

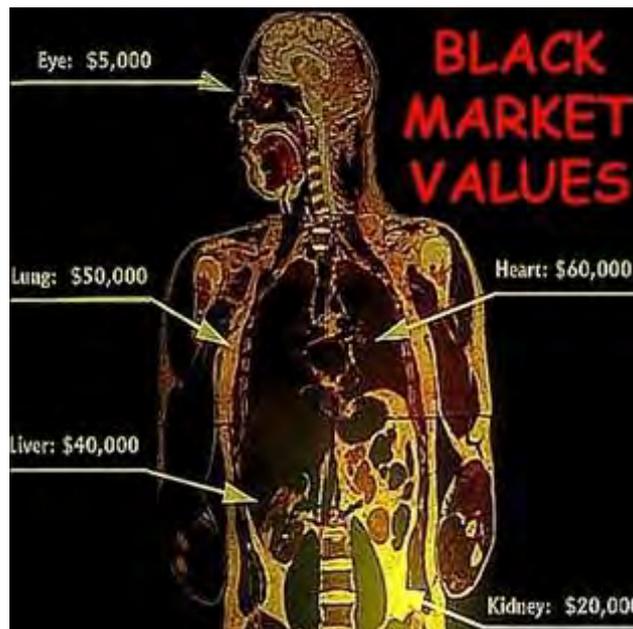
**A BLACK MARKET PERSPECTIVE ON ORGAN TRAFFICKING: SUGGESTIONS
FOR POSSIBLY PREVENTING THE ILLEGAL ORGAN TRADE**

BY

ARVITHA DOODNATH

STUDENT NUMBER: 208503152

SUPERVISOR: PROF DAVID MCQUOID-MASON



DECLARATION: I declare that all work submitted is my own and even though I have made reference to other works, I have not plagiarised the work of anyone when submitting this dissertation.

Sign: Arvitha Doodnath

Acknowledgements

I would like to thank my Supervisor, Prof David McQuoid-Mason for his guidance and help regarding my Dissertation and for his expertise regarding my topic.

To Professor Robin Palmer and the IPLT staff (Andrea and Melissa Murray), thank you for all your support and help when I needed it the most.

To Prof Magda Slabbert, Thank you for your guidance and time and for helping me to be more focused in researching my topic.

To the Kirath Ramasary, thank you for being my pillar of strength through this and always being there to support me.

To my family and friends, if it weren't for the support and encouragement that I have received, I would not be where I am today. I am truly grateful for all the patience and sacrifices that has been made to get me where I am.

Arvitha Doodnath

Table of Contents

Chapter 1: Introduction	1
1.1 Background of the topic	1
1.2 Breakdown of the relevant sub-topics of the dissertation	1-3
Chapter 2: International Scope on Organ Trafficking	4
2.1.1 Introduction	4
2.1.1 The Declaration of Istanbul	4
2.1.2 Introduction.....	4
2.1.3 History and the Background of the Declaration.....	4-5
2.1.4 Definitions in the Declaration.....	5-6
2.1.5 Principles of the Declaration.....	6-7
2.1.6 Proposals in the Declaration to increase cadaveric donations.....	7-8
2.1.7 Further Proposals in the Declaration.....	8-9
2.1.8 Conclusion.....	9-10
2.2 The Palermo Protocol	10
2.2.1 Introduction.....	10
2.2.2 Background to the Protocol.....	10-11
2.2.3 Provisions of the Protocol.....	11-13
2.2.4 Conclusion.....	13
Chapter 3: Foreign Law on Organ Transplantation	14
Introduction	14
3.1 The Human Tissue Act 2004 of United Kingdom	14
3.1.1 Introduction.....	14
3.1.2 Background.....	15

3.1.3 Features of the Act.....	15-17
3.1.4 Part 2 of Schedule 1 of the Act (which deals with e.g. Education, training and audit etc).....	17
3.1.5 Criminalising Trafficking of Human Tissue which is an important feature of the Act.....	18-19
3.1.6 Criticism of the UK Act.....	19-20
3.1.7 Conclusion.....	20
3.2: The Iranian Model.....	20
3.2.1 Introduction.....	20-21
3.2.2 Features of the Model.....	21-22
3.2.3 Arguments in favour of the Iranian Model.....	22-23
3.2.4 Arguments against the Iranian Model.....	23-25
3.2.5 Conclusion.....	25
3.3 The Singapore model.....	25
3.3.1 Introduction.....	25-26
3.3.2 Features of the Act.....	26-27
3.3.3 Singapore’s opt-out system.....	27
3.3.4 Criteria for donors in Singapore.....	27-28
3.3.5 Selection criteria for recipients.....	28
3.3.6 Other features of the Act.....	29-30
3.3.7 Criticisms of the opt-out provisions of the Act.....	30-31
3.3.8 Conclusion.....	31-32
3.4 The Spanish Model.....	32
3.4.1 Introduction.....	32
3.4.2 Features of the Model.....	32-33
3.4.3 The Co-ordinating teams for transplants.....	34
3.4.4 Main Functions of the ONT.....	35

3.4.5 Conclusion.....	36
3.5 The Indian Transplantation of Human Organs Act.....	36
3.5.1 Introduction.....	36
3.5.2 Features of the Act.....	36-37
3.5.3 Criticisms of the Act.....	38
3.5.4 Conclusion.....	38
3.6 Ideas elicited from these international instruments and models that will benefit the world wide organ shortage problem, South Africa and that will curb the black market organ trafficking syndicate.....	38-39
Chapter 4: Possibility of Xenotransplantation and Cloning.....	40
4.1 Introduction.....	40
4.2 Xenotransplantation.....	40-41
4.3 Cloning.....	41-42
4.4 Conclusion.....	42
Chapter 5: South African Legislation on “Organ Trafficking”.....	43
Introduction.....	43
5.1 The Human Tissue Act.....	43
5.1.1 Introduction.....	43
5.1.2 Critique of the section of the Act.....	43-45
5.1.3 Discussion of the State v Netcare Kwa-Zulu Natal (Pty) Limited.....	45
5.1.3.1 Introduction of the case.....	45-46
5.1.3.2 Who were the prime donors?.....	46
5.1.3.3 Netcare’s Agreement.....	46-49
5.1.3.4 Commentary on the Case.....	49-51
5.1.3.5 Conclusion.....	51
5.2 The National Health Act.....	51
5.2.1 Introduction.....	51

5.2.2 Discussion of the relevant section relating to payment for organ donations in the Act.....	52-54
5.2.3 Conclusion.....	54
Chapter 6: The Organ Trafficking Syndicate Worldwide.....	55
6.1 Introduction.....	55
6.1.1 Findings regarding a worldwide survey of organ trafficking.....	55-57
6.1.2 Are control measures to prevent the progression of the black market, really effective?.....	58
6.1.3 Conclusion.....	58
Chapter 7: Proposals for addressing the organ shortage problem.....	59
7.1 Introduction.....	59
7.1.1 Measures that can be taken against organ trafficking.....	59
7.1.2 Inhibiting factors regarding the organ shortage problem.....	59-60
7.1.3 Proposals to curb organ trafficking and organ shortages.....	60-62
7.2 Proposals to remedying South Africa’s Legislation on organ donation.....	62-66
7.3 Conclusion.....	66-67
Glossary of terms.....	68-73
Acronyms.....	74
Bibliography / References.....	75-83

Chapter 1– Introduction:

1. Introduction:

1.1 Background of the topic:

The black market thrives on poverty and instinct for survival. This then leads to it being prosperous due to two facts: (a) there exists a shortage of the organs which are available for transplant, and (b) there exists people who live in poverty who will do anything to alleviate that situation. The black market thrives under such circumstances as people in dire need of an organ transplant cannot obtain one legally due to various obstructions, such as long waiting lists and shortage of organs available for transplants, resorting to the black market to obtain their organs. The poor are then exploited due to them wanting to donate an organ to obtain money, which they think will alleviate their situation. The brokers in such transactions profit heavily, while the donors are left with little to benefit from. The brokers also find ways in which they find loopholes in the legislations of each country and find a way in which to traffic organs without getting caught. The brokers cleverly trick the donors into donating their organs and circumvent the law to establish a very lucrative organ trafficking syndicate. Due to the brokers being so clever in circumventing the law, it becomes harder for them to be prosecuted by authorities due to the extent of these syndicates being so large and by the time each link is found and prosecuted the broker escapes prosecution and skips to another country to establish the trade there. This is a worldwide problem as even developed countries have the poor selling their organs for money. Can one regulate this area of the black market or will it continue to prosper despite any regulations being put in place? The main objective will then be to discuss the various options available to possibly curb the black market trade in organs.

1.2 Breakdown of the relevant sub-topics of the dissertation:

The topics to be discussed under this dissertation are as follows:

a. The Declaration of Istanbul: The background and current principles as well as the proposals in the Declaration will be discussed. These principles will be suggested for South Africa's legislation and for the world and discussed as to whether these can effectively help South Africa and the world to curb the organ trafficking problem.

b. The Palermo Protocol: The nature and context of the Protocol and the ideas explored here to possibly remedy to organ trafficking in South Africa as well as for the world.

c. The UK Human Tissue Act: This Act will be discussed in detail particularly the provisions relating to organ transplants. A critique of the Act shall then follow. Some of the principles in the Act will be recommended for South Africa in respect of organ trafficking. The UK Human Tissue Authority will also be discussed as a possible step forward for both South Africa and the world to legalizing organ transplantation between non-related individuals.

d. The Iranian Model: The Iranian model of organ transplantation will be discussed with particular reference to the notion of gifts and “payment” and how effective these have been in curbing the organ trafficking as well as the shortage of the organ supply.

e. The Singapore Human Organ Transplantation Act: The features of this model will be discussed in detail. These commendable features of this model will also be recommended for South Africa and the world in possibly curbing the organ trafficking and shortage problem.

f. The Spanish Model of organ transplantation: This model will be discussed in particular the use of cadaver donors to curb the organ donation shortage. The organisation such as the National Organisation of Transplants will also be discussed and in particular how this can be used to assist South Africa and the world in curbing the organ shortage problem thereby curbing the organ trafficking problem.

g. The Indian Model: The Indian Transplantation of Human Organs Act will be discussed to illustrate how despite legislation, without effective implementation or regulation it still leads to exploitation in respect of organ donations.

h. The possibility of Xenotransplantation and Cloning: The possibility of curbing the organ shortage problem and the black market would be to possibly use xenotransplantation and cloning. These options will be discussed as possible options to further curb the organ shortage problem and in doing so hinder the organ trafficking syndicate.

i. The Human Tissue Act: Section 28 of the Human Tissue Act¹ (HTA) will be discussed as well as the Netcare, St Augustine’s Hospital case². This case will be used to illustrate how

¹ 65 of 1983.

despite legislation being in place in South Africa, organ trafficking still occurred under the Human Tissue Act.

j. The National Health Act:

The National Health Act³ (NHA), chapter 8 of which has repealed the Human Tissue Act will then be discussed, in particular sections 60 and 61 which deal with organ transplantation and payment for such transplantation.

j. Organ Trafficking Syndicate Worldwide: The investigations conducted by Nancy-Scheper Hughes and her role in uncovering the Netcare Organ Trafficking case as well as trafficking syndicates in other countries such as in the United States of America, Turkey and Brazil will be discussed together with measures to prevent the black market organ trade.

k. Recommendations and Conclusions: Recommendations and Conclusions will be made for preventing organ trafficking trade worldwide as well as in South Africa, based on international instruments as well as the various models of the countries discussed above.

² State v Netcare Kwa-Zulu Natal (Pty) Ltd, Commercial Crime Court, Regional Court of Kwa-Zulu Natal case no 41/1804/2010, (8 November 2010).

³ 61 of 2003.

Chapter 2 – International Instruments Dealing With Organ Trafficking:

2.1 Introduction:

The following international instruments dealing with organ trafficking will be discussed:

- a) The Declaration of Istanbul
- b) The Palermo Protocol

2.1.1 The Declaration of Istanbul:

2.1.2 Introduction:

The Declaration of Istanbul is an international instrument which was introduced in 2008 and deals with issues of human trafficking and organ trafficking. This chapter deals with:

- a) The history and background of the Declaration
- b) Definitions in the Declaration
- c) Principles in the Declaration
- d) Proposals in the Declaration to increase cadaveric donation
- e) Proposals in the Declaration to ensure the protection and safety of living donors as well as combating transplant tourism, organ trafficking and transplant commercialism
- f) Conclusions regarding the principles that emerge from the Declaration

2.1.3 History and Background of the Declaration:

The Declaration of Istanbul was introduced to firstly, protect the vulnerable and the poor from exploitation and being subjected to ‘transplant tourism’ and secondly, to address and curb the problem of international trafficking of both human organs and tissues⁴.

⁴ “The history and development of the Declaration of Istanbul” available at: http://www.declarationofistanbul.org/index.php?option=com_content&view=article&id=77&Itemid=57 (accessed on 7th July 2012).

As a result of the on-going problems of organ trafficking internationally as well as the shortage of organs for transplantation globally, the Transplantation Society together with the International Society of Nephrology representatives, met and decided to develop a formal Declaration that would unite those who wanted to combat unethical organ transplantation. A Steering Committee was established in 2007 to lay the foundations for the 2008 Istanbul Summit. The idea behind the Summit was to finalise a Declaration that would define organ trafficking, transplant tourism and commercialism, achieve consensus regarding principles of practice and recommend alternatives to address the organ shortage problem⁵.

On the 30th April 2008 representatives from scientific and medical bodies, government officials, social scientists and ethicists from around the world met and convened in Istanbul, to draft the Declaration⁶.

The Declaration was derived from the consensus which was reached by the participants at the Summit. The Declaration was first published on the 5th July 2008 in *Lancet*⁷. It has since then been published in several medical journals and translated into more than a dozen languages⁸.

2.1.4 Definitions in the Declaration:

One of the commendable aspects of the Declaration is that it specifically defines “organ trafficking”, “transplant commercialism” and “travel for transplantation”⁹. “Organ trafficking”¹⁰ is defined as the “recruitment, transport, transfer, harbouring or receipt of living or deceased persons or their organs 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 to, or the receiving by, a third party of payments or benefits to achieve the transfer of control over the potential donor, for the purpose of exploitation by the removal of organs for transplantation”.

⁵ Ibid.

⁶ Ibid.

⁷ ‘Organ trafficking and transplant tourism and commercialism: the Declaration of Istanbul’ (2008) 372, Issue 9362 *The Lancet* 5, 6.

⁸ Note 4 above.

⁹ This can be found in the definition section of the Declaration.

¹⁰ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 2.

“Transplant commercialism” is defined as a “policy or practice in which an organ is treated as a commodity, including by being bought or sold or used for material gain”¹¹.

“Travel for transplantation” is defined as the “movement of organs, donors, recipients or transplant professionals across jurisdictional borders for transplantation purposes. Travel for transplantation becomes transplant tourism if it involves organ trafficking and/or transplant commercialism or if the resources (organs, professionals and transplant centres) devoted to providing transplants to patients from outside a country undermine the country’s ability to provide transplant services for its own population”¹².

2.1.5 Principles of the Declaration:

Each of the principles of the Declaration will be discussed in turn. The first one states that national governments should work in collaboration with international and non-governmental organizations to develop extensive programs for the screening and treatment of organ failure¹³.

