principles and Guidelines on Human Rights and Human Trafficking, available at: <http://www.ohchr.org/Documents/Publications/Traffickingen.pdf> Accessed 23 May 2013.
11. European Parliament and the Council of the European Union. Standards of quality and safety of human organs intended for transplantation. In: European Union, editor. L 207/14 Brussels: Official Journal of the European Union 2010.
12. The declaration of istanbul on organ trafficking and transplant tourism. *Transplantation*. 2008;86(8):1013-8.
13. Council of Europe. Additional Protocol to the Convention on Human Rights and Biomedicine concerning Transplantation of Organs and Tissues of Human Origin. Strasbourg 2002 24-I-2002.
14. United Nations Office on Drugs and Crime. Model Law against Trafficking in Persons 2009 [cited 2013 15 May]: Available from: <http://www.refworld.org/docid/4a794e432.html>.
15. Caplan A, Domínguez-Gil B, Matesanz R, Prior C. Trafficking in organs, tissues and cells and trafficking in human beings for the purpose of the removal of organs. Joint Council of Europe/United Nations study: Directorate General of Human Rights and Legal Affairs Council of Europe 2009.

16. Caplan A. Do No Harm: The Case Against Organ Sales from Living Persons. In: Tan HP, M. A, S. R, editors. *Living Donor Transplantation* 2007. p. 431-3.
17. Budiani-Saberi DA, Karim KA. The social determinants of organ trafficking: a reflection of social inequity. *Social Medicine*. 2009;48(4).
18. Taylor JS. *Practical Autonomy and Bioethics*: Routledge; 2009.
19. Taylor JS. Autonomy and Organ Sales, Revisited. *J Med Philos*. 2009 December 1, 2009;34(6):632-48.
20. Taylor JS. Autonomy, duress, and coercion. *Social Philosophy and Policy*. 2003;20(2):127-55.
21. Taylor JS. Autonomy, constraining options, and organ sales. *Journal of applied philosophy*. 2002;19(3):273-85.
22. Taylor JS. *Personal Autonomy: New Essays on Personal Autonomy and its Role in Contemporary Moral Philosophy*. Edition. s, editor: Cambridge University Press; 2008.
23. Veatch R. *Transplantation Ethics*: Georgetown University Press; 2002.
24. Harmon W, Delmonico F. Payment for kidneys: a government-regulated system is not ethically achievable. *Clin J Am Soc Nephrol*. 2006;1(6):1146-7.
25. Lobasz JK. Beyond border security: Feminist approaches to human trafficking. *Security Studies*. 2009;18(2):319-44.
26. Cherry MJ. *Kidney for Sale by Owner. Human Organs, Transplantation, and the Market*. Washington D.C.: Georgetown University Press; 2005.
27. Scheper-Hughes N. The global traffic in human organs. *Current Anthropology*. 2000;41(2):191-224.
28. Cohen IG. Transplant tourism: the ethics and regulation of international markets for organs. *J Law Med Ethics*. 2013;41(1):269-85.
29. Mill JS. *On Liberty*: Dover Publications 2002 Edition; 2002
30. Pattinson SD. Organ trading, tourism, and trafficking within Europe. *Med Law*. 2008;27(1):191-201.
31. Hinkley C. *Moral Conflicts of Organ Retrieval: A Case for Constructive Pluralism*: Rodopi; 2005.
32. Bagheri A, Delmonico F. Global initiatives to tackle organ trafficking and transplant tourism. *Medicine, Health Care and Philosophy*. 2013;16(4):887-95.
33. Budiani-Saberi DA, Delmonico FL. Organ trafficking and transplant tourism: A commentary on the global realities. *Am J Transplant*. 2008;8(5):925-9.
34. Budiani-Saberi DA. Organ Trafficking and Transplant Tourism. In: Ravitsky V, Fiester A, Caplan AL, editors. *The Penn Center Guide to Bioethics*. New York: Springer; 2009. p. 699-708.
35. Scheper-Hughes N. Keeping an eye on the global traffic in human organs. *Lancet*. 2003;361(9369):1645-8.
36. Scheper-Hughes N. Rotten trade: millennial capitalism, human values and global justice in organs trafficking. *Journal of Human Rights*. 2003;2(2):197.
37. Taylor JS. *Stakes and kidneys: why markets in human body parts are morally imperative*: Ashgate Publishing, Ltd.; 2005.
38. Scheper-Hughes N. The tyranny of the gift: Sacrificial violence in living donor transplants. *Am J Transplant*. 2007;7(3):507-11.

39. World Health Organization. World Health Organization Guiding Principles on Human Cell, Tissue and Organ Transplantation. www.who.int; 2008 [1 September 2013].
40. 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 (1997).
41. WMA International Code of Medical Ethics (2006).
42. Delmonico FL. The development of the declaration of Istanbul on organ trafficking and transplant tourism. *Nephrol Dial Transplant*. 2008;23(11):3381-2.
43. Panjabi RKL. Sum of a Human's Parts: Global Organ Trafficking in the Twenty-First Century, *The*. *Pace Env'tl L Rev*. 2010;28:1.
44. Scheper-Hughes N. Keeping an eye on the global traffic in human organs (vol 361, pg 1645, 2003). *LANCET*. 2003;362(9389):1082.
45. Matesanz R, Miranda B. Organ donation—the role of the media and of public opinion. *Nephrology Dialysis Transplantation*. 1996 November 1, 1996;11(11):2127-8.
46. Mahillo B, Carmona M, Álvarez M, White S, Noel L, Matesanz R. 2009 Global Data in Organ Donation and Transplantation: Activities, Laws, and Organization. *Transplantation*. 2011;92(10):1069-74.
47. Delmonico FL. The implications of Istanbul Declaration on organ trafficking and transplant tourism. *Curr Opin Organ Transplant*. 2009;14(2):116-9.
48. Matesanz R. International Figures on Donation and Transplantation. Newsletter *Transplant: Spain: Organización Nacional de Trasplantes (ONT)*. 2012.
49. Commission of the European Communities. Communication from the Commission to the European Parliament and the Council. Organ Donation and Transplantation: Policy Actions at EU Level. Brussels European Commission 2007.
50. Eurotransplant International Foundation. Annual Report 2012. Leiden 2013.
51. Bagheri A. Asia in the spotlight of the international organ trade: Time to take action. *Asian Journal of Wto & International Health Law and Policy*. 2007;2(1):11-23.
52. Shimazono Y. The state of the international organ trade: A provisional picture based on integration of available information. *Bull WHO*. 2007;85(12):955-62.
53. Jafar TH. Organ Trafficking: Global Solutions for a Global Problem. *Am J Kidney Dis*. 2009;54(6):1145-57.
54. Noorani MA. Commercial transplantation in Pakistan. *British Medical Journal*. 2008;336(7657):1378.
55. Tong A, Chapman JR, Wong G, Cross NB, Batabyal P, Craig JC. The experiences of commercial kidney donors: Thematic synthesis of qualitative research. *Transplant Int*. 2012;25(11):1138-49.
56. Rodriguez-Iturbe B. Organ trafficking: A time for action. *Kidney Int*. 2008;74(7):839-40.
57. Mor E, Boas H. Organ trafficking: Scope and ethical dilemma. *Curr Diabetes Rep*. 2005;5(4):294-9.
58. Moniruzzaman M. "Living Cadavers" in Bangladesh: Bioviolence in the Human Organ Bazaar. *Med Anthropol Q*. 2012;26(1):69-91.
59. Passas N. Cross-border crime and the interface between legal and illegal actors. In: Van Duyne P, Von Lampe K, Passas N, Eds, editors. *Upperworld and Underworld in Cross-border Crime*. Nijmegen: Wolf Legal Publishers; 2002.

60. Waldby C, Mitchell R. *Tissue Economies: Blood, Organs, and Cell Lines in Late Capitalism*. Durham NC: Duke University Press; 2007.
61. Akoh JA. Renal transplantation in developing countries. *Saudi J Kidney Dis Transpl*. 2011;22(4):637-50.
62. Susan M. Opt-out scheme is still best way to increase organ donation, says BMA. *BMJ*. 2012;11;344.
63. Rithalia A, McDaid C, Suekarran S, Norman G, Myers L. A systematic review of presumed consent systems for deceased organ donation. *Health Technol Assess*. 2009;13(26):118.
64. Lopp L. *Regulations Regarding Living Organ Donation in Europe*. Munster University of Munster 2013.
65. Dor FJMF, Massey EK, Frunza M, Johnson R, Lennerling A, Lovén C, et al. New classification of ELPAT for living organ donation. *Transplantation*. 2011;91(9):935-8.
66. Radcliffe-Richards J. *The case for allowing kidney sales*. Gutmann T, Daar AS, Sells RA, Land W, editors. D-49525 Lengerich: Pabst Science Publishers; 2004.
67. Kranenburg L, Zuidema W, Weimar W, Hilhorst M, Ijzermans JNM, Passchier J, et al. Strategies to advance living kidney donation: a single center's experience. *Progress in Transplantation*. 2009;19(1):71-5.
68. Matas AJ, Satel S, Munn S, Richards JR, Tan-Alora A, Ambagtsheer F, et al. Incentives for Organ Donation: Proposed Standards for an Internationally Acceptable System. *American Journal of Transplantation*. 2012;12(2):306-12.
69. Abouna GM. Organ Shortage Crisis: Problems and Possible Solutions. *Transplant Proc*. 2008;40(1):34-8.
70. Kierans C. Narrating kidney disease: the significance of sensation and time in the emplotment of patient experience. *Cult Med Psychiatry*. 2005;29(3):341-59.
71. Crowley-Matoka M. Desperately seeking "normal": the promise and perils of living with kidney transplantation. *Soc Sci Med*. 2005;61(4):821-31.
72. Lock M, Nguyen V-K. *An anthropology of biomedicine*: Wiley. com; 2011.
73. Lundin S. Organ economy: Organ trafficking in Moldova and Israel. *Public Underst Sci*. 2012;21(2):226-41.
74. Cohen DJ. Transplant tourism: a growing phenomenon. [10.1038/ncpneph1039]. 2009;5(3):128-9.
75. Sanal A. "Robin Hood" of techno-Turkey or organ trafficking in the state of ethical beings. *Cult Med Psychiatry*. 2004;28(3):281-309.
76. Lock M. *Twice dead: Organ transplants and the reinvention of death*: University of California Pr; 2001.
77. Randhawa G, Brocklehurst A, Pateman R, Kinsella S, Parry V. Faith leaders united in their support for organ donation: findings from the UK organ donation taskforce study. *Transpl Int*. 2010;23(2):140-6.
78. Gavriluta C, Frunza M. Transplantation debates in Romania between bioethics and religion. *Journal for the Study of Religions and Ideologies*. 2012(31):49-71.
79. Scheper-Hughes N. The global traffic in human organs. *Current Anthropology*. 2000;41(2):191-224.
80. Scheper-Hughes N. Commodity fetishism in organs trafficking. *Body & Society*. 2001;7(2-3):31-62.