Legislation should be developed and implemented by each country to govern the recovery of organs from deceased and living donors, and the practice of transplantation, in line with international standards¹⁴.

Organs that are used for transplantation should be equitably distributed within countries to recipients without discriminating on the grounds of their gender, ethnicity, and religion, social and financial status¹⁵.

The main objective underlying transplant policies and programs should be optimal short and long-term medical care to promote the health of both the donor and the recipients¹⁶.

Countries and regions should strive to be as self-sufficient as possible in organ donation for recipients in their countries or regions¹⁷. Obtaining organs between countries is not

¹¹ Note 4 above, 2.

¹² *ibid.*

¹³ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism under the section entitled principles, note 4 above, 2.

¹⁴ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 3.

¹⁵ *ibid.*

¹⁶ *ibid.*

¹⁷ The Declaration of Istanbul note 4 above, 3.

inconsistent with self-sufficiency as long as such partnership protects the vulnerable, promotes equality and does not violate the principle of the Declaration¹⁸. Treatment of patients outside of the country is acceptable if it does not undermine the country's ability to provide transplant services for its own population¹⁹.

Organ trafficking and transplant tourism violate the principle of equity, justice and respect for human dignity and should be prohibited²⁰. Resolution 44.25 of the World Health Assembly²¹, encourages countries to prevent the purchasing and selling of human organs for transplantation²². Prohibitions on advertising of organs for sale should be done to prevent organ trafficking or transplant tourism²³. The prohibitions should also include penalties for acts encouraging organ trafficking and transplant tourism²⁴. A practice which induces or encourages vulnerable groups to donate their organs and thereby exploiting their situation, is prohibited and is inconsistent with the aim of combating organ trafficking and transplant tourism²⁵.

2.1.6 Proposals in the Declaration to increase cadaveric donations²⁶:

The following proposals are made in the Declaration to increase cadaveric donation and includes a number of proposals put forward regarding governments being in partnerships with health care professionals, institutions and NGOs as well as encourages countries to create legislation encouraging cadaveric donation. These proposals are:

- Governments in partnerships with health care professionals, institutions and NGOs should take appropriate steps to increase deceased organ donations and decrease disincentives to deceased organ donations²⁷.
- In countries that do not have deceased organ donation legislation, such legislation should be enacted to encourage the country's deceased donor potential²⁸.

¹⁸ Ibid.

¹⁹ Ibid

²⁰ Ibid.

²¹ Guiding Principles on Human Organ Transplantation WHO, 1991 Cf: G Alfredsson *A Thematic Guide to Documents on Health and Human Rights: Global and Regional Standards* volume 2 (1998) 259-261.

²² The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 3.

²³ Ibid.

²⁴ Ibid.

²⁵ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 4.

²⁶ This is found in the proposal sections of the Declaration of Istanbul note 4 above, 4.

²⁷ Ibid.

- In countries where deceased organ donation has been established, the therapeutic potential of the deceased organ donation and transplantation should be maximized²⁹.
- Countries which have a well-established deceased donor transplantation programs are encouraged to share their information, technology and expertise with countries striving to establish their organ donation programs³⁰.

2.1.7 Further Proposals in the Declaration:

The following proposals relate to ensuring the protection and safety of living donors as well as combating transplant tourism, organ trafficking and transplant commercialism. These proposals are:

- The act of donation should be viewed as heroic and honourable by representatives of the government and civil society organisations³¹.
- The determination of the medical and psychosocial suitability of the living donors should be guided by the recommendations of the Amsterdam³² and the Vancouver Forums³³. The notion of informed consent should be incorporated when subjecting the donors to such assessments. All donors should also go to mental health professionals during screening.
- The care of organ donors including victims of organ trafficking, transplant commercialism and transplant tourism is the responsibility of all countries that sanction such actions³⁴.
- Systems and structures should ensure standardization, transparency and accountability of support for donation. Such mechanisms should be established to ensure transparency and informed consent is an important notion in this process³⁵.

²⁸ Ibid.

²⁹ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 4.

³⁰ Ibid.

³¹ Ibid.

³² 'The Consensus Statement of the Amsterdam Forum on the Care of the Live Kidney Donor - The Ethics Committee of the Transplantation Society' (2004) 78 491, 92. Available at: <http://www.who.int/transplantation/publications/ConsensusStatementShort.pdf>, (accessed on 7th July 2012).

³³ Pruett TL, Tibell A, Alabdulkareem A, Bhandari M, Cronon DC, Dew MA, Dib-Kuri A, Gutmann T, Matas A, McMurdo L, Rahmel A, Rizvi SAH, Wright L & Delmonico FL The Ethics Statement of the Vancouver Forum on the Live Lung, Liver, Pancreas, and Intestine Donor. Transplantation (2006) 81 1386, 1387. Available at: <http://www.livingdonorassistance.org/documents/Ethics%20Statement%20of%20Vancouver%20Forum.pdf>, accessed on (7th July 2012).

³⁴ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 4.

- Provision of care includes medical and psychosocial care at the time of donation and for the long and short term consequences attached to such donation. This involves the provision of care that is consistent with that of the country³⁶.
- Reimbursement of the actual documented costs does not constitute payment for the organ but is part of the costs of treating the recipient. Such re-imburement is done by the government health department or health insurer and is done in accordance with national norms³⁷.
- Costs that may be reimbursed are considered legitimate when they include:
 - a. The cost of any medical and psychological evaluations of potential living donors who are excluded from donation due to medical or immunologic issues discovered during the evaluation process.
 - b. Incurred in arranging pre-, peri- and post-operative phases resulting from the donation process are also considered legitimate expenses.
 - c. Medical expenses incurred for the post-discharge care of the donor and lost income in relation to donation, which is consistent with national norms are also legitimate expenses³⁸.

2.1.8 Conclusion:

The Declaration is indeed a step forward in combating the black market trade of organs. Some principles that other countries should adopt from this Declaration are;

The fact that the Declaration specifically defines organ trafficking, transplant commercialism and transplant commercialism also helps to assist authorities with prosecuting people who commit the crime of organ trafficking as there will be no disputes when it comes to what the crime of organ trafficking entails. The re-imburement options are good to adopt which does not include costs for the organ itself but for treatment and medical expenses. The principles put forward by the Declaration in relation to not only protecting donors but also to establish links with other countries to prevent exploitation of organs is another step in the right direction as it creates unity amongst the countries which can assist to combat the organ trafficking problem worldwide. The idea of transparency within the system is good as the exploitative aspect is then minimised and the black market hindered. These ideas are

³⁵ Ibid.

³⁶ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above, 4-5.

³⁷ The Declaration of Istanbul on Organ Trafficking and Transplant Tourism note 4 above 5.

³⁸ Ibid.

commendable and if implemented correctly could possibly curb the spread of the black market.

2.2 The Palermo Protocol³⁹:

2.2.1 Introduction:

The second international instrument that is discussed here in relation to organ trafficking is the Palermo Protocol. The background of the Protocol, the provisions and a conclusion will be reached as to the important principles elicited from the Protocol. The Protocol deals with human trafficking which covers trafficking of organs. The Protocol further states that State parties should adopt legislation and other measures which are necessary to prohibit trafficking of persons which includes trafficking of organs.

2.2.2 Background to the Protocol:

The United Nations Convention against Transnational Organized Crime which was signed in Palermo, Italy has two Protocols that supplement it⁴⁰. These two Protocols are: the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children⁴¹ and the Protocol against the Smuggling of Migrants by Land, Sea and Air⁴². The first Protocol is popularly known as the Palermo Protocol⁴³.

³⁹ Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime. Available at: <http://www2.ohchr.org/english/law/protocoltraffic.htm>, (accessed on 9th July 2012).

⁴⁰ "Palermo Protocol" available at: <http://www.palermoprotocol.com/general/the-palermo-protocol> (accessed on 9th July 2012).

⁴¹ of 2000 and came into force on 25th December 2003. Information available at: http://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsq_no=XVIII-12-a&chapter=18&lang=en, (accessed on 15th July 2012).

⁴² of 2000 and came into force on 28th January 2004. Information available at: ⁴² Protocol to Prevent, Suppress and Punish Trafficking in Persons Especially Women and Children, supplementing the United Nations Convention against Transnational Organized Crime. Available at: <http://www2.ohchr.org/english/law/protocoltraffic.htm>, (accessed on 9th July 2012).

⁴² "Palermo Protocol" available at: <http://www.palermoprotocol.com/general/the-palermo-protocol> (accessed on 9th July 2012).

⁴² of 2000 and came into force on 25th December 2003. Information available at: http://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsq_no=XVIII-12-a&chapter=18&lang=en, (accessed on 15th July 2012).

<http://www.unodc.org/unodc/en/treaties/CTOC/>, (accessed on 15th July 2012).

⁴³ Note 40 above.

The United Nations in 2000⁴⁴ reached an agreement as to what the definitions in the Palermo Protocol of “human trafficking” entails and this definition encompasses three aspects namely; the act, the means and the purpose⁴⁵.

2.2.3 Provisions of the Protocol:

The Protocol lays out a number of obligations for the parties to it and defines specifically what “trafficking in persons” includes and the penalties⁴⁶ attached to a contravention of the Protocol, which a State party should attach to it. The Protocol further defines what “a child”⁴⁷ is and prohibits the trafficking of children⁴⁸.

The Protocol includes the definition of “trafficking in persons” and states that it means “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”⁴⁹. The Protocol is very clear as to what exploitation is and in the definition it includes the removal of organs. The Protocol therefore takes notice and includes the fact that organs being removed can be exploited and therefore caters for the prohibition against the black market organ trade by including in the definition of exploitation the removal of organs.

The Protocol places an obligation on a State party to adopt legislative and other measures necessary to introduce criminal offences⁵⁰ for the contravention of Article 3 which deals with the trafficking of persons. The introduction of criminal offences for such offence which includes the removal of organs being exploited is commendable in that there will then be a deterrence attached to such offences. Even though this does not stop the black market from

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Article 5 of the Protocol.

⁴⁷ Article 3(d) of the Protocol.

⁴⁸ A child as defined in Article 3 of the Protocol is any person under the age of 18 years.

⁴⁹ Article 3(a) of the Protocol.

⁵⁰ Article 5 of the Protocol.

thriving in certain instances as in many countries such as India, which have such penalties, the black market still thrives. The form of punishment attached to this depending on what it is will be the deterring factor to the black market's success.

The Protocol further sets out the criteria to follow to protect victims of trafficking in persons⁵¹. This entails State parties being under an obligation to ensure that its domestic laws or any administrative systems contain provisions for protecting the victims of trafficking in persons, as well as provision in appropriate cases for housing and counselling etc⁵². State parties should make provision for victims to use the law to obtain compensation for damages suffered⁵³. These provisions encompass the need to protect the vulnerable and those susceptible to being exploited for their organs.

There is a further obligation on States to protect victims of trafficking if that State is the receiving State⁵⁴. This also includes repatriation of victims of trafficking by the States⁵⁵. Emphasis is placed here again on the protection of victims which includes the vulnerable and the weak who are exploited by brokers for their organs with a promise of getting paid large amounts when in fact these amounts are very minimal in comparison to the profit that the brokers make.

The prevention of trafficking in persons is also laid down in the Protocol⁵⁶. It states that State parties shall establish comprehensive policies, programmes and other measures to prevent trafficking as well as protect victims of trafficking⁵⁷. This also requires State parties to take measures such as to conduct research to obtain information and to introduce campaigns against trafficking in persons⁵⁸. They must also use the co-operation of NGOs to assist with the implementation of policies and programmes⁵⁹. In addition State parties must also strengthen their bilateral and multilateral co-operation agreements to alleviate trafficking especially of women and children⁶⁰. State parties must adapt or strengthen legislative or other social

⁵¹ Article 6 of the Protocol.

⁵² Article 6(3)(a)-(d) of the Protocol.

⁵³ Article 6(6) of the Protocol.

⁵⁴ Article 7 of the Protocol.

⁵⁵ Article 8 of the Protocol.

⁵⁶ Article 9 of the Protocol.

⁵⁷ Article 9(1)(a) and (b) of the Protocol.

⁵⁸ Article 9(2) of the Protocol.

⁵⁹ Article 9(3) of the Protocol.

⁶⁰ Article 9(4) of the Protocol.

measures through bilateral or multilateral co-operation to discourage the trafficking of persons⁶¹. These suggestions put forward by the Protocol create an inter-linking system which is supposed to function together in one effective unit, starting from the individual State to the NGOs and then the bilateral and multilateral agreements between States completes the unit to effectively curb the organ trafficking worldwide.

Whilst the Declaration of Istanbul defines organ trafficking, transplant tourism and transplant commercialism, the Palermo Protocol goes wider and defines the trafficking in person to include the exploitation of people and includes the removal of organs. Both the Declaration of Istanbul and the Palermo Protocol prohibit the trafficking of organs and both state that agreements between countries should be established to assist each other in creating effective mechanisms to combat trafficking in organs.

2.2.4 Conclusion:

The Protocol is commendable in that similar to the Declaration of Istanbul it protects the vulnerable from exploitation and further defines exploitation to include the removal of organs. It also further encourages both bilateral and multilateral co-operations to alleviate the trafficking of persons. This is a good way forward as the only possible way to curb the organ trafficking trade would be to fight together in collaboration with many States. The fight against organ trafficking will be curbed through numbers and this can only be achieved as stated above through States coming together and establishing agreements to assist one another to cut down on the black market trade.

⁶¹ Article 9(5) of the Protocol.

Chapter 3 – Foreign Law on Organ Transplantation:

Introduction:

This chapter will deal foreign law regarding organ trafficking and transplantation. The Human Tissue Act of the United Kingdom, the Iranian model which deals with organ transplantation, the Singapore Human Tissue Organ Transplantation Act, the Spanish model for organ transplantation and the Indian Model for organ transplantation. These Countries have been chosen to be discussed because some of them are commendable in the way in which they deal with organ transplantation and some will be discussed illustrating how despite legislation being in place, organ trafficking still occurs. Some of these principles of the various pieces of foreign law will be discussed later and elicited and possibly applied to the South African legislation. Lastly the ideas elicited from these international instruments and models that will benefit the world wide organ shortage problem and South Africa's legislative problem regarding the black market organ trafficking syndicate will be discussed as a final conclusion to this chapter.

3.1 The Human Tissue Act 2004 of United Kingdom:

3.1.1 Introduction:

The Human Tissue Act of the United Kingdom (UK)⁶² has some very interesting features which will be discussed and possibly be applied to the South African legislation. The following topics will be discussed:

- a. The background of the Act
- b. The features of the Act
- c. Part 2 Schedule 1 of the Act (dealing with education and training and audit etc)
- d. Criminalising Trafficking of Human Tissue which is an important feature of the Act
- e. Criticism of the Act
- f. Conclusion

⁶² of 2004.

3.1.2 Background:

The Human Tissue Act 2004 of United Kingdom has definitely been a model which is worth discussing in light of curbing organ trafficking.

The Human Tissue Act 2004 repeals and replaces the Human Tissue Act 1961, the Anatomy Act 1984 and the Human Organ Transplants Act 1989 as they relate to England and Wales. It also repeals and replaces the Human Tissue Act (Northern Ireland) 1962, the Human Organ Transplants (Northern Ireland) Order 1989 and the Anatomy (Northern Ireland) Order 1992⁶³.

3.1.3 Features of the Act:

The Act contains many features some of these will be discussed. The Act makes consent the most important principle for the lawful use of body parts, organs and tissue. The Act also regulates the removal, storage and use of human tissue. Regarding consent, the Act lists purposes for which consent is required. This is done in Schedule 1 of the Act and consent is required for the purposes of:

1. Anatomical examination - requires witnessed consent in writing before death
2. Determining the cause of death - exception where a post mortem is ordered by a coroner
3. Establishing after a person's death the efficacy of any drug or other treatment administered to him – e.g. hospital post mortem
4. Obtaining scientific or medical information about a living or deceased person which may be relevant to any other person (including a future person) – e.g. genetic information.
5. Public display - requires witnessed consent in writing before death and the requirement of obtaining a licence.
6. Research in connection with disorders or the functioning of the human body
7. Transplantation - includes all bodily material such as blood, bone marrow, skin, tissue and organs⁶⁴.

⁶³ Department of Health UK available at: <http://www.hta.gov.uk/legislationpoliciesandcodesofpractice/legislation/humantissueact.cfm>, (accessed on 6th August 2012).

⁶⁴ Scheduled Purposes requiring consent in the UK Human Tissue Act – Part 1: purposes generally requiring consent where the tissue is from the living or the deceased. .

This licence as stated in bullet point number 5 above includes amongst others activities⁶⁵, the storage and use of human bodies or parts for public display and requires that an application be made to the Human Tissue Authority (HTA) for such a licence to be granted⁶⁶. An example of public display will be the display of bodies in the “Body World” exhibition of Gunther von Hagens which entails cadaveric bodies being publically displayed as art forms. This type of public display would require obtaining consent from the deceased prior to them dying as well as obtaining an HTA licence⁶⁷ for the public display of such deceased persons.

The Act also creates a Human Tissue Authority which is tasked with the duties of oversight and compliance with the Act⁶⁸. This Authority is also responsible to licence and inspect post mortem activities for hospitals, coroners, anatomical examinations, public display of human remains and storage of human tissue⁶⁹.

The Act further makes it an offence to have human tissue which includes hair and nails for the purposes of DNA analysis without the consent of the individual or the family of the individual from which the tissue came if deceased⁷⁰.

The Act makes it lawful to take minimum steps to preserve organs of deceased persons as long as appropriate consent is elicited from their next- of- kin⁷¹.

The Act also allows certain specified museums in England discretionary power to move remains of humans provided that they are reasonably believed to be those of people who died

⁶⁵ These activities include obtaining licences for:

- Storage and use of human bodies for anatomical examination and related research;
- The carrying out of post-mortem examinations, including a removal and retention of human tissue;
- Removal of human tissue from the body of a deceased person for other scheduled purposes, except transplantation and;
- Storage of human tissue for other scheduled purposes, for example human tissue banking for transplant purposes or research. This is as stated in section 16(2) of the Act.

⁶⁶ J Herring *Medical Law and Ethics* 3 ed (2010) 410.

⁶⁷ P N Furness ‘Human Tissue Act: reassurance for relatives at a price’ (2006) 333 *British Medical Journal* 512.

⁶⁸ Part 2 of the UK Human Tissue Act of 2004.

⁶⁹ Human Tissue Authority available at <http://www.hta.gov.uk/>, (accessed on 12th July 2012).

http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4103686.pdf. section 13 of the Human Tissue Act of 2004.

⁷⁰ Section 1 of the Act.

⁷¹ Part 3, Section 43 of the Act.

less than one thousand years before the date that the relevant provision of the Act came into force⁷².

3.1.4 Part 2 of Schedule 1 of the Act (which deals with e.g. Education, training and audit etc):

Tissue from the living and consent for such tissue can be found in Part 2 of Schedule 1 of the Act.

Such purposes for which the tissue can be used for in this schedule are: Clinical audit, education or training relating to human health - includes training in research techniques, performance assessment e.g. testing medical devices, public health monitoring and quality assurance.

In Part 2 of Schedule 1 of the Act it further provides that there will be no need for 'appropriate consent' where human material from a live person is stored for the purposes listed above⁷³. Research is not listed here and there may be an overlap between research, education and training. The purpose for this exception is that the use of these materials for such purposes as mentioned above is seen as intrinsic to the proper conduct of the patient's treatment. This exception does not apply to human material taken from a deceased person⁷⁴.

An also important aspect to note is that where there is a situation where a person is using bodily material for a purpose other than that approved in Schedule 1, according to the explanatory notes, the Act will not apply⁷⁵. For example, where an artist removes part of a corpse for use in a sculpture, will then not be covered by the Act, and hence will not be considered legal or illegal. The artist could be charged with an offence of theft⁷⁶.

⁷² Section 47(2) of the Act which states that: (2) Anybody to which this section applies may transfer from their collection any human remains which they reasonably believe to be remains of a person who died less than one thousand years before the day on which this section comes into force if it appears to them to be appropriate to do so for any reason, whether or not relating to their other functions.

⁷³ J Herring note 66 above, 408.

⁷⁴ Ibid.

⁷⁵ J Herring note 66 above, 407.

⁷⁶ Ibid.

3.1.5 Criminalising Trafficking of Human Tissue which is an important feature of the Act:

The most important feature of this Act is that in addition to new offences being listed, it specifically criminalises the trafficking of human tissue for transplantation purposes. This therefore extends the existing offence beyond just trafficking in organs for transplantation. The penalties for such an offence can be either a fine or up to three months imprisonment or both⁷⁷. The Act further attaches a penalty⁷⁸ for a person who receives a gift or reward for the supply of any controlled material⁷⁹, or seeks to find a person willing to sell any controlled material⁸⁰, offers to sell any control material for reward⁸¹, initiates or negotiates any agreement involving the giving of a reward for the supply of any controlled material⁸² or takes part in the management or control of a body of persons corporate or unincorporated whose activities consist of or include the initiation or negotiation for such agreements⁸³.

The Act further makes it an offence⁸⁴ for a person to publish or distribute advertisements inviting a person to supply any controlled material⁸⁵ for reward or that the advertiser will negotiate any such agreement⁸⁶. However, “reasonable belief” defences are available to this offence. This is where a person believes on reasonable grounds that the body or material is not relevant material which is the subject of appropriate consent. The regulation-making power is intended to be used to ensure that legitimate uses of tissue which may come to light in future will not be criminalised⁸⁷.

⁷⁷ Section 32(4)(b) which is on conviction on indictment.

⁷⁸ According to section 32(4)(a) on summary conviction to a fine or a term of imprisonment not exceeding 12 months or both.

⁷⁹ Section 32(1) (a) of the Act.

⁸⁰ Section 32(1) (b) of the Act.

⁸¹ Section 32(1) (c) of the Act.

⁸² Section 32(1) (d) of the Act.

⁸³ Section 32(1)(e) of the Act

⁸⁴ According to section 32(5) on summary conviction to a fine or a term of imprisonment not exceeding 51 weeks or both.

⁸⁵ The Act defines controlled material as:

(a) consists of or includes human cells, .

(b) is, or is intended to be removed, from a human body,

(c) is intended to be used for the purpose of transplantation, and

(d) is not of a kind excepted under subsection (9). This is as provided for in section 32(8) if the Act.

⁸⁶ Section 32(2) (a) – (b) of the Act.

⁸⁷ Section 8 of the Act Cf: Explanatory notes on the Human Tissue Act 2004(c. 30) which received Royal Assent on 15 November 2004. Available at:

This Act is commendable as it is one of the few pieces of legislation in the world to specifically criminalise organ trafficking as well as human tissue trafficking. The Act also has the Human Tissue Authority which plays an oversight role and helps to prevent organ trafficking and exploitation of organs.

3.1.6 Criticism of the UK Act:

There has however been criticism regarding the UK Act. It has suggested that the Act was established with political motives. This was due to the organ-retention scandal at Liverpool's Alder Hey hospital that brought issues of consent, organ and tissue use and storage during the periods 1988 to about 1995)⁸⁸ under the spotlight. It has been suggested that the Act in order to gain popularity restricted the authority of pathology departments to retain body parts⁸⁹.

Two years after the Act was passed, the local donor assessment has still not been decided. The decision of authorisation of paired⁹⁰, pooled⁹¹ and non-directed⁹² donations is not really an advance, but merely an overdue release from an irrational restraint imposed by over-regulation. Even though the Act extends the offence of trafficking and the sanctions are also increased, the effect is only marginal due to the penalties on long term National Health Services (NHS) health care which is regarded as the most effective measure not being included⁹³.

<http://www.eui.eu/Projects/InternationalArtHeritageLaw/Documents/NationalLegislation/UnitedKingdom/humanissueact2004explanatorynotes.pdf>, (accessed on 28th February 2012).

⁸⁸ 'The Human Tissue Act comes into force on 1 September, but what is it and how will it work?' *BBC News* 30 August 2006 available at <http://news.bbc.co.uk/2/hi/health/4944018.stm> (accessed on 28th February 2012).

⁸⁹ J F Douglas 'Live kidney donation under the Human Tissue Act' (2006) 3 *North Ireland Ethics Forum* 52, 58.

⁹⁰ The term 'paired donation' relates to circumstances where a donor and recipient are incompatible (or mismatched), either by blood group or by tissue type. It is possible that pairs can be matched to another couple in a similar situation, so that both people in need of a transplant receive a matched organ or part organ. Available at: <http://www.hta.gov.uk/bodyorganandtissuedonation/transplants/organdonationfaqs.cfm>, (accessed on 28th February 2012).

⁹¹ Pooled donation is where more than two pairs of donors and recipients are involved in the swap. Available at: <http://www.hta.gov.uk/bodyorganandtissuedonation/transplants/organdonationfaqs.cfm>, (accessed on 28th February 2012).

⁹² The term 'non-directed altruistic donation' is a form of donation whereby a healthy living person donates an organ or part organ, usually a kidney, to an unknown person. The donor does not have a relationship with the recipient. It is commonly known as 'altruistic' or 'stranger' donation. Available at: <http://www.hta.gov.uk/bodyorganandtissuedonation/transplants/organdonationfaqs.cfm>, (accessed on 28th February 2012).

⁹³ J F Douglas note 89 above, 53.

The Act also creates an impression of control without any meaningful effect. Some argue that the measures of the Act are misdirected and will be as unsuccessful as the Unrelated Live Transplant Regulatory Authority (ULTRA)⁹⁴ was. Some also argue that even though the criminalisation of trafficking under the Act is sufficient to curb trafficking in the UK but true trafficking will continue unaffected by these measures⁹⁵.

The Act has also been seen as an impediment to live donation. The Act also does not encourage Live Related Donors and Living Unrelated Donors⁹⁶, despite their courageous altruism and they are anachronistically assessed as if they are potential traffickers or subordinate children. The Act has therefore been termed out dated, oppressive and hostile to the advances of living donation⁹⁷.

3.1.7 Conclusion:

The UK Human Tissue Act despite its flaws it does have some commendable aspects that could be possibly elicited and possibly be used under South African legislation. The main principle that can be extracted here is the fact that the Act specifically criminalises the trafficking of organs and imposes strict penalties for such activities. Here this is a step forward in possibly curbing the trade in organ trafficking.

Section 3.2: The Iranian Model:

3.2.1 Introduction:

The Iranian Model has been praised for its compensation system relating to the organ transplants that occur in the country. This is different from the UK Human Tissue Act in that it does not criminalise organ trafficking but it does provides compensation for organs. The following shall be discussed under this model:

⁹⁴ This authority was established under the Human Organ Transplants Act of 1989 (UK). This authority was responsible for proving by genetic testing that donor's were close relations or else authorised donations as altruistic as the 1989 Act banned all transplants for profit and live donations Cf: JF Douglas note 89 above, 54.

⁹⁵ J F Douglas note 89 above, 55.

⁹⁶ FL Delmonico, R Arnold & N Scheper-Hughes et al 'Ethical Incentives – not payment – for Organ Donation (2002) 346 *English Journal of Medicine* 2002,2005.

⁹⁷ J F Douglas note 89 above, 58.

- a. Features of the Model
- b. Arguments in favour of the Iranian model
- c. Arguments against the Iranian model
- d. Conclusion

3.2.2 Features of the Model:

The Iranian Model has been praised for many reasons. The model is described as follows:

Originally kidney transplantation in Iran involved only with living related altruistic donors⁹⁸. This method of transplantation was changed due to the shortage of organs to transplant and the absence of deceased donors. This then changed to the method of unrelated living donor transplants (URLD) occurring in the country⁹⁹.

The legalisation of living non-related donation (LNRD) occurred in 1988 and led to the establishment of an associated transplantation system. This associated system which is organised by government regulates funds and compensates the donors for their organs. A third party agency called the Dialysis and Transplant Patients Association (DATPA) was set up to arrange contact between donors and recipients. This agency is staffed on a voluntary basis by end-stage renal failure patients¹⁰⁰.

All members of the agency receive no incentives for finding a living non –related donor or for referring the patient and the donor to a renal transplant team. All the transplant teams belong to hospitals owned by the Universities. The government pays for all the hospital expenses of the transplant team. After the transplantation has occurred the donor receives a gift and health insurance from the government¹⁰¹. The non-related living donors also receive

⁹⁸ A kidney donor who gives a kidney for no material reward. This may be a family member. Available at: www.kidney.org.uk/Medical-Info/glossary/glossary.html, (accessed on 5 November 2012).

⁹⁹ A Ghods & M Mahdavi, 'Organ Transplantation in Iran' (2007) 18 *Saudi Journal of Kidney Diseases and Transplantation* 648, 655 Cf: AH Rizvi, AS Naqvi, NM Zafar, E Ahmed 'Regulated compensated donation in Pakistan and Iran' (2009) 14 *Current Opinion in Organ Transplantation* 124, 125.

¹⁰⁰ RWL Major 'Paying Kidney Donors: Time to Follow Iran?' (2008) 11 *McGill Journal of Medicine* 67, 69.

¹⁰¹ A J Ghods & S Savaj 'Iranian Model of Paid and Regulated Living-Unrelated Kidney Donation' (2006) 1 *Clinical Journal of the American Society of Nephrology* 1136, 1145.

a rewarding gift¹⁰² either from the recipient or if the recipient is poor from a charitable organization. This is arranged and defined by the DATPA. The government also provides essential drugs to all recipients at a subsidized and reduced price¹⁰³.

To prevent exploitation of the system, it is under close scrutiny by the Iranian Society for Organ Transplantation regarding all ethical issues. Also to prevent “transplant tourism” and foreigners coming to Iran to perform transplants, the Iranian government have laws that prevent a foreigner from receiving an organ transplant from Iranian non-related living donors. Foreigners are also not permitted to volunteer to donate organs to Iranian patients. Foreigners may receive a transplant in Iran provided that the donor and the recipient are of the same nationality and authorization for the transplantation is obtained from the end-stage renal diseases (ESRD) Office of the Ministry of Health¹⁰⁴. The Ministry of Health regulates all transplants that take place in Iran has an oversight function of such transplants.

There have been arguments both in support of and against the Iranian Model.

3.2.3 Arguments in favour of the Iranian Model:

The amount of organ transplants that have occurred under the new system has doubled and nearly four fifths of the transplants come from living unrelated sources¹⁰⁵.