81. Budiani D. Facilitating Organ Transplants in Egypt: An Analysis of Doctors' Discourse. *Body & Society*. 2007;13(3):125.
82. Mendoza RL. Transplant Management from a Vendor's Perspective. *Journal of Health Management*. 2012;14(1):67-74.
83. Mendoza RL. Price deflation and the underground organ economy in the Philippines. *J Public Health (United Kingdom)*. 2011;33(1):101-7.
84. Mendoza RL. Colombia's organ trade: Evidence from Bogota and Medellin. *J Public Health (Germany)*. 2010;18(4):375-84.
85. Vora K. Others' organs: South Asian domestic labor and the kidney trade. *Postmodern Culture*. 2008;19(1).
86. Scheper-Hughes N. Mr Tati's holiday and João's safari - seeing the world through transplant tourism. *Body and Society*. 2011;17(2-3):55-92.
87. Scheper-Hughes N. Illegal Organ Trade: Global Justice and the Traffic in Human Organs. In: Grussner R, Bedeti E, editors. *Living Donor Organ Transplants*. New York: McGraw-Hill; 2008. p. 107-21.
88. Scheper-Hughes N. Neo-cannibalism: the global trade in human organs. *Hedgehog Rev*. 2002;381:16.
89. Scheper-Hughes N. Parts unknown. *Ethnography*. 2004;5(1):29-73.
90. Sharp LAA. *Strange harvest: organ transplants, denatured bodies, and the transformed self*: Univ of California Press; 2006.
91. Yea S. Trafficking in part(s): The commercial kidney market in a Manila slum, Philippines
Trafic humain et trafic d'organes: Le commerce des reins dans un bidonville de Manille aux Philippines. *Global Social Policy*. 2010;10(3):358-76.
92. Kierans C. Anthropology, organ transplantation and the immune system: Resituating commodity and gift exchange. *Soc Sci Med*. 2011;73(10):1469-76.
93. Cohen L. Where it hurts: Indian material for an ethics of organ transplantation. *Zygon*. 2003;38(3):663-88.
94. Beck U, Camiller P. *What is globalization?: Polity Press Cambridge*; 2000.
95. Goldstein JS, Pevehouse JC. *International Relations*. edition t, editor. New York: Pearson International Edition; 2006.
96. Farmer P. *Pathologies of power: health, human rights, and the new war on the poor: with a new preface by the author*: University of California Pr; 2005.
97. Passas N. Cross-border crime and the interface between legal and illegal actors. *Upperworld and underworld in cross-border crime*. 2002:11-41.
98. Ruggiero V. 7 Global Markets and Crime. *Critical Reflections on Transnational Organized Crime, Money Laundering and Corruption*. 2003:171.
99. Passas N. Globalization and transnational crime: Effects of criminogenic asymmetries. *Combating Transnational Crime*. 2001:22-56.
100. Bruinsma G, Bernasco W. Criminal groups and transnational illegal markets. *Crime, Law and Social Change*. 2004;41(1):79-94.
101. Paoli L. The paradoxes of organized crime. *Crime, law and social change*. 2002;37(1):51-97.
102. Taylor JS. Black markets, transplant kidneys and interpersonal coercion. *Journal of Medical Ethics*. 2006;32(12):698-701.

103. Ambagtsheer F, Weimar W. A criminological perspective: Why prohibition of organ trade is not effective and how the declaration of Istanbul can move forward. *Am J Transplant.* 2012;12(3):571-5.
104. Cohen L. Migrant supplementarity: Remaking biological relatedness in Chinese military and Indian five-star hospitals. *Body and Society.* 2011;17(2-3):31-541.
105. Moazam F, Zaman RM, Jafarey AM. Conversations with kidney vendors in Pakistan: An ethnographic study. *Hast Cent Rep.* 2009;39(3):29-44.
106. Efrat A. The rise and decline of Israel's participation in the global organ trade: causes and lessons. *Crime, Law and Social Change.* 2013:1-25.
107. Efrat A. Combating The Kidney Commerce: Civil Society against Organ Trafficking in Pakistan and Israel. *British Journal of Criminology.* 2013 April 26, 2013.
108. Padilla B, Danovitch GM, Lavee J. Impact of legal measures prevent transplant tourism: the interrelated experience of The Philippines and Israel. *Medicine, Health Care and Philosophy.* 2013:1-5.
109. Abdeldayem HM, Salama I, Soliman S, Gameel K, Gabal AA, El Ella KA, et al. Patients seeking liver transplant turn to China: Outcomes of 15 Egyptian patients who went to China for a deceased-donor liver transplant. *Experimental and Clinical Transplantation.* 2008;6(3):194-8.
110. Adamu B, Ahmed M, Mushtaq RF, Alshaebi F. Commercial kidney transplantation: Trends, outcomes and challenges-A single-centre experience. *Ann Afr Med.* 2012;11(2):70-4.
111. Chen HM, Hu RH, Shih FJ, Shih FJ. Dilemmas across different overseas liver transplant stages: Taiwan transplant recipient families' perspectives. *Transplant Proc.* 2012;44(2):539-43.
112. Berglund S LS. 'I had to leave': Making Sense of Buying a Kidney Abroad. In: Gunnarson M., Svenaeus F, editors. *The Body as a Gift, Resource, and Commodity: Exchanges Organs, Tissues and Cells in the 21st Century.* Huddinge: Södertörn Studies in Practical Knowledge; 2012. p. 321–42.
113. Canales MT, Kasiske BL, Rosenberg ME. Transplant tourism: Outcomes of United States residents who undergo kidney transplantation overseas. *Transplantation.* 2006;82(12):1658-61.
114. Cronin AJ, Johnson RJ, Birch R, Lechler RI, G. R. Solving the Kidney Transplant Crisis for Minority Ethnic Groups in the UK: is being transplanted overseas the answer? In: Weimar W, Bos MA, Busschbach JJ, editors. *Organ Transplantation: Ethical, Legal and Psychosocial Aspects Expanding the European Platform.* Lengerich: Pabst Science Publishers 2011. p. 62-72.
115. Alghamdi SA, Nabi ZG, Alkhafaji DM, Askandrani SA, Abdelsalam MS, Shukri MM, et al. Transplant tourism outcome: A single center experience. *Transplantation.* 2010;90(2):184-8.
116. Al-Wakeel J, Mitwalli AH, Tarif N, Malik GH, Al-Mohaya S, Alam A, et al. Living unrelated renal transplant: outcome and issues. *Saudi J Kidney Dis Transpl.* 2000;11(4):553-8.
117. Cha RH, Kim YC, Oh YJ, Lee JH, Seong EY, Kim DK, et al. Long-term outcomes of kidney allografts obtained by transplant tourism: Observations from a single center in Korea. *Nephrology.* 2011;16(7):672-9.