Trade in organs is officially banned and procurement through the implementation of various control measures prevents the establishment of an organized trade in organs¹⁰⁶.

The model of organ transplantation in Iran is also effective in that donors are not paid for their organs; they only receive a fixed amount of money as a gift¹⁰⁷ to compensate them for their time and any loss of income. The recipients of the organs do not pay a fee for receiving the organ. The amount allocated as compensation for the donors does not change based on the

¹⁰² Such gifts are generally money or social benefits such as health insurance from the recipient or a charitable organization or arranged payment by the Dialysis and Transplant Patients Association (DATPA) from the recipient taken from: A J Ghods 'Renal Transplantation in Iran' (2002) 17 *Nephrology Dialysis Transplantation* 222, 224.

¹⁰³ Ghods & Savaj note 101 above, 1145.

¹⁰⁴ Ghods & Savaj note 101 above, 1138.

¹⁰⁵ Major note 100 above, 69.

¹⁰⁶ Ghods & Savaj note 101 above, 1145.

¹⁰⁷ This is approximately 1200 USD Cf: Ghods & Savaj note 101 above, 1141.

quality or the rarity of the organ. Although there does exist cases of organ sales being reported, there is no sign of middleman or organ broker involvement in the program¹⁰⁸.

Other positive aspects of this system are the provision of adequate safety nets for donors and the requirement of securing the donors' free and informed consent. The donors are also provided with adequate care and counselling before and after the operation¹⁰⁹.

A Donor Clinic has also been established to assist with the long-term follow-up of live kidney donors. This Clinic was established by the Management Centre for Transplantation and Special Diseases (MCSTD)¹¹⁰.

The Iranian program apart from being concerned with the ethics in procurement of organs, it is also concerned with the just allocation and effective utilisation of donated kidneys. The rich and the poor are also considered equally¹¹¹.

Some authors argue that this model where donors are taken good care of and "paid" for their organs is the gold standard model that all countries should strive to achieve¹¹². There is also no reason as to why the possibility of regulated rewarded donation could be followed¹¹³ as done in the Iranian model where it is effectively regulated.

It is submitted that there are many positive aspects to the Iranian model.

3.2.4 Arguments against the Iranian Model:

Even though the Iranian model of organ transplantation has been praised for its effective contribution to curbing the organ shortage in Iran, there are many criticisms.

The preclusion of the organ brokers in the system does not prevent individual kidney sales and may also in some cases encourage people to offer their kidneys for sale in a private transaction. The model has also been criticised for encouraging people to sell their organs to alleviate their financial circumstances¹¹⁴.

¹⁰⁸ Ghods & Savaj note 101 above, 1145.

¹⁰⁹ Major note 100 above, 80.

¹¹⁰ A Bagheri 'Compensated Kidney Donation: An Ethical Review of the Iranian Model' (2006) 16 *Kennedy Institute of Ethics Journal* 269, 276.

¹¹¹ Ibid.

¹¹² 'Legal and illegal organ donation' - Editorial, (2007) 369 *The Lancet*, 1901.

¹¹³ S A M Mclean *Contemporary Issues in Law, Medicine and Ethics* (1996) 129.

¹¹⁴ A Bagheri Supra note 110.

It has been suggested that the Iranian system will decrease the willingness of family members to donate organs to their loved ones. Studies have shown that this had adverse effects on donations by living related donors (LRD)¹¹⁵.

The Iranian program has also been criticised for not exercising effective control to prevent donors and recipients becoming familiar with each other. If this occurs then it can lead to private transactions being concluded between them in addition to the compensation received by the NGO or the government¹¹⁶. The program has been exploited by individuals who give their kidneys based on an independent monetary transaction rather than a donation. It has further been stated that the program has not been well designed to prevent donor-recipient monetary relationships¹¹⁷.

The program has also been criticised in that an increased supply may cause a lowering of the strict clinical selection criteria for organs. The issue being that an increased availability of kidneys for transplant may in essence undermine the safety of possible recipients. This may lead to the physicians recommending transplantation sooner than would otherwise occur, but this system needs to be further investigated¹¹⁸. As there is no national registry for transplants, there is no report on the short and long-term results of all the kidney transplants¹¹⁹.

The system has also been criticised because facilitated organ transplantation through Living Non-related Donors (LNRD) could lead to the focus being only on such donors instead of pursuing other sources such as cadaver donors and non-heart beating donors. In Iran, however, the use of cadaver organs is not used because of the technical nature and methods of preserving and procuring organs¹²⁰.

This system has been criticised on the basis that the Human Leucocytes Antigen (HLA) matching of tissues, which is necessary to ensure rejection does not occur by the host, is not routinely performed¹²¹.

There have also been arguments that payments for organs are considered ethically unacceptable as it commodifies the human body. It has been stated that the poor donors give

¹¹⁵ A J Ghods, S Savaj & P Khosravani 'Adverse Effect of a Controlled Living Unrelated Donor Renal Transplant Program on Living Related and Cadaveric Kidney Donation' (2000) 32 *Transplantation Proceedings* 541 .

¹¹⁶ A Bagheri note 110 above, 277.

¹¹⁷ Ibid.

¹¹⁸ A Bagheri note 110 above, 277.

¹¹⁹ A J Ghods 'Renal Transplantation in Iran' (2002) 17 *Nephrology Dialysis Transplantation* 222, 228.

¹²⁰ Ibid.

¹²¹ Major note 100 above, 69.

their organs to the richer recipients and are therefore exploited¹²². Poverty is also a factor that makes the poor vulnerable to exploitation. The program has also been criticized as leading to the exclusion of very poor patients with end-stage renal failure (ESRF) who remain on dialysis awaiting a donor. The amount that is paid to the donors by the State is minimal according to Iranian standards which lead to exploitation of the poor or people belonging to lower socio-economic class for their organs¹²³.

3.2.5 Conclusion:

The Iranian model has some aspects that might be useful to South Africa's legislation. The aspect of establishing an agency such as the DATPA is a good notion to help curb the exploitation of organs. The provision of a non-monetary system should be used. This will be beneficial as those who are given agreed to be donors as they are given priority health care or that the government control the amount monetary aspect of the donations instead of the donor getting paid by the recipient themselves. NGOs should be involved and encouraged to donate money or compensate donors for donating their organs.

3.3 The Singapore model:

3.3.1 Introduction:

The Singapore Human Organ Transplantation Act is a good piece of legislation to examine as a possible solution to the shortage of organs available for transplantation. The following sections will be discussed:

- a. Features of the Act
- b. Singapore's 'opt-out' system
- c. Criteria for donors in Singapore
- d. Selection criteria for recipients
- e. Other features of the Act

¹²² Major note 100 above,69

¹²³ Ibid.

f. Criticisms of the ‘opt-out’ provisions of the Act

g. Conclusion

3.3.2 Features of the Act:

The Human Organ Transplant Act¹²⁴ (HOTA) of Singapore has been praised for allowing donations and transplants of organs between unrelated donors.

The Act covers citizens of Singapore as well as permanent residents, non-Muslims; people aged 21 and 60 years, people who are of sound mind and people who have not opted out of being donors whilst they were alive¹²⁵.

Organs that are covered by the Act are: kidneys, liver, corneas and the heart¹²⁶. The Act becomes applicable only when a person has died in a hospital. The definition of death consists of two forms, either cardiac death (when the heart stops beating), or brain death (when the heart is still beating but the brain ceases to function)¹²⁷.

The criterion for brain death includes the following:

- Glasgow Coma Scale <5,
- No corneal reflex
- No pupillary reflex
- No oculocephalic (“doll’s eyes”) reflex
- No oculovestibular reflex
- No gag/cough reflex
- Isoelectric EEG
- Positive apnea test
- Absence of cerebral flow
- Absence of confounding conditions (e.g. hypothermia, hypoglycaemia, over-sedation)¹²⁸.

¹²⁴ of 2005.

¹²⁵ Section 5 of the Human Organ Transplant Act, 2005, Chapter 131A.

¹²⁶ As stated in Schedule 1 other than Parts IV and IVA of the Act.

¹²⁷ This can be found in Part I, Section 2A of the Interpretation Act 10 of 1965 which was revised on 31st December 2002.

¹²⁸ Gerald Tan, “Singapore Human Organ Transplants Act (HOTA) [homepage on the Internet]. Singapore” 21 February 2010. Available from: <http://www.geraldton.com/medaffairs/hota.html>, (accessed 22nd July 2012).

Essentially these are clinical tests which are conducted to determine brain stem death.

3.3.3 Singapore's opt-out system:

Regarding the opt-out system under the Singapore model, a patient can opt-out of donating their organ by filling in a form which is available to them on the Ministry of Health (MOH) website. A patient can completely opt-out of organ donation or they can donate some organs but opt-out of donating others. The patient has to opt-out while they have the ability to do so. Their family cannot opt-out for them once they are in a coma¹²⁹.

The steps after a patient opts-out of donating an organ involves the patient receiving a lower priority on the organ transplant list should they need one. This rule also applies to those not covered by the HOTA, namely, people younger than 21 and over 60 and Muslims who have not opted in¹³⁰.

If one who has opted out wants to cancel their objection and opt back in, they can do so by using a similar form on the website. Other organs than can be pledged may be done so under Medical (Therapy, Education and Research) Act (MTERA)¹³¹. People who are not citizens of Singapore can follow the same method. Muslims can elect to opt-in but this must be done so in the presence of two male adults. Muslims are also given equal status on the waiting lists only if they opt-in¹³².

3.3.4 Criteria for donors in Singapore:

People who are likely to be chosen as organ donors are previously healthy adults, sudden death victims such as traffic accidents, rupture of blood vessels or severe trauma, and organs that have not been affected by injury¹³³.

Conditions that make donors unsuitable for organ donations are; pre-existing medical conditions, which can include: infectious diseases (HIV/AIDS, sepsis, TB, cancer, renal disease, chronic heart disease, severe systemic disease such as uncontrolled diabetes and Hepatitis B carriers (unless the recipient is also positive). Small babies, assuming that they

¹²⁹ Gerald Tan note 128 above.

¹³⁰ Ibid.

¹³¹ Took effect in 1973 and relates to an opt-in system. This Act allowed a person to donate his body to therapy which included transplantation as well as education or research.

¹³² Gerald Tan note 128 above.

¹³³ Ibid.

have opted in, but generally the organs are too small to be transplanted.¹³⁴ This is viewed as unethical, I submit, as one could argue that the taking of an organ from a child to be transplanted violates the ethical principles of beneficence and non-maleficence as this is a child and the taking of their organs will cause them harm as well as violate the principle of beneficence which states that one should always work to the benefit of the child. Taking one's organs is clearly not for their benefit as this will be harmful to them due to the fact that they are not as developed as adults and might have major complications. Another view could be the where the situation arises where a sibling is in need of an organ and this might be viewed as ethical taking the donor sibling's organ to be transplanted into the recipient sibling's organs to save that recipient sibling's life. This according to the utilitarian approach would be viewed as ethical as it would be viewed as saving another's life and hence will be to the good of others and not oneself.

3.3.5 Selection criteria for recipients:

The selection of recipients for organ transplants is mainly done on the basis of utilitarianism. One utilitarian concern is to maximize the output attainable from the resources available - medical utilitarianism. The other utilitarian concern is putting society's interest above that of individuals. This is done by emphasising the patient's social worth and ability to contribute to the community's well-being. This concept is known as socio-moral utilitarianism¹³⁵.

In terms of medical triage there exist three steps to decide who gets the transplanted organ or not. The first step consists of patients being referred for evaluation to the transplant program. They are then admitted to the waiting list of the program and are selected from the list once the organ is made available¹³⁶. Except in cases where priority is given to organ pledgers over non-organ pledgers,¹³⁷ and citizens over foreigners, the law contains no stipulations regarding the allocation of donated organs. The matter is entirely left to the medical profession.

¹³⁴ Gerald Tan note 128 above.

¹³⁵ V.H. Schmidt & C.H. Lim 'Organ Transplantation in Singapore: history, problems and policies' (2004) 15 *Social Science & Medicine* 2173, 2182.

¹³⁶ Schmidt & Lim note 135 above, 2176.

¹³⁷ Section 12 of the Human Organ Transplant Act, 2005 (Chapter 131A).

3.3.6 Other features of the Act:

The Act also, contrary to many other transplant Acts, allows for the designation of pledged organs to specific recipients¹³⁸.

The Act allows for donations between living donors with the written approval of the Transplant Ethics Committee of the hospital for a specific organ to be removed if the donor gives consent to the specific organ being removed. The donor must not have revoked such consent. The Transplant Ethics Committee must be satisfied that the donor has given consent for the specific organ to be removed and is not mentally impaired. Furthermore the consent must not be given in pursuance of any prohibited agreement regarding the buying or selling of organs and the consent is not obtained under fraud, duress or undue influence¹³⁹.

The Act also prohibits the sale or purchase of organs or blood. The penalty for a person who is caught entering into an agreement or contract regarding such an arrangement will be guilty of an offence and liable on conviction to a fine not exceeding 10, 000 Singapore dollars or to imprisonment for a period not exceeding 12 months or both¹⁴⁰.

The Act further stipulates that a person who gives or offers their organs for sale or supply or who initiates an agreement between people for the purpose of organ transplantation; or a body corporate or unincorporated body which negotiates a contract or agreement, will be held liable on conviction to a fine not exceeding 100, 000 Singapore dollars or to imprisonment to a term not exceeding 10 years or to both¹⁴¹.

The Act states further that it will not be an offence where a contract or agreement or scheme or benefits for removal of blood as in accordance with any other written law. Any compensation for loss of income or expenses resulting in the supplying of an organ to a person shall not be a contravention of the Act. The provision of long - or short- term medical care or insurance for persons supplying the organs shall also not be a contravention of the Act¹⁴².

Another positive aspect of the Act is that it criminalises any form of advertising relating to the buying or selling of any organ or blood in Singapore. The penalty for such a

¹³⁸ Section 14(7) (b) of the Human Organ Transplant Act, 2005 (Chapter 131A).

¹³⁹ Section 15 A of the Human Organ Transplant Act, 2005 (Chapter 131A).

¹⁴⁰ Section 14(2) of the Human Organ Transplant Act, 2005 (Chapter 131A).

¹⁴¹ Section 14(2A) of the Human Organ Transplant Act, 2005 (Chapter 131A).

¹⁴² Section 14(3) of the Human Organ Transplant Act, 2005 (Chapter 131A).

contravention of the Act is a fine of 10, 000 Singapore dollars or to a period of 12 months imprisonment or both¹⁴³.

3.3.7 Criticisms of the opt-out provisions of the Act:

Even though the Act has many positive aspects it has been criticised for the opt-out system. The situation of Mr Sim Tee Hua is an example of the challenges a family of a deceased person faces in relation to the opt-out system. Mr Sim was declared brain dead after he had a stroke, and as he had not opted-out of donating his organs after his death, the doctors wanted to remove his organs. His family members pleaded with the hospital authorities to wait for 24 hours to remove his organs and the authorities agreed. After this period had elapsed, his family requested a further 24 hours however, the authorities refused to delay the matter any further as the organs would not be suitable for transplantation. His family pleaded and eventually ended up in a scuffle between authorities and the family. Eventually, after police were called in to contain the situation, Mr Sim's organs were transplanted to a recipient¹⁴⁴.

The situation with Mr Sim, I submit, illustrates the problem that the opt-out system presents in Singapore as it not only can portray the message of it being harsh but also infringes on the patient's right to autonomy and privacy in that the patient does not get a chance to properly decide as to what happens to them. This can be contrasted to the fact that the patient can opt-out of donating their organs should they wish to, however, as stated below the patients are not aware of this option and so it can be stated that the hospital authorities are taking advantage of these patients for the organs for transplantation purposes.

The situation with Mr Sim caused the hospital authorities to be publicly labelled as cold and unsympathetic. At the time the Health Ministry stated that doctors will accommodate the family's requests as far as possible however, the transplant team will balance the interests of the recipient and the lives to be saved, with donor's family's needs to maintain him/her for a while longer¹⁴⁵.

Even though the Act allows for death to be defined as brain death and for organs to be taken from a patient who has not opted out of donation, some have argued that the hospitals are not

¹⁴³ Section 15 of the Human Organ Transplant Act, 2005 (Chapter 131A).

¹⁴⁴ Gerald Tan note 128 above.

¹⁴⁵ Ibid.

enforcing or bringing to the attention of the potential donors the opt-out system or making the forms readily available for patients to opt-out. It has been suggested that the Health Ministry should make these opt-out forms readily available both online even though this is online however it is not readily available to those who do not have access to the internet and in hospitals so that patients do not have to go looking for them.¹⁴⁶

Others have stated that the public need to be made aware that kidneys and other organs such as livers, hearts and corneas can be transplanted from citizens of Singapore as well as permanent residents when they die as death is defined by the Act, unless they have elected to opt-out¹⁴⁷. Hospitals and polyclinics as well as various community institutions should educate the public as to what the provisions of the Act entail and how its enforcement can affect the public¹⁴⁸.

This Act is commendable, as it enforces the opt-out system which has been shown to increase the number of organs donated to people in need of such organs¹⁴⁹.

However, it has been shown that this system can be seen as being insensitive as well as not implemented properly, as often the patients are not told of their right to opt-out of donating their organs. Also the Act's stringent requirements for those who can donate organs, such as HIV positive status, alcoholism and age, excludes a number of people who are potential donors thereby reducing the number of organs for transplantation. Despite the Act's negative aspects, I submit that it does have commendable features such as the specific criminalisation of the buying and selling of organs, the opt-out system and the transplanting of organs between non-related donors which can possibly curb the organ shortage problem.

3.3.8 Conclusion:

The Singapore Human Organ and Transplantation Act is commendable in that it has the opt-out system which seems to be working even though it has been criticized, it helps to alleviate the shortage of organs available for transplantation. The specific criminalising of buying and

¹⁴⁶ Dr Lim Boon Hee "SGH could have handled removal of organs better" *Strait Times 'Forum'*, 10th February 2007.

¹⁴⁷ Ibid.

¹⁴⁸ Harry Chia Kim Seng "Tussle shows need to educate the public on HOTA" *Strait Times 'Forum'*, 10th February 2007.

¹⁴⁹ E Shum, A Chern "Amendment of the Human Organ Transplant Act" (2006) 35(6) *Annals Academy of Medicine Singapore* 428,429.

selling of organs is a good idea to adopt in curbing the black market; however the better option would be to legalize the donation of organs between living unrelated donors. The notion of the Transplantation Committee is effective in curbing the exploitation aspect of the donation of organs.

3.4 The Spanish Model:

3.4.1 Introduction:

The Spanish model is notable in the aspect of the model only utilising cadaver organs for transplantation and has been very effective in curbing the shortage of organs in the country. The following will be discussed:

- a. Features of the model
- b. The co-ordinating teams for transplants
- c. The main functions of the ONT
- d. Conclusion

3.4.2 Features of the Model:

Spain has an integrated system which involves an organized transplant programme that focuses mainly on organ procurement based on a network of well-trained transplant co-ordinators¹⁵⁰. In each hospital there exists a potential donor for procurement of their organ and a transplant co-ordination team which includes both doctors and nurses¹⁵¹.the potential donor is found as they are sourced by the transplantation co-ordinating team¹⁵². The team is in charge of all the steps regarding the transplant of organs¹⁵³. The teams are integrated into a National Organization of Transplants (ONT) (Organizaci'on Nacional de Transplantes)¹⁵⁴

¹⁵⁰ R. Matesanz, B. Miranda, C. Felipe "Organ procurement and renal transplants in Spain: the impact of transplant coordination" (1994) 9 *Nephrology Dialysis Transplantation* 475,575.

¹⁵¹ Ibid 475.

¹⁵² Ibid 475.

¹⁵³ Ibid 475.

¹⁵⁴ Matesanz, Miranda & Felipe note 150 above, 475.

which is in charge of co-ordinating transplantation activities and does not have an executive function¹⁵⁵.

The Spanish¹⁵⁶ definition of brain death is likened to other Western definitions, as being the “total and irreversible loss of brain function”¹⁵⁷. It also mentions that brain death must be certified by three doctors who have no relationship to the transplant team¹⁵⁸. The signs of brain death must also be determined clinically and recorded by silent EEG for a period of 30 minutes¹⁵⁹. This must be repeated twice with an interval of not less than 6 hours¹⁶⁰. This type of testing is valid unless the patient is hypothermic or under drugs which are known to be brain depressive¹⁶¹. I submit that this criterion for the doctors certifying death not being a part of the transplantation team is a good idea as this prevents exploitation if these were to be the same doctors conducting the transplant as they would then know that this patient is now brain death and his/her organs can be used for transplanting into someone else who has paid the doctor for that organ.

The organs of a patient are obtained after the family of the patient gives informed consent¹⁶². No provision is made in the law for compensation to be paid to the donor nor can any payment for grafts of a liver to be obtained from the donor¹⁶³.

In Spain about 99% of organ donations are obtained from cadavers¹⁶⁴. Living donors account for about 1%. These statistics regarding the organ donations are most likely attributable to the fact that there exists no real pressure with dialysis units in Spain. There is then no need to ask a living person to donate a kidney. There is also not many people who stay on dialysis for more than six to eight months and hence it is very difficult to ask a parent or sibling to give a kidney in that situation.

¹⁵⁵ Matesanz, Miranda & Felipe note 150 above, 475.

¹⁵⁶ Approved by Parliament in 1979 called Ley de Transplantes.

¹⁵⁷ B Miranda, J Canon & N Cuende ‘The Spanish Organizational Structure for Organ Donation’ (2001) 15 *Transplantation Reviews* 33, 34.

¹⁵⁸ Matesanz, Miranda, Felipe note 150 above, 475.

¹⁵⁹ Matesanz, Miranda, Felipe note 150 above, 476.

¹⁶⁰ Ibid.

¹⁶¹ Ibid.

¹⁶² Ibid.

¹⁶³ Ibid.

¹⁶⁴ R. Matesanz, “A decade of continuous improvement in cadaveric organ donation: the Spanish model” (2001) Volume XXI *Supplement 5 Nefrologia* 59, 61.

3.4.3 The Co-ordinating teams for transplants:

The ONT was established in 1989 and began under the Department of Health. This organisation emphasized the need for one person or a group to conduct organ procurement and transplantation in each hospital. The transplant coordinating network works at three levels: national, regional and local levels¹⁶⁵. This organization also stated that a medical doctor should be attached to each hospital and that each team should have a nurse¹⁶⁶. The transplant co-ordinators work part time to coordinate transplants if a hospital procures organs without having a transplant team attached to it¹⁶⁷.

This structure although formal is also flexible in that it ensures that the transplant coordinators who work at “grass roots” level have a sense of accountability for their performance¹⁶⁸. The coordinators are generally doctors qualified mainly in intensive care or nephrology¹⁶⁹.

The coordinators are trained in a 4-day course before they enter the field¹⁷⁰. This includes training for nurses of the teams as well. They learn: a) how to identify a donor; b) the different techniques that are associated with determining brain death, c) the clinical management and maintenance of a donor, d) psychological abilities to approach a family which is grieving, e) how to give support, f) how to interview relatives and g) how to obtain consent¹⁷¹. They also receive training in ethics and law¹⁷². They also learn how to contact the co-ordinating office as well as basic information concerning solid organ and tissue transplantation¹⁷³.

¹⁶⁵ Matesanz, Miranda, Felipe note 150 above, 476.

¹⁶⁶ Ibid.

¹⁶⁷ Ibid.

¹⁶⁸ B Miranda, M Fernandez Lucas, C de Felipe, M Naya, JM Gonzalez-Posada and R Matesanz “Organ Donation In Spain” (1999) 14 *Nephrology Dialysis Transplantation* 15, 15.

¹⁶⁹ Ibid.

¹⁷⁰ Matesanz, Miranda, Felipe note 150 above, 477.

¹⁷¹ Miranda et al note 168 above, 15.

¹⁷² Miranda et al note 168 above, 15.

¹⁷³ Ibid.

3.4.4 Main Functions of the ONT:

The ONT are involved in administrative tasks and relations with any other social group which is not directly involved in organ transplantations but could affect it¹⁷⁴.

The media relations are carefully run together with educational programmes which are designed to offer the coordinators with the best way to send out messages to media professionals¹⁷⁵.

Close contacts and collaborations are maintained with patient associations, judges, coroners as well as social groups which are not directly related to organ donation¹⁷⁶.

The main aim of the ONT and its staff members are to successfully transplant organs. The central office of the ONT acts as a service agency¹⁷⁷. It deals with organ sharing, the transplant teams and the transplantation of organs¹⁷⁸. It also has the responsibility of maintaining the waiting lists and registries for transplants. It updates data and keeps interested groups informed as well as maintains an open telephone line to assist with any queries about organ procurement and transplantation¹⁷⁹.

The direct link which is established between the ONT and the Spanish Department of Health is a good link as it helps to establish a flow of information to the health authorities about any problems or other aspects related to transplantation¹⁸⁰.

The ONT is the support agency for hospitals which conduct organ or tissue transplantations and it guarantees transparency through this process¹⁸¹. The development of committees, and discussions with health authorities and transplant representative teams, regarding possible conflicts and matters of transparency, ensures transparency in the whole process. These committees ensure compliance with all the necessary regulations in respect of organ distribution and criteria for being listed on the waiting lists¹⁸².

¹⁷⁴ Miranda et al note 168 above, 16.

¹⁷⁵ Matesanz, Miranda, Felipe note 150 above, 477.

¹⁷⁶ Ibid.

¹⁷⁷ Matesanz, Miranda, Felipe note 150 above, 477.

¹⁷⁸ Ibid.

¹⁷⁹ Miranda et al note 168 above, 16.

¹⁸⁰ Matesanz, Miranda, Felipe note 150 above, 477

¹⁸¹ Ibid.

¹⁸² Matesanz, Miranda, Felipe note 150 above, 477

3.4.5 Conclusion:

Spain is one of the few countries that have a successful cadaveric donor transplantation¹⁸³ programme. It also is the only country that has a waiting list which is decreasing¹⁸⁴. The Spanish government's commitment to developing and maintaining the national organ procurement system adds to this success. The ONT is a successful organisation and together with the transplant committees in hospitals really function well together and is a good notion to adopt if trying to rectify legislation that is lacking.

3.5 The Indian Transplantation of Human Organs Act:

3.5.1 Introduction:

The Indian Transplantation of Human Organs Act is an example of how despite legislation which exists to curb the trafficking of organs, the black market trade in organs still exists and is still thriving due to other factors such as the socio-economic conditions prevalent in a country such as India. The following topics will be discussed:

- a) The features of the Act
- b) Criticisms of the Act
- c) Conclusion

3.5.2 Features of the Act:

Despite India adopting the Transplantation of Human Organs Act in 1994, organ trade is still rife in India. The Act places a ban on the sale of human organs and all transplants except in situations where a relative donates an organ¹⁸⁵. However, the Act is flawed in stating that hospital authorization committees are authorized to allow non-related donors to donate their

¹⁸³ M Crowley-Makota & M Lock "Organ transplantation in a globalised world," (2006) 11 in Routledge *Mortality: Promoting the interdisciplinary study of death and dying* 166, 178.

¹⁸⁴ Miranda et al note 168 above, 16.

¹⁸⁵ Section 19 (a) – (f) of the Indian Transplantation of Human Organs Act, 1994.

organs to patients if they are “emotionally close¹⁸⁶”. This term has been loosely defined in the Act and hence can lead to exploitation¹⁸⁷.

Provision is made in the Act for:

- a) Death to be defined as brain-stem death¹⁸⁸;
- b) The Prohibition of the sale of organs and;
- c) A near relative as defined as a spouse, son, daughter, father, mother, brother or sister, who may donate organs without permission from the government.¹⁸⁹

The Act does not allow for payment of money for organ donations¹⁹⁰. It also states that an unrelated donor has to file an affidavit in Court stating that the organ is being donated out of affection¹⁹¹. The donor is then subjected to tests before the transplant can take place¹⁹². The Authorization Committee makes sure that the documents required under the Act are supplied¹⁹³. If it is established that money has been paid between the donor and the recipient they are both considered offenders under the law. The Indian laws also ban organ sales and foreigners may not obtain organs from local donors¹⁹⁴.

Live transplants are limited to relatives by blood, spouses and those who donate out of “affection”¹⁹⁵. The Authorization Committee is tasked with the duty of ensuring that all applications for unrelated transplants are carefully scrutinized and in accordance with the requirements of the Act¹⁹⁶. Hospitals that conduct transplants are required to be registered with Committees¹⁹⁷ to monitor their functioning¹⁹⁸.

¹⁸⁶ Section 9(2) of the Act which uses the words “by reason of affection or attachment”.

¹⁸⁷ S R Glaser ‘Formula to Stop the Illegal Organ Trade: Presumed Consent Laws and Mandatory Reporting Requirements for Doctors’ *Human Rights Brief* 12, no. 2 (2005) 20, 22.

¹⁸⁸ Section 2(d) of the definition section of the Indian Transplantation of Human Organs Act, which defines brain-stem death as the stage at which all functions of the brain stem have permanently and irreversibly ceased.

¹⁸⁹ Section 2(i) of the Act.

¹⁹⁰ Section 19 of the Act.

¹⁹¹ Section 9(5) of the Act.

¹⁹² Napur Nadir ‘Organ Transplantation Law in India’ (2008) available at:

<http://www.legalserviceindia.com/article/1224-Orqan-Transplantation-Law-In-India.html>, (accessed on 3rd July 2012).

¹⁹³ Section 9(5)-(6) of the Act.

¹⁹⁴ Glaser note 184 above, 22.

¹⁹⁵ Section 9(3) of the Act.

¹⁹⁶ Section 9(4) of the Act.

¹⁹⁷ These Committees are the authorization committees.

¹⁹⁸ Section 10 of the Act.

3.5.3 Criticisms of the Act:

Despite the provisions of the Indian Act, that practice of medicine regarding the transplantation of organs is unregulated and numerous problems arise. For instance, even though there are numerous reports of complaints of racketeering in organs being laid with the State Medical Councils, the complaints are never investigated. The Councils seem to have ignored such complaints and this leads to exploitation of organs and a thriving of black market trade in organs¹⁹⁹.