118. Cha RH, Lee JP, Oh YJ, Yang SH, Kim YS. Poor outcomes of kidney allografts obtained by transplant tourism: Observations from a single center in Korea. *Am J Transplant.* 2011;11:268.
119. Chien YS, Hsieh HH, KT. H. Clinical Analysis of 100 Renal Transplant Recipients Back From the People's Republic of China to Taiwan. *Transplantation Proceedings.* 2000;32:1819-21.
120. Elaffandi AH, Gaunt T, Lumgair H, Jayasooriya N, Ondhia C, Thuraisingham R, et al. Outcome of transplant tourism from the UK. *Am J Transplant.* 2010;10:372.
121. Fadhil RAS, Al-Thani H, Al-Maslamani Y, Ali O. Trichosporon fungal arteritis causing rupture of vascular anastomosis after commercial kidney transplantation: A case report and review of literature. *Transplant Proc.* 2011;43(2):657-9.
122. Fan ST, Wang H, BK. L. Follow-Up of Chinese Liver Transplant Recipients in Hong Kong. *Liver Transplantation* 2009;15(5):544-50.
123. Geddes CC, Henderson A, Mackenzie P, Rodger SC. Outcome of patients from the west of scotland traveling to pakistan for living donor kidney transplants. *Transplantation.* 2008;86(8):1143-5.
124. Gill J, Diec O, Landsberg DN, Rose C, Johnston O, Keown PA, et al. Opportunities to deter transplant tourism exist before referral for transplantation and during the workup and management of transplant candidates. *Kidney Int.* 2011;79(9):1026-31.
125. Gill J, Madhira BR, Gjertson D, Lipshutz G, Cecka JM, Pham PT, et al. Transplant tourism in the United States: a single-center experience. *Clin J Am Soc Nephrol.* 2008;3(6):1820-8.
126. Higgins R. Kidney transplantation in patients travelling from the UK to India or Pakistan. *Nephrol Dial Transplant.* 2003;18:851.
127. Hsu CC, Lee CH, Hwang SJ, Huang SW, Yang WC, Chang YK, et al. Outcomes of overseas kidney transplantation in chronic haemodialysis patients in Taiwan. *Nephrology.* 2011;16(3):341-8.
128. Huang CH, Hu RH, Shih FJ, Chen HM, Shih FJ. Motivations and decision-making dilemmas of overseas liver transplantation: Taiwan recipients' perspectives. *Transplant Proc.* 2011;43(5):1754-6.
129. Inston NG, Gill D, Al-Hakim A, Ready AR. Living paid organ transplantation results in unacceptably high recipient morbidity and mortality. *Transplant Proc.* 2005;37(2):560-2.
130. Ivanovski N. The Organ Shortage in the Balkans! Pakistan – The New hope on the horizon. In: W. Weimar B, M. Busschbach, J.J.v., editor. In: *Organ Transplantation: Ethical, Legal and Psychosocial Aspects Expanding the European Platform.* Lengerich: Pabst Science Publishers 2011. p. 5861.
131. Ivanovski N, Masin J, Rambabova-Busljetic I, Pusevski V, Dohcevic S, Ivanovski O, et al. The outcome of commercial kidney transplant tourism in Pakistan. *Clin Transplant.* 2011;25(1):171-3.
132. Ivanovski N, Popov Z, Cakalaroski K, Masin J, Spasovski G, Zafirovska K. Living-unrelated (Paid) renal transplantation - Ten years later. *Transplant Proc.* 2005;37(2):563-4.
133. Kapoor A, Kwan KG, Paul Whelan J. Commercial renal transplantation: A risky venture? A single canadian centre experience. *Journal of the Canadian Urological Association.* 2011;5(5):335-40.

134. Kennedy SE, Shen Y, Charlesworth JA, Mackie JD, Mahony JD, Kelly JJP, et al. Outcome of overseas commercial kidney transplantation: An Australian perspective. *Med J Aust.* 2005;182(5):224-7.
135. Khalaf H, Farag S, El-Hussainy E. Long-term follow-up after liver transplantation in Egyptians transplanted abroad. *Saudi Med J.* 2004;25(12):1931-4.
136. Krishnan N, Cockwell P, Devulapally P, Gerber B, Hanvesakul R, Higgins R, et al. Organ trafficking for live donor kidney transplantation in indoasians resident in the west midlands: High activity and poor outcomes. *Transplantation.* 2010;89(12):1456-61.
137. Merion RM, Barnes AD, Lin M, Ashby VB, McBride V, Ortiz-Rios E, et al. Transplants in foreign countries among patients removed from the US transplant waiting list. *Am J Transplant.* 2008;8(4 PART 2):988-96.
138. Morad Z, Lim TO. Outcome of overseas kidney transplantation in Malaysia. *Transplant Proc.* 2000;32(7):1485-6.
139. Polcari AJ, Huguenot CM, Farooq AV, Holt DR, Hou SH, Milner JE. Transplant tourism - a dangerous journey? *Clin Transplant.* 2011;25(4):633-7.
140. Prasad GVR, Shukla A, Huang M, D'A Honey RJ, Zaltzman JS. Outcomes of commercial renal transplantation: A Canadian experience. *Transplantation.* 2006;82(9):1130-5.
141. Sever MS, Kazancioglu R, Yildiz A, Turkmen A, Ecdar T, Kayacan SM, et al. Outcome of living unrelated (commercial) renal transplantation. *Kidney Int.* 2001;60(4):1477-83.
142. Shimizu T, Ishida H, et al. A case of acute vascular rejection after overseas deceased kidney transplantation. *Clin Transplant.* 2007;21((SUPPL.18)):46-9.
143. Sugo H, Balderson GA, Crawford DHG, Fawcett J, Lynch SV, Strong RW, et al. Overseas liver transplantation for hepatitis C in Japanese patients: A comparison with patients from Australia/New Zealand. *Transplant Proc.* 2002;34(8):3323-4.
144. Sun CY, Lee CC, Chang CT, Hung CC, Wu MS. Commercial cadaveric renal transplant: An ethical rather than medical issue. *Clin Transplant.* 2006;20(3):340-5.
145. Tomazic J, Pirš M, Matos T, Ferluga D, Lindic J. Multiple infections after commercial renal transplantation in India [25]. *Nephrol Dial Transplant.* 2007;22(3):972-3.
146. Tsai MK, Yang CY, Lee CY, Yeh CC, Hu RH, Lee PH. De novo malignancy is associated with renal transplant tourism. *Kidney Int.* 2011;79(8):908-13.
147. Finkel M. This little kidney went to market. *N Y Times Mag.* 2001:1-13.
148. Scheper-Hughes N. Kidney kin: Inside the transatlantic transplant trade. *Harvard International Review.* 2006;27(4):62-5.
149. Muraleedharan VR, Jan S, Ram Prasad S. The trade in human organs in Tamil Nadu: the anatomy of regulatory failure. *Health Econ Policy Law.* 2006;1(Pt 1):41-57.
150. Erikoglu M, Tavli S, Tonbul Z. Ethical and economical appreciation of living nonrelated donors renal transplantation from outside Turkey. *Transplant Proc.* 2004;36(5):1253-4.
151. Kwon CHD, Lee SK, Ha J. Trend and outcome of Korean patients receiving overseas solid organ transplantation between 1999 and 2005. *J Korean Med Sci.* 2011;26(1):17-21.
152. Allam N, Al Saghier M, El Sheikh Y, Al Sofayan M, Khalaf H, Al Sebayel M, et al. Clinical outcomes for Saudi and Egyptian patients receiving deceased donor liver transplantation in China. *American Journal of Transplantation.* 2010;10(8):1834-41.
153. Majid ea. Outcomes of kidney transplant tourism in children: a single center experience. *Pediatr Nephrol* 2010;25:155-9.

154. Rizvi SAH, Naqvi SAA, Zafar MN, Mazhar F, Muzaffar R, Naqvi R, et al. Commercial transplants in local Pakistanis from vended kidneys: A socio-economic and outcome study. *Transplant Int.* 2009;22(6):615-21.
155. Ben Hamida F, Ben Abdallah T, Goucha R, Hedri H, Helal I, Karoui C, et al. Outcome of living unrelated (commercial) renal transplantation: Report of 20 cases. *Transplant Proc.* 2001;33(5):2660-1.
156. Ackoundou-N'Guessan C, Gnionsahe DA, Dekou AH, Tia WM, Guei CM, Moudachirou AM. Outcomes of renal patients from the ivory coast transplanted abroad: Time for a local kidney transplantation program. *Transplant Proc.* 2010;42(9):3517-20.
157. Budiani D, Columb S. A human rights approach to human trafficking for organ removal. *Medicine, Health Care and Philosophy.* 2013;Online Publication
158. Arichi N, Kishikawa H, Nishimura K, Ichikawa Y, Mitsui Y, Shiina H, et al. Is it safe to go outside Japan to receive kidney transplantation through a commercial transaction? - Investigation of cases followed up at hyogo prefectural nishinomiya hospital. *Nishinohon Journal of Urology.* 2009;71(4):143-7.
159. Fujita M, Taylor slingsby B, Akabayashi A. Transplant tourism from Japan. *Am J Bioethics.* 2010;10(2):24-6.
160. Rhodes R, Schiano T. Transplant tourism in China: A tale of two transplants. *Am J Bioethics.* 2010;10(2):3-11.
161. Yakupoglu YK, Ozden E, Dilek M, Demirbas A, Adibelli Z, Sarikaya S, et al. Transplantation tourism: High risk for the recipients. *Clin Transplant.* 2010;24(6):835-8.
162. Ghods AJ, Nasrollahzadeh D. Transplant tourism and the Iranian model of renal transplantation program: ethical considerations. *Exp Clin Transplant.* 2005;3(2):351-4.
163. Ambagtsheer F, Zaitch D, van Swaaningen R, Duijst W, Zuidema W, Weimar W. Cross-border quest: the reality and legality of transplant tourism. *J Transplant.* 2012;2012:391-936.
164. Kucuk M, M.S. S, Turkmen A, Sahin SK, R., Ozturk S, Eldegez U. Demographic Analysis and Outcome Features in a Transplant Outpatient Clinic. *Transplantation Proceedings.* 2005;37(2):743-6.
165. Schiano TD, Rhodes R. The dilemma and reality of transplant tourism: An ethical perspective for liver transplant programs. *Liver Transplant.* 2010;16(2):113-7.
166. Zargooshi J. Commercial renal transplantation in Iran: The recipients' perspective. *Journal of Urology.* 2007 Apr;177(4):602-3.
167. O'Brien N. Organ trafficker's death closes case. *The Sydney Morning Herald.* 2012.
168. The rise and fall of the South African organ-trafficking ring. *Christian Science Monitor.* 2004;96(136):12.
169. SA police smash 'body-part trade'. *BBC News.* 2003.
170. Lundin S. The great organ bazar. *Project Syndicate : a World of Ideas* 2011.
171. Malakoutian T, Hakemi MS, Nassiri AA, Rambod M, Haghghi AN, Broumand B, et al. Socioeconomic Status of Iranian Living Unrelated Kidney Donors: A Multicenter Study. *Transplant Proc.* 2007;39(4):824-5.
172. Ionescu C. Donor charged in Romania's first organ trafficking trial. *Lancet.* 2005;365(9475):1918.
173. Budiani-Saberi D, Mostafa A. Care for commercial living donors: The experience of an NGO's outreach in Egypt. *Transplant Int.* 2011;24(4):317-23.