The other major problem that exists in India is that the majority of the population live below the poverty line in areas with weak regulatory systems regarding organ procurement. This leads to exploitation of the poor for money and their lack of protection, weaknesses in the implementation and enforceability of the Indian Act²⁰⁰. As stated in the *Lancet*: “The success of transplantation as a life-saving treatment does not require—nor justify victimizing the world's poor people as the source of organs for the rich.”²⁰¹

3.5.4 Conclusion:

The Indian Act is an example as stated before of despite having legislation in place to prevent organ trafficking the black market still thrives, as stated above. This is influenced by factors such as poverty and people in dire need of money to meet their needs. There is also insufficient regulatory work being done in this aspect to implement the Act correctly, so despite the Act criminalising the selling of organs, the system is flawed and the trafficking of organs thrives.

3.6 Ideas elicited from these international instruments and models that will benefit the world wide organ shortage problem, South Africa and that will curb the black market organ trafficking syndicate:

¹⁹⁹ Napur Nadir note 189 above.

²⁰⁰ S Shroff ‘Legal and ethical aspects of organ donation and transplantation’ (2009) 25(3) *Indian Journal of Urology* 348,352.

²⁰¹ ‘Organ trafficking and transplant tourism and commercialism: the Declaration of Istanbul Summit’ (2008) 372 *The Lancet* 5, 6.

The Declaration of Istanbul and Palermo Protocol make the principles clear that collaborative partnerships between States and the States should establish specific penalties and define the crimes relating to organ trafficking specifically. The other countries and the different systems that they employ to deal with organ transplantation and to curb organ trafficking is important to note as possible ways forward in the fight against organ trafficking. The UK has the HTA which is a good idea to employ to curb organ trafficking. The UK also employs specific penalties for trafficking of organs which is good as does not leave room for interpretation and hence could lead to exploitation. The Iranian model is most commendable as it caters for compensation for the donors through hospital services. The Singapore model of the opt-out system and the DATPA is also a good model as it curbs the organ shortage problem. The Spanish model which has the ONT and the cadaver donations seems to be an effective model in curbing the organ shortage problem. The Indian model is a good which illustrates that despite legislation being in place there still exist exploitation of the poor for their organs. All these countries to the exception of India are successful in the models that they have established to some extent but as discussed above some still have flaws. Will these models and ideas be effective in another country with a different economic status and economic status of the people? In a country such as South Africa will any of these models work given the economic status of South Africa and South Africans? This will be discussed in preceding chapters.

Chapter 4 – Possibility of Xenotransplantation and Cloning:

4.1 Introduction:

This chapter will discuss the possibilities of exploring other forms of increasing the amount of organs available to meet the demand. Xenotransplantation and cloning will be discussed as these other forms which could possibly be the answer to the shortage in the not so distant future.

4.2 Xenotransplantation:

A suggestion for curbing the organ shortage problem besides the Spain model and other models discussed above relates to xenotransplantation²⁰². This involves the procuring of organs from animals and transplanting them into humans who have organs that are failing. This notion of transplantation has been driven by the supply and demand issue regarding an insufficient supply of organs to meet the demand.

Xenotransplantation could help to curb the organ shortage problem. Xenotransplantation has been defined as any procedure that involves the transplantation, implantation, or infusion into a human recipient of either:

- (1) Live cells, tissues, or organs from a non-human animal source or;
- (2) Human body fluids, cells, tissues, or organs that have had ex vivo contact²⁰³ with live non-human animal cells, tissues, or organs²⁰⁴.

Baboons and chimpanzees have been used previously for their organs however, due to ethical concerns and the fear of transmission of deadly viruses²⁰⁵. Organs from pigs have been used more frequently for xenotransplantation²⁰⁶.

There is evidence of several successful xenotransplants. In 1984 a baboon heart was transplanted into a newborn²⁰⁷. The baby lived about 20 days after the surgery. A baboon

²⁰² Matesanz, Miranda, Felipe note 150 above, 478.

²⁰³ This means occurring outside the living body and conducted in an artificial environment outside the organism with minimum alteration of the natural conditions. Available at: <http://www.thefreedictionary.com/ex+vivo>, (accessed on 6th November 2012).

²⁰⁴ T Samdani, "Xenotransplantation - Overview" available at: <http://emedicine.medscape.com/article/432418-overview>, (accessed 29th July 2012). Cf: US Food and Drug Administration (FDA), 1999; FDA 2001.

²⁰⁵ Ibid.

²⁰⁶ Samdani note 204 above.

liver was also transplanted but the recipient only lived for 70 days²⁰⁸. Porcine islet cells of Langerhans²⁰⁹ have been used for diabetes patients²¹⁰.

The question is whether this form of xenotransplantation could be the answer to the organ shortage problem? However, there are many ethical, moral and legal aspects that need to be considered when considering this form of transplantation. Animal rights activists are opposed to xenotransplantation²¹¹. It will also be the need to regulate xenotransplantation by legislation as well as to consider the moral aspect of valuing a human life over that of an animal's. Does the utilitarian theory explain fully justifying utilising xenotransplantation? A discussion of this is beyond the scope of this dissertation. For xenotransplantation to be acceptable the right mechanisms must be put in place to monitor such transplants.

4.3 Cloning:

Cultivation through stem cells which are a better idea to use due to them being able to be used for any type of cell being regenerated, and cloning is still in the developmental stages²¹² and is yet to be found as a definitive answer to the organ shortage problem.

The South African legislation²¹³ prohibits the reproductive cloning of human beings and this includes genetic material of human gametes, zygotes or embryos or any activity that includes the nuclear transfer of embryo splitting²¹⁴. However, the Minister may permit therapeutic cloning using adult or umbilical cord stem cells²¹⁵. The Minister may also permit research on stem cells and zygotes which are not more than 14 days old²¹⁶. The Act further makes it an offence for a person who fails to comply with this section and the penalty is either a fine or to imprisonment of five years or both²¹⁷. The Act further defines reproductive cloning²¹⁸ and

²⁰⁷ LL Bailey, SL Nehlsen-Cannarella, W Concepcion, et al. "Baboon-to-human cardiac xenotransplantation in a neonate" (1985) *Journal of the American Medical Association*. 254(23) 3321, 3329.

²⁰⁸ TE Starzl, J Fung, A Tzakis, et al. 'Baboon-to-human liver transplantation' (1993) 341 *the Lancet* 65, 71.

²⁰⁹ These are cells which are found in the pancreas of pigs and contain the endocrine i.e. the hormone producing cells are transplanted into type 1 diabetics, which were discovered by Paul Langerhans in 1869. Information accessed from: R M Meloche 'Transplantation for the treatment of type 1 diabetes' (2001) 13 *World Medical Journal of Gastroenterology* 6347, 6355.

²¹⁰ PP Rood, DK Cooper. 'Islet xenotransplantation: are we really ready for clinical trials?' (2006) 6(6) *American Journal of Transplantation* 1269, 1274.

²¹¹ Herring note 63 above, 439.

²¹² M Slabbert & H Oosthuizen 'Establishing a market for human organs in South Africa, Part 1A: proposal' (2007) 28 *Obiter* 44, 47-8.

²¹³ The National Health Act 61 of 2003, section 57.

²¹⁴ Section 57(1) of the National Health Act.

²¹⁵ Section 57(2) of the Act.

²¹⁶ Section 57(4) of the Act.

²¹⁷ Section 57(5) of the Act.

therapeutic cloning²¹⁹. Stem cell research is permitted in South Africa and is probably occurring in many other countries across the world.

Cloning, if done under close control and with effective regulation could be the answer to the shortage problem. This idea however, could raise some ethical concerns with regard to consent issues from the possible person whose organs are being cloned as well as preventing exploitation of such an idea. This idea however, could possibly be the way forward in terms of curbing the organ shortage problem and possibly the black market.

4.4 Conclusion:

The notion of xenotransplantation and cloning are a good notion to be explored as possible solutions to curbing the shortage of organs, however as discussed above these notions are not ideal as there are many issues to the effective implementation of both measures that are controversial as well as the amount of funds that will be needed to make these aspects a reality will be a strain on a country and its resources.

²¹⁸ Means the manipulation of genetic material in order to achieve the reproduction of a human being and includes nuclear transfer or embryo splitting for such purpose.

²¹⁹ Means the manipulation of genetic material from either adult, zygotic or embryonic cells in order to alter, for therapeutic purposes, the function of cells or tissues.

Chapter 5 – South African Legislation on “Organ Trafficking”:

Introduction:

This chapter will discuss the Human Tissue Act²²⁰ (HTA) of South Africa as well as the State v Netcare Kwa-Zulu Natal (Pty) Ltd²²¹ case. A discussion will then follow of the National Health Act²²² (NHA) chapter 8 which repealed the Human Tissue Act. The sections which are relevant to organ trafficking will be discussed for both Acts respectively.

5.1 The Human Tissue Act²²³:

5.1.1 Introduction:

The Human Tissue Act (HTA) which has now been repealed by chapter 8 of the National Health Act²²⁴ is a piece of legislation which despite prohibiting the sale of organs, this still occurred in numerous well known hospitals. The following shall be discussed in this section:

- a. Critique of the Sections of the Act relating to the prohibition on the sale of organs
- b. A discussion of the State v Netcare Kwa-Zulu Natal Pty (Ltd) case
- c. Conclusion

5.1.2 Critique of the section of the Act:

The HTA has been repealed by chapter 8 of the National Health Act and so the focus here will be only on the section which prohibits the sale of organs. This section is section 28 of the HTA.

- **Section 28** which deals with payment in connection with import, acquisition or supply of tissue, blood, blood products or gametes states the following:

(1) No person except-

²²⁰ 65 of 1983.

²²¹ Case No 41/1804/2010, (8 November 2010).

²²² 61 of 2003.

²²³ 65 of 1983.

²²⁴ 61 of 2003.

(a) an authorized institution or, in the case of tissue or gametes imported in terms of this Act, the importer concerned, **may receive any payment** in respect of the import, acquisition or supply of any tissue or gamete for or to another person for any of the purposes referred to in section 4 (1)²²⁵ or 19²²⁶;

(b) a prescribed institution or person may receive any payment in respect of the import or acquisition for or the supply to another person of blood or a blood product, and any such payment which has been received, shall be refundable to the person who made it.

(2) The provisions of subsection (1) shall not prevent a medical practitioner or dentist from receiving remuneration for professional services rendered by him to any person.

The HTA further defines tissue as:

a). any human tissue, including any flesh, bone, organ, gland or body fluid, but excluding any blood or gamete and²²⁷;

b). any device or object implanted before the death of any person by a medical practitioner or dentist into the body of such person²²⁸.

I submit that this section does state that a tissue includes an organ and hence in section 28 of the HTA, payment for an organ will be prohibited. It does allow for medical practitioners to receive remuneration for the services rendered by them, this can be problematic as discussed in the next section; where the doctors did receive remuneration for performing the illegal organ transplants (which was their professional services rendered). This aspect of the HTA was therefore violated by the doctors finding a way around this despite the HTA prohibiting such transplantation of organs for payment.

The objective of the Human Tissue Act prior to it being repealed was to regulate and standardise the use of human tissue for purposes associated with medical practice. The extent to which the use of such tissue being used was limited to medical or dental training, research

²²⁵ This section deals with the purposes of which the Human Tissue Act authorised donations: to universities, hospitals, an authorized institution, a medical practitioner, a dentist, for medical or dental training in the advancement of medicine.

²²⁶ This section also lists a number of purposes for which donations could be done: transplantation into another for the production of a therapeutic, diagnostic or prophylactic substance, giving blood to another living person or artificial fertilization of another person to name just a few purposes listed under this section.

²²⁷ Section 1 of the Act.

²²⁸ Section 1 of the Act

and therapy, the advancement of dentistry or medicine in general, for post-mortem examinations of certain human bodies, for the removal of tissue, blood and gametes from living persons for medical or dental purposes, the control of artificial fertilization of persons and the regulation of export and import of human tissue, blood and gametes. There was no provision made in the Act for non-related donors to donate organs to each other, Ministerial consent would have to be required for such donations, nor is there anything relating to using a body or tissue for purposes of public display or art except where the body, tissue is used at the university, however this is specifically stated as being used for the purposes of medical or dental and other related aspects as stated above.

The operation of the Human Tissue Act was regarding the use of human tissue in many aspects as stated in the objective of the Act and applied to South Africa only. The Act, despite the regulations and the operation of the Act being clear on prohibiting the sale of organs in instances, it will be discussed below as to how this aspect was avoided and the HTA exploited due to loop holes being found in the law. If a loop hole can be found in the law then this shows that the wording of the Act enforcing the law is not effective enough to make it less prone to exploitation.

5.1.3 Discussion of the State v Netcare Kwa-Zulu Natal (Pty) Limited²²⁹ Case:

5.1.3.1 Introduction to the case:

The **State v Netcare Kwa-Zulu Natal (Pty) Limited²³⁰** case in 2010, involved illegal kidney transplant operations conducted in St Augustine's Hospital, in Durban of which Netcare is a parent company. The case is an example of how the Human Tissue Act failed to curb the problem of organ trafficking as will be discussed later in the section.

The kidney operations took place between June 2001 and November 2003 with a scheme which was developed for Israeli citizens who were in need of organ transplants. The Israeli's

²²⁹ Case no. 41/1804/2010.

²³⁰ Case no. 41/1804/2010.

could obtain the organs in South Africa and the operations were performed at St Augustine's Hospital²³¹.

5.1.3.2 Who were the prime donors?

Donors were initially Israeli citizens but later donors from Brazil and Romania were also used for donating their organs. The name of the organ broker was Ilan Perry and he was in charge of recruiting donors and recipients for kidney transplants. He obtained kidneys from the donors at a much lower cost than he had charged the recipients. This resulted in him profiting from the transaction.

This broker was not charged²³² but his two recruiters Captain Ivan Da Silva and Gaby Tauber were imprisoned for their part in the matter²³³.

The screening of prospective donors and the compatibility tests were done in South Africa²³⁴. Documents were fraudulently made to indicate that the donors and the recipients were 'related' to each other, even though they were not²³⁵. This was done in order to avoid outside approval, through the Ministerial Committee, for transplants to unrelated recipients²³⁶.

Netcare were paid for their hospital services in connection with the illegal kidney transplants, the donors were paid in cash after the transplants had been conducted²³⁷.

5.1.3.3 Netcare's Agreement:

Netcare pleaded guilty to charges²³⁸ which were laid under the Human Tissue Act²³⁹ and the Prevention of Organised Crime Act²⁴⁰. The hospital entered into a plea bargain to avoid

²³¹ J Allain, Commentary, "Trafficking of Persons for the Removal of Organs and the Admission of Guilt of a South African Hospital" (2008) 19 *Medical Law Review* 117,122.

²³² He was not charged due to him turning State Witness Cf: Nivashni Nair 'Jews caught Organ Trafficking in South Africa' *The Forbidden Truth* 15 September 2010 available at: <http://theforbiddentruth.net/archive/index.php/t-10507.html>, (accessed on 5th November 2012).

²³³ These two were sentenced to 8 years imprisonment by a Brazilian Court for their roles in the syndicate. Cf: Nivashni Nair 'Jews caught Organ Trafficking in South Africa' *The Forbidden Truth* 15 September 2010 available at: <http://theforbiddentruth.net/archive/index.php/t-10507.html>, (accessed on 5th November 2012).

²³⁴ Allain note 231 above 118.

²³⁵ Ibid.

²³⁶ Ibid.

²³⁷ Allain note 231 above, 118.

²³⁸ The charges were 102 counts which related to charges coming from having allowed its employees and facilities to be used to conduct illegal kidney transplants, to receive payment for such transplants and for using minors for their transplants to name a few. Cf: J Allain, Commentary, "Trafficking of Persons for the Removal of Organs and the Admission of Guilt of a South African Hospital" (2008) 19 *Medical Law Review* 117, 118-9.

²³⁹ 65 of 1983

²⁴⁰ of 1998.

charges such as fraud, forgery and assault with the intention of doing grievous bodily harm. The latter operations performed without informed consent.

Section 18(a) and 28(1) of the Human Tissue Act²⁴¹ prohibited the transplantation of non-related tissues of minors²⁴², requires written consent from donors²⁴³ and the purchase of tissue such as kidneys²⁴⁴. The Ministerial Policy of the Department of Health sets out that:

“Donor organs must be used primarily for South African citizens and permanent residents. Written consent must be obtained from the Minister of Health before any person who is not a South African citizen or permanent resident is accepted onto a transplantation programme”²⁴⁵.

This policy also established a Ministerial Committee to approve applications for transplantation of unrelated living donors to curb the possibility of abuse and exploitation.

In the plea bargain between Netcare and the State, the State recognized its own “legitimate interest in overseeing the control over transplant of human tissues... the interests of the medical profession and the public at large”²⁴⁶. The agreement in the plea bargain stated that it is in the public interest that:

“that a company, such as the accused company, guilty of an offence such as this, should be convicted and punished and more particularly, that that conviction and punishment should take place in open court for society as a whole to come to know and understand that the prosecuting authorities and the Department of Health will not tolerate breaches of the code of conduct and standards of ethics and compliance with the law required in a civilised society”²⁴⁷.

The plea bargain then set out the penalty which was a confiscation order or R3, 800,000 plus a sentence of R 4,020,000 for each of the counts to which Netcare pleaded guilty²⁴⁸.

²⁴¹ 65 of 1983.

²⁴² Section 18(b) (i) of the Human Tissue Act.

²⁴³ Ibid.

²⁴⁴ Section 28(1) of the Human Tissue Act.

²⁴⁵ Agreement in terms of section 105 (A) (1) of the Criminal Procedure Act 51 of 1977 Cf: State v Netcare Kwa-Zulu Natal (Pty) Limited, case No. 41/1804/2010.

²⁴⁶ Allain note 231 above, 120.

²⁴⁷ Annexure from the Charge Sheet obtained from the 105(A)(1) agreement in terms of the Criminal Procedure Act 51 of 1977.Cf: The State v Netcare Kwa-Zulu Natal (Pty) Limited , case No. 41/1804/2010

²⁴⁸ Allain note 231 above, 120.

The case is the first case in which a hospital was implicated in trafficking of human organs. The case was heard under the HTA and POCA even though at the time South Africa was not a party to the Palermo Protocol²⁴⁹ which deals with trafficking in human organs²⁵⁰ and would have been more useful to the State if this Protocol was utilised in bringing on the charges against the accused hospital, doctors and staff.

Although the illegal trafficking of organs have now been prevented in South Africa, at the time of the case illegal transplants were taking place all over the country, with hospitals in Cape Town²⁵¹ and Johannesburg²⁵² also being reported to have conducted them²⁵³.

Resulting from the negotiations and the plea of guilty that resulted from the agreement between Netcare and the State, charges against the CEO, Richard Friedland were dropped. The interpreter, Samuel Ziegler was sentenced to a fine of R50, 000 or three months imprisonment and given a suspended sentence of five years²⁵⁴. The nephrologist, Dr Jeffrey Kallmeyer, who fled to Canada pleaded guilty to ninety counts and was fined R150, 000²⁵⁵. Lindy Dickson and Melanie Azor who were the transplant administrators as well as the four transplant surgeons, Ariff Haffejee, John Robbs, Neil Christopher and Mahadev Naidoo, are still awaiting trial²⁵⁶.

Currently the four accused doctors and the two employees who are now doctors have on the 23 November 2012 appeared in the Durban High Court and brought an application for a

²⁴⁹ of 2000.

²⁵⁰ The Republic of South Africa ratified the Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, Supplementing the United Nations Convention against Transnational Organized Crime on 20 February 2004.

²⁵¹ These were the Groot Schuur as well as the Chris Barnard Memorial Hospitals, information obtained from Lyse Comins 'New Kidney Scandal' *IOL News* 26 February 2011 available at: <http://www.iol.co.za/news/new-kidney-scandal-1.1032853>, (accessed on 6th November 2012).

²⁵² These were the Charlotte Maxeke hospital and the Garden City hospitals, information obtained from Lyse Comins 'New Kidney Scandal' *IOL News* 26 February 2011 available at: <http://www.iol.co.za/news/new-kidney-scandal-1.1032853>, (accessed on 6th November 2012).

²⁵³ Allain note 231 above, 122.

²⁵⁴ The State v Samuel Ziegler, Agreement in Terms of s 105A of the Criminal Procedure Act 1977, Commercial Crime Court, Regional Court of Kwa-Zulu Natal, Durban, South Africa, Case No 41/1816/2010, 23 November 2010.

²⁵⁵ South Africa Police Service, 'Police Secure further Conviction in Human Organ Transplant case', 15 December 2010, See South African Government Information at: <http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=15306&tid=25900>, (accessed on 6th July 2012).

²⁵⁶ Allain note 231 above, 122.

permanent stay of prosecution²⁵⁷. They brought this application on the basis that the prosecution (headed by Advocate Robin Palmer and Advocate Joanna Bromley-Gans) had unreasonably delayed (the delay however, was due to the extent of the organ trafficking syndicate being so large that it took time to investigate and collect statements from the people involved in each country) the institution of proceedings and as a result they have suffered irreparable trial prejudice as a result of the delay²⁵⁸. Acting Judge Troskie reserved judgment in the matter and now a decision is eagerly awaited in the matter²⁵⁹. The decision handed down by Judge Troskie on the 14th December 2012 was that the permanent stay of prosecution was granted for the doctors and that the State is still contemplating on whether to take this matter on appeal²⁶⁰.

5.1.3.4 Commentary on the Case:

I submit that this case is a good example of how the Human Tissue Act was open to exploitation due to its implementation not being carried out effectively this leading to contraventions of the Act. The doctors and employees involved in the scandal as well as the organ brokers falsified documents in order for the transplant to be done, as stated above that despite the HTA prohibiting the payment for organs, the doctors still found a way around that and conducted the illegal transplants on unrelated donors and recipients. This shows that the legislation at that time was therefore not enforced properly and hence led to exploitation due to there not being effective oversight mechanisms in place in terms of the Act to monitor the organ transplants and by the hospital involved by not having more stringent methods in place to verify that the donor and the recipient are related and to ensure that illegal organ transplants do not occur. Even though the Ministerial Policy from the Department of Health establishing a Ministerial Committee to approve applications for transplants to foreigners, this was also exploited by the members to the scandal as the documents were falsified to show the donors are related when in fact they were not.

²⁵⁷ Lyse Comins 'Surgeons in Bid to Quash "Kidneys" case' *The Independent on Saturday* 24 November 2012 at 2.

²⁵⁸ Ibid.

²⁵⁹ Ibid.

²⁶⁰ John Robbs, Arif Haffejee, Neil Christopher, Madhav Naidoo, Lindy Dickson and Melanie Azor v The Deputy Director of Public Prosecutions for the Province of KwaZulu – Natal, Case no: 13510/2011, Judgment at page 24 delivered on 14th December 2012.

Another aspect of the Act which was contravened was the fact that the transplants were paid for. This then led to illegal transplants occurring as a result of the legislation not specifically prohibiting organ trafficking, nor defining such an act under the Human Tissue Act.

As stated before, the Human Tissue Act was open to exploitation, The National Health Act, still does not define the offence of organ trafficking nor attaches a substantial penalty to such a crime. Nor does it establish mechanisms to curb and monitor organ transplantations occurring in the country. There should exist a national register which registers all people willing to donate their organs which is made available to hospitals should a person be declared brain dead²⁶¹.

It has also been stated that there needs to be an establishment of an independent body which is funded by government and the private sector, similar to the UK Human Tissue Authority which should give guidance to government, public officials and professionals on the retention and storage of human tissue as well as publish codes of practice and issue licences for certain procedures²⁶².

This body should perform the duties and functions of the inspectors of anatomy and human tissue inspectors²⁶³. The body should have a small executive core membership and accredited committees in the different provinces, similar to how the research ethics committees operate in terms of the National Health Act. The body should also raise a licence fee to help cover its running costs²⁶⁴.

In the Netcare case, it appears that Netcare got off lightly by just paying a fine. Regarding the revocation of Netcare's licence, it was stated the group's licence could not be revoked without finding out in which hospitals such illegal transplants took place. The Health Practitioners Council of South Africa (HPCSA) investigation into the case still needs to be finalised, and it may still guide the authorities as to what action needs to be taken against the

²⁶¹ M Slabbert & H Oosthuizen 'Establishing a market for human organs in South Africa, Part 1A: proposal' (2007) 28 *Obiter* 44, 46.

²⁶² D McQuoid-Mason 'UKZN Anniversary symposium on the medico-legal and ethical implications of human tissue use' (2011) 4 *SAJBL* 13, 14.

²⁶³ *Ibid.*

²⁶⁴ *Ibid.*

hospitals involved in the illegal kidney transplants²⁶⁵. I submit that even though this case is regarded as a landmark case it seems to give the message that due to ineffective implementation of legislation, as well as delays in prosecuting the correct hospitals, the illegal transplantation of kidneys may continue without an effective penalty being meted out to those guilty of such acts. This is in relation to Netcare.

5.1.3.5 Conclusion:

I submit that the case also brought the prestige and reliability of a hospital group such as Netcare into disrepute, as patients may question the honesty of their employees. If a hospital group of the calibre of Netcare conducts such illegal acts that negatively impact on its reputation, patients who may in future approach them for organ transplantations could question the authority and honesty of their employees. The suggestion of a body which could monitor the storage and retention of human tissue is a good notion to carry forward and could possibly curb the problem that was experienced in the Netcare case.

5.2 The National Health Act²⁶⁶:

5.2.1 Introduction:

The National Health and its regulations are commendable in certain aspects when compared to the Human Tissue Act (HTA) as the National Health Act (NHA) does take a step forward in certain aspects, however the majority of the regulations of the NHA are a reproduction of the HTA's regulations and will therefore not be as effective as could be if they were re-drafted. The following sections shall be discussed:

- a. Discussion of the relevant sections relating to payment for organ donation in the Act
- b. Conclusions

²⁶⁵ 'Netcare: Operation Kidney' on Wednesday, 29 February 2012. Available at: http://www.indiansun.co.za/index.php?option=com_zoo&task=item&item_id=1581&Itemid=64, (accessed on 12th July 2012).

²⁶⁶ 61 of 2003.

5.2.2 Discussion of the relevant section relating to payment for organ donations in the Act:

• **Section 60** deals with payment in connection with the importation, acquisition or supply of tissue, blood, blood products or gametes and states the following:

(1) No person, except-

(a) a hospital or an institution contemplated in section 58 (1) (a), a person or an institution contemplated in section 63 and an authorised institution or, in the case of tissue or gametes imported or exported in the manner provided for in the regulations, the importer or exporter concerned, **may receive payment** in respect of the acquisition, supply, importation or export of any tissue or gamete for or to another person for any of the purposes contemplated in section 56 or 64;

(b) a person or an institution contemplated in section 63 or an authorised institution, may receive any payment in respect of the importation, export or acquisition for the supply to another person of blood or a blood product.

(2) The amount of payment contemplated in subsection (1) may not exceed an amount which is **reasonably required to cover the costs** involved in the importation, export, acquisition or supply of the tissue, gamete, blood or blood product in question.

(3) This section does not prevent a health care provider registered with a statutory health professional council from receiving remuneration for any professional service rendered by him or her.

(4) It is **an offence for a person-**

(a) who has donated tissue, a gamete, blood or a blood product to receive any form of financial or other reward for such donation, **except for the reimbursement of reasonable costs incurred by him or her to provide such donation;** and

(b) **to sell or trade in tissue**, gametes, blood or blood products, except as provided for in this Chapter.

(5) Any person convicted of an offence in terms of subsection (4) is liable on conviction to a fine or to imprisonment for a period not exceeding five years or to both a fine and such imprisonment.

I submit that this section mentions “reimbursement of reasonable costs” this does seem like a good step forward for this piece of Legislation, however the term is not defined by the Act

nor is their guidelines as to make such a determination nor is it stated who is the designated person who is going to make such a determination and who will control this aspect. This again leaves uncertainty in the wording of the Act and will impact implementation of this Act as different interpretations of this word will lead to many unreasonable circumstances or exploitation of this wording as reasonable could mean different things to different people. An example to illustrate how this might be a cause for concern, is where a person is in dire need of money to support his/her family and if they donate their organ to someone for a reasonable amount which might be a significantly huge amount of cash but is considered a reasonable reimbursement to them for donating such an organ.

This section does prohibit the selling or trade in tissue, however, I submit, that there is a very fine line between the selling and trading of one's organs and that of the reasonable reimbursements of costs and this could then lead to a potential for exploitation of the Act.

The section in this provision regarding trading or selling of the organs tends to imply a more individualistic approach to traders and sellers. It would be more appropriate to make the trafficking or selling of organs a crime and stating specifically that trafficking of tissue, blood or gametes will constitute a crime as this section does not target the syndicates that are currently thriving in the black market sector of organ trafficking. It would also be a good step forward to specifically define the terms organ trafficking, transplant tourism and transplant commercialism.

• Section 61(3) and 61(4) of the Act deals with the allocation and use of human organs and states the following:

(3) An organ may not be transplanted into a person who is not a South African citizen or a permanent resident of the Republic without the Minister's authorisation in writing.

(4) The Minister must prescribe-

(a) criteria for the approval of organ transplant facilities; and

(b) procedural measures to be applied for such approval.

This section is a good move forward in comparison to the Human Tissue Act as it states that the organ may not be transplanted into a person is not a South African citizen unless the Minister gives authorisation, this might have helped to curb the problem that occurred in the

Netcare case discussed above, however, I submit that the fact that the documents that are submitted to the Minister could still be false possibly leaves the National Health Act open to exploitation.

Further the Regulations to the National Health Act state that in the case of an organ transplant, the death must be determined by two medical practitioners, one of whom must have been practising for a period of at least 5 years and neither of whom are members of the transplant team²⁶⁷.

I submit that these regulations therefore put in an additional measure in preventing a doctor from obtaining an organ and transplanting it into another person as the two who certify death cannot be a part of the organ transplant team and this could possibly prevent the situation of the Netcare case where the doctors involved conducted their own illegal transplants.

5.2.3 Conclusion:

Despite this step forward, it does seem that the NHA uses a similar notion behind the HTA and despite it stating that it is an offence to receive payment for a donation; it does not state what is meant by reasonable costs. There also exists no provision for non-related living donors to donate organs. There are some positive aspects to the NHA such as in the regulations which does not allow the same doctor to be a part of the transplant team thereby not causing a conflict. The National Health despite having some commendable features as stated above does not specifically define what organ trafficking is nor does it specifically attach a penalty to such a crime.