174. Paguirigan MS. Sacrificing something important: the lived experience of compensated kidney donors in the Philippines. *Nephrol Nurs J.* 2012;39(2):107-17; quiz 18.
175. Naqvi SAA, Ali B, Mazhar F, Zafar MN, Rizvi SAH. A socioeconomic survey of kidney vendors in Pakistan. *Transplant Int.* 2007;20(11):934-9.
176. Lundin S. The Valuable Body. *Baltic Worlds.* 2008;1(1):6-8.
177. Goyal M, Mehta RL, Schneiderman LJ, Sehgal AR. Economic and health consequences of selling a kidney in India. *J Am Med Assoc.* 2002;288(13):1589-93.
178. Khalili MI. Organ trading in Jordan: bad news, good news. *Politics Life Sci.* 2007;26(1):12-4.
179. Budiani-Saberi DA, Delmonico FL. Organ trafficking and transplant tourism: a commentary on the global realities. *American Journal of Transplantation.* 2008;8(5):925-9.
180. Rai MA, Afzal O. Organs in the bazaar: The end of the beginning? *Politics & the Life Sciences.* 2007;26(1):10-1.
181. Noorani MA. Commercial transplantation in Pakistan and its effects on Western countries. *BMJ.* 2008;336(7657):1378.
182. Awaya T, Siruno L, Toledano S, Aguilar F, Shimazono Y, De Castro L. Failure of informed consent in compensated non-related kidney donation in the Philippines. *Asian Bioethics Review.* 2009;1(2):138-43.
183. Naqvi SAA, Rizvi SAH, Zafar MN, Ahmed E, Ali B, Mehmood K, et al. Health status and renal function evaluation of kidney vendors: A report from Pakistan. *Am J Transplant.* 2008;8(7):1444-50.
184. Jha V. Paid transplants in India: The grim reality. *Nephrol Dial Transplant.* 2004;19(3):541-3.
185. Danovitch GM, Al-Mousawi M. The Declaration of Istanbul-early impact and future potential. *Nat Rev Nephrol.* 2012;8(6):358-61.
186. Francis LP, Francis JG. Stateless Crimes, Legitimacy, and International Criminal Law: The Case of Organ Trafficking. *Criminal Law and Philosophy.* 2010;4(3):283-95.
187. Freeman RB. "Transplant tourism" in the United States? *Transplantation.* 2007;84(12):1559-60.
188. Kokubo A. The interaction of the international society concerning kidney transplants - A consideration of diseased kidney transplants in Japan and transplant tourism over the world. *Legal Med.* 2009;11(SUPPL. 1):S393-S5.
189. Padilla BS. Regulated compensation for kidney donors in the Philippines. *Curr Opin Organ Transplant.* 2009;14(2):120-3.
190. Turner L. Commercial organ transplantation in the Philippines. *Camb Q Healthc Ethics.* 2009;18(2):192-6.
191. Peters A. Making the Choice, Organ Transfer or Trade: An Analysis of Canadian Values and the Political Economy of Care: University of Guelph; 2011.
192. Biggins SW, Bambha K, Terrault N, Inadomi J, Roberts JP, Bass N. Transplant tourism to China: The impact on domestic patient-care decisions. *Clin Transplant.* 2009;23(6):831-8.
193. Abbud-Filho M, Campos HH, Garcia VD, Pestana JO. Payment for donor kidneys: only cons. *Kidney Int.* 2006;70(3):603; author reply 4.
194. Epstein M. Sociological and ethical issues in transplant commercialism. *Curr Opin Organ Transplant.* 2009;14(2):134-9.

195. Anker AE, Feeley TH. Estimating the risks of acquiring a kidney abroad: A meta-analysis of complications following participation in transplant tourism. *Clin Transplant*. 2012;26(3):E232-E41.
196. Mendoza RL. Kidney black markets and legal transplants: Are they opposite sides of the same coin? *Health Policy*. 2010;94(3):255-65.
197. Barsoum RS. Trends in unrelated-donor kidney transplantation in the developing world. *Pediatr Nephrol*. 2008;23(11):1925-9.
198. Tsai DFC. Transplant tourism from taiwan to china: Some reflection on professional ethics and regulation. *Am J Bioethics*. 2010;10(2):22-4.
199. Beširević V, Codreanu N, Demény E, Florea GT, Sándor J. Improving the effectiveness of the organ trade prohibition in Europe. Chişinău: EULOD2012.
200. Gantz M. Israeli Holocaust survivor turned organ trafficker arrested in Rome. *Ynetnews*. 2013 06-09-2013.
201. Champion-Vincent V, Scheper-Hughes N. On Organ Theft Narratives. *Current Anthropology*. 2001;42(4):555-8.
202. Ghods AJ, Savaj S. Iranian model of paid and regulated living-unrelated kidney donation. *Clin J Am Soc Nephrol*. 2006;1(6):1136-45.
203. Zargooshi J, Dean R, Wessells H. Quality of life of Iranian kidney "donors". *J Urol*. 2001;166(5):1790-9.
204. Meyer S. Trafficking in Human Organs in Europe: A Myth or an Actual Threat? *European Journal of Crime, Criminal Law & Criminal Justice*. 2006;14(2):208-29.
205. Sidley P. South African doctors charged with involvement in organ trade. *BMJ*. 2004;329(7459):190.
206. Allain J. Trafficking of persons for the removal of organs and the admission of guilt of a South African hospital. *Medical Law Review*. 2011;19(1):117-22.
207. Barbeau N. Kidney Doctor Case Collapses. *IOL News*. 2012.
208. Sarig M. Israeli surgeon is arrested for suspected organ trafficking. *British Medical Journal*. 2007 May;334(7601):973-.
209. CNN. Turkish doctor suspected of human organ trafficking arrested. *CNN*. 2011 12-01-2011.
210. Mudur G. Kidney trade arrest exposes loopholes in India's transplant laws. *BMJ*. 2004;328(7434):246.
211. Carvajal D. Trafficking Investigations Put Surgeon in Spotlight. *The New York Times* 2011 11-2-2011;Sect. A4.
212. Lewis P. Six Kosovar doctors face charges of illegal organ trafficking. *BMJ*. 2010;341:c7290.
213. Bilefsky D. Seven Charged in International Organ-Trafficking Ring Based in Kosovo. *New York Times*. 2010:4.
214. BBC. Medicus: Five guilty in Kosovo human organ trade case. *BBC News*. 2013 29-04-2013.
215. Dyer Z. Costa Rica doctor accused of running organ trafficking ring promoted services in You Tube. *Tico Timesnet*. 2013 18-06-2013.
216. Parry W. How Poverty, False Promises, Fuel Illegal Organ Trafficking. *Live Science*. 2012 22-03-2012.

217. Moazam F. Pakistan and kidney trade: battles won, battles to come. *Medicine, Health Care and Philosophy*. 2012;1-4.
218. Ivanovski N, Stojkovski L, Cakalaroski K, Masin G, Djikova S, Polenakovic M. Renal transplantation from paid, unrelated donors in India--it is not only unethical, it is also medically unsafe. *Nephrol Dial Transplant*. 1997;12(9):2028-9.
219. Trey T, Caplan AL, Lavee J. Transplant ethics under scrutiny-responsibilities of all medical professionals. *Croat Med J*. 2013;54(1):71-4.
220. Rowinski W, Paczek L. Transplantation ethics: Are we approaching the crossroads? *Transplant Proc*. 2012;44(7):2171-2.
221. Nasir M, Nasir T, Ashraf Khan H, Khizar S. Organ Trafficking: Do you want a society where the destitute become a store for the wealthy? *Professional Medical Journal*. 2013;20(2):177-81.
222. Pancevski B. Bulgarian hospital admits role in illegal transplants. *LANCET*. 2006;367(9509):461.
223. Rizvi AHS, Naqvi ASA, Zafar NM, Ahmed E. Regulated compensated donation in Pakistan and Iran. *Curr Opin Organ Transplant*. 2009;14(2):124-8.
224. Bilgel F. *The Law and Economics of Organ Procurement*. Rotterdam: Rotterdam; 2011.
225. Vermot-Mangold R-G. *Trafficking in Organs in Europe: Council of Europe Parliamentary Assembly, Committee on Social, Health and Family Affairs 2003*.
226. Bramstedt KA, Xu J. Checklist: Passport, plane ticket, organ transplant. *Am J Transplant*. 2007;7(7):1698-701.
227. *The State vs Samuel Ziegler. Specialized Commercial Crime Court Durban; 2010*.
228. UNODC. Preventing, combating and punishing trafficking in human organs, Report of Secretary-General. Vienna UNODC Commission on Crime Prevention and Criminal Justice (CCPCJ)2006.
229. Endo F. Organ plan poses ethical issues; new RP scheme to allow kidney trading aims to close back market. *Daily Yomiuri*. 2007 3-2-2007.
230. Walsh D. Transplant tourists flock to Pakistan, where poverty and lack of regulation fuels trade in human organs. *The Guardian*. 2011 10-02-2005.
231. Haken J. *Transnational Crime in the Developing World*. Washington DC: Global Financial Integrity2011.
232. Geis G, Brown GC. The transnational traffic in human body parts. *Journal of Contemporary Criminal Justice*. 2008;24(3):212-24.
233. *Brazil: Doctors Convicted of Killing Four Patients for Their Kidneys. New York Times. 2011:5*.
234. Vermot-Mangold R-G. Der Organhandel nutzt extreme Armut aus. *Soziale Medizin, Hintergrund Transplantation Gespräch mit Ruby-Gaby Vermot-Mangold*. 2004:20-3.
235. Budiani-Saberi D, Mostafa A. Care for commercial living donors: The experience of an NGO's outreach in Egypt. *Transplant International*. 2011;24(4):317-23.
236. Zargooshi J. Iranian kidney donors: Motivations and relations with recipients. *Journal of Urology*. 2001;165(2):386-91.
237. Shimazono Y. *What is Left Behind? Informal Consultation on Transplantations at the World Health Organization; Geneva. 20062006*.
238. Scheper-Hughes N. *The Rosenbaum Kidney Trafficking Gang. Counter Punch2011*.
239. McLaughlin A, Prusher IR, Downie A. *What is a kidney worth? 2004 9-6-2004*.

240. World Health Organization. Organ trafficking and transplantation poses new challenges. *Bulletin*. 2004;82(2):639-718
241. Tao D. Worldwide Market Fuels Illegal Traffic in Organs. *The New York Times*. 2009 29-07-2009.
242. Rothman DJ, Rose E, Awaya T, Cohen B, Daar A, Dzemeshevich SL, et al. The bellagio task force report on transplantation, bodily integrity, and the international traffic in organs. *Transplant Proc*. 1997;29(6):2739-45.
243. Sidley P. South African doctors arrested in kidney sale scandal. *BMJ*. 2005;331(7515):473.

Appendix I: Literature Search Strategy

Two extensive literature searches were performed by the Erasmus MC University Hospital (EMC) and Lund University (ULUND) research teams. Then, both searches were combined. The results of these literature searches form the basis of this deliverable. The search strategy is explained below.

A. Search by ULUND

In order to do an extensive search for literature on organ trafficking, we searched a number of different databases. The databases were chosen to cover literature on organ trafficking from a wide range of perspectives and also different types of material, even though the main focus was on articles from academic journals. The searches were performed and compiled by Aron Lindhagen at the Humanities and Theology libraries at Lund University.

The search was the same in all databases, with some minor alterations, and based on key words provided by the members of the project. In PubMed we did a number of additional searches based on relevant subject headings (MESH terms) in order to collect as much as we could on the topic. In Library of Congress Catalog we searched for material with the authorized subject key “organ trafficking” and removed fictional works. On the EbscoHost platform we originally searched all of the 46 databases Lund University subscribes to. Once the original search had been executed, a number of databases were removed from the search, either because they retrieved no hits, or as the hits were irrelevant to the project.

In the end the following databases remained:

Abstracts in Social Gerontology, Academic Search Complete, ATLA Religion Database with ATLASerials , Business Source Complete, CINAHL, Criminal Justice Abstracts, EconLit, Family Studies Abstracts, Humanities International Complete, Philosopher's Index, Political Science Complete, PsycEXTRA, PsycINFO, Public Affairs Index, Regional Business News, SocINDEX, Teacher Reference Center, Violence & Abuse Abstracts

The following **key words** were used:

- commercial transplants
- buying organs
- kidney sales
- organ trade
- organ trafficking
- organ tourism
- organ brokers
- organ trafficking chain
- organ sales
- selling organs
- trafficking in persons for the purpose of organ removal
- transplant tourism

The table below shows how many hits the original search retrieved in each database. Once the searches were performed, duplicates were removed along with a number of off-topic resources that had been caught by the search, leaving 1067 resources.

The 1067 search results were shared by the ULUND team with all other authors of this report.

Table 3. Search results ULUND

<i>Database</i>	<i>No of hits</i>	<i>Date of search</i>
<i>EbscoHost databases</i>	<i>792 (after automatic deduplication)</i>	<i>21 February 2013</i>
<i>Library of Congress Catalog</i>	<i>16</i>	<i>27 February 2013</i>
<i>OAIster</i>	<i>68</i>	<i>26 February 2013</i>
<i>PubMed</i>	<i>345</i>	<i>26 February 2013</i>
<i>Scopus</i>	<i>340</i>	<i>26 February 2013</i>
<i>Web of Science</i>	<i>262</i>	<i>26 February 2013</i>

B. Search by EMC

EMC adopted a similar search strategy, using a wide range of search terms that cover various aspects of organ trafficking. The databases were: Embase, Medline OvidSP, Cochrane, Web of Science and Scopus. In these databases the following search strings were used:

Embase

('organ transplantation'/de OR 'liver transplantation'/de OR 'kidney transplantation'/de) AND ('commercial phenomena'/de OR market/de OR marketing/de OR purchasing/de)) OR (((purchas* OR buy* OR commerc* OR tourism* OR traffic* OR overseas OR abroad OR sale OR sales OR sold OR selling OR crime OR criminal* OR vending OR vendor* OR pay* OR trade OR trading OR business* OR market* OR solicit* OR entrepreneur* OR financ* OR broker* OR profit*) NEAR/3 (organ OR organs OR kidney* OR liver* OR transplant* OR graft* OR donor OR donation*)) OR ((donor* OR donat*) NEAR/3 recruit*)):ab,ti NOT ([animals]/lim NOT [humans]/lim)

Medline OvidSP

("organ transplantation"/ OR "liver transplantation"/ OR "kidney transplantation"/) AND ("Commerce"/ OR marketing/) OR (((purchas* OR buy* OR commerc* OR tourism* OR traffic* OR overseas OR abroad OR sale OR sold OR selling OR crime OR criminal* OR vending OR vendor* OR pay* OR trade OR trading OR business* OR market* OR solicit* OR entrepreneur* OR financ* OR broker* OR profit*) ADJ3 (organ OR organs OR kidney* OR liver* OR transplant* OR graft* OR donor OR donation*)) OR ((donor* OR donat*) ADJ3 recruit*)):ab,ti. NOT (exp animals/ NOT humans/)

Cochrane

(((purchas* OR buy* OR commerc* OR tourism* OR traffic* OR overseas OR abroad OR sale OR sold OR selling OR crime OR criminal* OR vending OR vendor* OR pay* OR trade OR trading OR business* OR market* OR solicit* OR entrepreneur* OR financ* OR broker* OR profit*) NEAR/3 (organ OR organs OR kidney* OR liver* OR transplant* OR graft* OR donor OR donation*)) OR ((donor* OR donat*) NEAR/3 recruit*)):ab,ti

Web-of-science

TS=(((purchas* OR buy* OR commerc* OR tourism* OR traffic* OR overseas OR abroad OR sale OR sold OR selling OR crime OR criminal* OR vending OR vendor* OR pay* OR trade OR trading OR business* OR market* OR solicit* OR entrepreneur* OR financ* OR broker* OR profit*) NEAR/3 (organ OR organs OR kidney* OR liver* OR transplant* OR graft* OR donor OR donation*)) OR ((donor* OR donat*) NEAR/3 recruit*)) NOT ((animal* OR swine* OR chick* OR rat OR rats OR sheep OR mouse* OR mice OR fish*) NOT (human* OR patient*))

Scopus

TITLE-ABS-KEY((((purchas* OR buy* OR commerc* OR tourism* OR traffic* OR overseas OR abroad OR sale OR sold OR selling OR crime OR criminal* OR vending OR vendor* OR pay* OR trade OR trading OR business* OR market* OR solicit* OR entrepreneur* OR financ* OR broker* OR profit*) W/3 (organ OR organs OR kidney* OR liver* OR transplant* OR graft* OR donor OR donation*)) OR ((donor* OR donat*) NEAR/3 recruit*)) AND NOT ((animal* OR swine* OR chick* OR rat OR rats OR sheep OR mouse* OR mice OR fish*) AND NOT (human* OR patient*))

C. Integrated search by ULUND and EMC

The table below shows how many hits the original search retrieved in each database. After the searches were performed, we integrated our results with the ULUND search results. Then, we removed duplicates along with a number of off-topic results, leaving 10107 publications.

Table 4. Total number of records

<i>Database</i>	<i>Number of hits</i>	<i>Remaining publications after removing duplicates</i>	<i>Date of search</i>
<i>Embase</i>	<i>2495</i>	<i>2425</i>	<i>6 May 2013</i>
<i>Scopus</i>	<i>7301</i>	<i>5242</i>	<i>6 May 2013</i>
<i>Web-of-science</i>	<i>4186</i>	<i>1642</i>	<i>6 May 2013</i>
<i>Medline OvidSP</i>	<i>2434</i>	<i>273</i>	<i>6 May 2013</i>
<i>Lund Search</i>	<i>1067</i>	<i>524</i>	<i>February 2013</i>
<i>Cochrane central</i>	<i>49</i>	<i>1</i>	<i>6 May 2013</i>
Total	17532	10107	

Of the 10107 remaining records, we excluded records on: blood, cell, tissue, sperm, eggs, bone marrow, other medical publications (not relevant for HOTT) and all publications published before 01-01-2000.

This led to a total of **1137 publications** that were shared with all authors of this report.