²⁶⁷ Regulation 9 of the General control of Human Bodies, Tissue, Blood, Blood Products and Gametes regulations in GN R180 GG 35099 of 2 March 2012.

Chapter 6 – The Organ Trafficking Syndicate Worldwide:²⁶⁸

6.1 Introduction:

South Africa is not the only country which has a major problem regarding the organ trafficking syndicates which are thriving. There are other countries which will be discussed below who also have the problem of organ trafficking occurring on a huge scale. The following will be discussed:

- a. Findings regarding a worldwide survey of organ trafficking
- b. Are control measures to prevent the progression of the black market, really effective?
- c. Conclusion

6.1.1 Findings regarding a worldwide survey of organ trafficking:

The tracking of illegal sale of human organs across the globe has been done by Nancy Scheper-Hughes. She was instrumental in tracing the illegal organ trade in South Africa that led to Brazil as well as leading her to her own country's (America) best medical facilities. She posed at time as a medical doctor and at other times as a would-be kidney buyer²⁶⁹.

Scheper-Hughes exposed the syndicate that occurred in South Africa as well as in other countries such as Brazil, Moldova and the USA. She stated that her biggest challenge was convincing people that the problem of organ trafficking existed at all. She states that people used to make fun of the whole situation until she herself had gone and uncovered the truth about the whole trade²⁷⁰.

At conferences with transplant surgeons, Scheper-Hughes evidence was largely anecdotal and partly came from interviews with known criminals, and did not convince the American State Department officials. However despite this many officials, Human Rights Watch and

²⁶⁸ Nancy Scheper –Hughes account of the organ trafficking syndicate worldwide.

²⁶⁹ Nancy Scheper-Hughes "Not Just Urban Legend: Organ trafficking was long considered a myth. But now mounting evidence suggests it is a real and growing problem, even in America". Available at: <http://www.thedailybeast.com/newsweek/2009/01/09/not-just-urban-legend.html>, (accessed 12th February 2012).

²⁷⁰ Ibid.

transplant surgeons have adopted the view that organ trafficking exists and is a real problem worldwide²⁷¹.

Scheper-Hughes also managed to expose not only the Netcare Hospital arrangements in South Africa but also in leading hospitals in developed countries²⁷². In an interview conducted amongst American patients, some cited the Philadelphia hospital as a good place to go to for obtaining brokered organs²⁷³.

This hospital is regarded as a leading hospital, and illustrates that not only developing countries are subjected to organ trafficking but leading hospitals in developed countries also have brokers and medical staff guilty of this practice²⁷⁴.

Scheper-Hughes stated that she followed patients from dialysis clinics to meetings with organ brokers in shopping malls, tea shops, and coffee houses, to illicit surgeries in operating rooms of hospitals of which some of them resembled five-star hotels, others reminiscent of clandestine back alley abortion clinics²⁷⁵.

Scheper-Hughes also observed and interviewed hundreds of transplant surgeons who practise or facilitate, or who simply condone illicit surgeries with purchased organs. She also met with organ brokers and their criminal links. She then communicated some of the findings to medical ethics and licensing boards and to Ministries of Health as well as to US congressional hearings and to special meetings of the Council of Europe²⁷⁶.

Scheper-Hughes also stated that syndicates are thriving in trafficking of kidneys but also in half-livers, eyes, skin and blood. The World Health Organization (WHO) estimates that about one fifth of the 70 000 kidneys transplanted worldwide every year are supplied by the black market²⁷⁷.

²⁷¹ Scheper-Hughes note 267 above.

²⁷² Scheper-Hughes note 267 above.

²⁷³ Ibid.

²⁷⁴ Scheper-Hughes note 267 above.

²⁷⁵ N Scheper-Hughes 'Keeping an eye on the global traffic in human organs' (2003) 361 *The Lancet* 1645, 1645.

²⁷⁶ Ibid.

²⁷⁷ Scheper-Hughes note 267 above.

One can argue that the reason why kidneys are the most easily trafficked organs is because of the fact that donors and recipients can both easily survive, if proper precautions are taken to ensure successful transplants. As a result kidneys are the most targeted organs in the black market trade.

The Netcare St Augustine's Hospital case is just one of the cases that have highlighted the problem of trafficking in organs, namely kidneys. However as stated above, the shortage of organs is a world-wide problem and The Netcare case is not an isolated example of organ trafficking.

In many other countries there have been reports of organ trafficking as well as coercion of donors to donate their organs. Countries such as Ecuador, Israel and Belarus have illicit organ trafficking syndicates, and some donors have reported that they have been coerced and intimidated into not reporting such activity to the police. They have also stated that they have been coerced into donating their organs with threats against their families if they refuse to donate their organs. One donor named Yafimau stated that brokers for such syndicates use deception, violence and coercion to buy kidneys from impoverished people, who come from mainly underdeveloped countries, and sell the organ to critically ill patients, in developed countries²⁷⁸.

I submit that the black market organ trade thrives on organs from the poor illegally transplanted into rich recipients many governments globally have legislation in place to curb organ trafficking and some measures are in respect of the criminalisation of organ trafficking. However, despite such legislation the black market still exists and has a thriving industry in illegal donations of organs. A move forward will be to possibly incentivise the organ donation to curb the shortage of organs or maybe possibly have the living unrelated system of donation of organs implemented and regulated.

²⁷⁸ Michael Smith, Daryna Krasnolutska and David Glovin "Organ Gangs Force Poor to Sell Kidneys for Desperate Israelis" *Bloomberg Markets Magazine* 2nd November 2011 available at: <http://www.bloomberg.com/news/2011-11-01/organ-gangs-force-poor-to-sell-kidneys-for-desperate-israelis.html>, (accessed 13th July 2012).

6.1.2 Are control measures to prevent the progression of the black market, really effective?

Will any amount of regulation or legislation curb the thriving of the black market? It is apparent that no matter how much regulation or legislation aimed at reducing trafficking in organs is introduced there will always be trafficking in human organs.

There will always be brokers who exploit those from lower socio-economic groups for their organs and in order to profit from the worldwide shortage of organs for donation. It is inevitable that as long as the shortage still exist those who are in of organs need will strive at all costs, if they can afford it, to obtain organs that will preserve their lives.

The human instinct for survival will result in people trying to obtain organs no matter what the price and no matter who they exploit in the process.

In short, people's fight for survival will supersede their instinct for caring for others and awaiting their turn on the long recipient waiting lists. This will therefore result in resorting to the black market for organs.

6.1.3 Conclusion:

As examined above there is a global problem of there not being enough organs to supply the demand and as a result in most countries the black market is thriving. This then leads to the exploitation of the poor by the rich and again the notion of human instinct superseding the other morals and values that are in an individual takes over. This then fuels the black market trade in organs.

Chapter 7– Recommendations and Conclusions:

7.1 Introduction:

The models and legislation discussed above have some commendable aspects that if adopted and applied would assist to curb organ trafficking and the organ shortage problem. The following topics will be discussed:

- a) Measures that can be taken against organ trafficking
- b) Inhibiting factors regarding the organ shortage problem
- c) Proposals to curb organ trafficking and organ shortages
- d) Proposals to remedying South Africa’s legislation on organ donation
- e) Conclusion

7.1.1 Measures that can be taken against organ trafficking:

As stated above there is a major shortage of organs for transplantation worldwide. Many countries such as Switzerland and Singapore have adopted the ‘opt-out’ systems of organ transplantations to curb this problem, whilst others have adopted the living unrelated donors²⁷⁹ and payments for organs to curb the shortage. Organ transplantation in Switzerland is more stringent than that of Singapore in that Switzerland’s ‘opt-out’ mechanism was the notion of presumed consent. This entails removing organs and body parts from cardiac dead or brain-dead patients, without obtaining the consent of the next-of-kin or even advising the next-of-kin²⁸⁰. These methods have worked to a certain extent by increasing the supply of the organs available for transplant. However, this does not mean that they have prevented organ trafficking entirely. It also infringes on the right to privacy, bodily integrity and autonomy and this is great price to pay for the person’s whose rights are being violated to serve the greater good and meet the supply requirements for organs.

7.1.2 Inhibiting factors regarding the organ shortage problem:

In Israel due to religious concerns, legal organ transplantation mechanisms are hindered. In Israel, people believe that in order for a smooth passage to the “other side” the body must be

²⁷⁹ See the Iranian Model discussed above in chapter 3.2.

²⁸⁰ “The Nasty Side of Organ Transplanting” available at: www.OrganFacts.net, (accessed on 15th July 2012).

buried whole. This means that there are fewer organs available for transplantation, which result in Israeli patients who need organs, resorting to “transplant tourism” in order to alleviate their situation. This is not only in Israel but in other countries such as South Africa and Spain where for religious reasons donations whilst the person is alive are not conducted. However, in Spain as explained above cadaveric donation does occur mainly and has been proven to be very successful.

Another hindrance to the supply of available organs is that some low income and middle income countries may not have the necessary infrastructure to implement and regulate the transplantation of organs. South Africa falls into the low- middle income category can provide only limited organs regarding the availability of resources.

7.1.3 Proposals to curb organ trafficking and organ shortages:

As previously mentioned there is a great shortage of organs available for transplantation and this leads to the black market in organ trafficking. The proposals in the Declaration of Istanbul and the Palermo Protocol on Organ Trafficking are commendable and may curb some organ trafficking. These proposals will also be discussed in relation to South Africa and how effective they might be to remedying South Africa’s legislation with regard to organ donation and transplantation.

State parties to both agreements must create domestic legislation that not only defines organ trafficking but also provides measures to punish organ traffickers as suggested by the Palermo Protocol.

Such legislation which specifically criminalises organ trafficking and imposes harsh penalties for those caught contravening it may help to reduce the black market in organs. However, to reduce it, legislation must be properly monitored and implemented.

The Declaration of Istanbul encourages collaborative partnerships between the State and NGOs as well as between doctors and institutions to work together to protect the vulnerable and to curb organ trafficking. Countries which have good legislation regarding organ donation could assist countries to draft similar legislations. For example, countries such as Spain, Singapore and Iran could help other countries such as South Africa to develop legislation regarding the definition of organ trafficking and to establish mechanisms to

monitor transplants between non-related living donors and to take measures to increase cadaveric donations.

The Palermo Protocol defines trafficking in human organs and re-iterates some of the ideas in the Declaration of Istanbul. It mentions that States should establish measures to protect victims of organ trafficking, through legislation, and other means such as housing or obtaining legal remedies²⁸¹. It further places an obligation on States to create special penalties for those who traffic in organs and lays down measures for how to achieve this. This requires partnerships be established to prevent trafficking campaigns, policies and programmes, in partnership with NGOs, to prevent trafficking.

The above measures may assist to curb the thriving of the black market trade in organs if the proper procedures to implement these ideas are in place.

The UK, Iran, Singapore and Spain each have their own methods and some of these models may assist to curb organ trafficking. These models do have their flaws, however, but are still worth mentioning. The UK Human Tissue Act attaches stringent penalties for those caught organ trafficking²⁸². It also has the Human Tissue Authority which is tasked with the duties of oversight and helps to prevent the trafficking in organs.

Iran provides compensation to donors for loss of income as well as health insurance, and has the Transplant Society to monitor such transplants. The programme also allows for non-related living donors, which have proved to be successful in curbing both the shortage of organs as well as the organ trafficking problem.

Singapore has the 'opt-out' system which has managed to curb the organ shortage to a certain extent, however, it has been argued that the criteria to be an organ donor in Singapore are too stringent and that cadaveric donation has not been used effectively. The Transplant Ethics Committee in Singapore ensures that no exploitation or trafficking of organs occurs. It also allows for the donation by non-related living donors (NRLD) donors similar to Iran. This

²⁸¹ This is as stated above in Article 6(3) (a)-(d) of the Palermo Protocol. .

²⁸² As explained in chapter 3.1 above and deals with section 32 of the UK Human Tissue Act of 2004. This section attaches penalties ranging from fines to 3 years imprisonment.

helps to alleviate the shortage of organs and curb the black market as more people are able to donate their organ which relieves the shortage of organs for donation.

Spain focuses on cadaveric donation and has the ONT²⁸³ to facilitate organ donations. If similar organizations are established in other countries it may assist in reducing their organ shortages.

The possibility of xenotransplantation and cloning are also possible mechanisms to curbing the organ shortage problem as if these methods are perfected then one would not have to resort to the black market to obtain an organ, they can then obtain an organ through xenotransplantation or cloning. These methods still need to be perfected and regulated in order for them to be effective answers to the organ shortage problem.

The black market trafficking of organs goes hand in hand with the organ shortage problem. Therefore if the organ shortage problem is controlled this will have a major impact on the black market and may contribute significantly to reducing the illegal trade in organs. .

7.2 Proposals to remedying South Africa's Legislation on organ donation:

It is submitted that the following measures should be introduced to curb the illegal trafficking in South Africa as discussed above and will be applied below to possibly curbing organ trafficking and organ shortage problems in South Africa:

1. Non-related living donors with NGOs assistance: South African legislation should be amended to allow for living non-related donors (LNRD) to donate their organs, as is done in Iran and Singapore. This system will have to be regulated and implemented properly together the imposition of strict penalties for non-adherence. NGOs should also assist the government to effectively implement these procedures and to allow for unrelated donors to donate their organs, to prevent exploitation and curb the black market trade²⁸⁴. This is recommended for South Africa as it will help in curbing the organ shortage problem which exists in South Africa. It will be helpful to South Africa due to the fact that with NGOs assisting the Government will not be strained to handle the matter solely and can hence work in

²⁸³ Organizaci'on Nacional de Transplantes also called the National Organization of Transplants.

²⁸⁴ As set out in Article 9(3) of the Palermo Protocol discussed above.

collaboration with NGOs to ensure that the procedure of allowing LNRD's will be successful. This will then not result in exploitation of organs and will also help prevent the shortage of organs available for transplant.

2. Incentives or payment to the donor for their organs to be introduced and regulated and monitored by committees: It will be difficult to regulate this however, and to prevent exploitation in this regard. This would be difficult in South Africa as this could be exploited by the rich against the poor as they will pay the poor small amounts for their organs which will not be enough to alleviate their poverty stricken situation. To make regulation easier these incentives or payments would have to be monitored by committees established to effectively monitor the amounts paid and other incentives. The legislation would have to specifically define what incentives and what payment includes. The committee should also set minimum or maximum amounts that can be given as payments for organs. It can be argued that this commodifies organs to a certain extent; it would not be commodification if the incentives or payments are properly regulated and monitored. This might be difficult to monitor and enforce due to lack of resources in South Africa. However, I submit that with assistance from NGOs it might be possible to effectively monitor these provisions. This is a good step forward for South Africa as instead of having legislation which does not specifically criminalise organ trafficking, a regulated method or scheme with NGO assistance seems to be the better option to solving the organ shortage and trafficking problem.

3. Non- cash options: Another solution would be to limit the compensation for organ donation to specific non-cash options, such as health insurance (as in the Iranian model) or medical care or cancelling the hospital bill if the donation is made after a long hospital stay. This may be viewed as ethically justifiable as compared to a direct cash payment²⁸⁵. This again is also a good way forward for South Africa with the allocation of the health budget being focused on this aspect to ensure that this method runs efficiently.

4. The 'opt-out' system: This might also prove to be useful in South Africa to curb the organ shortage problem. However, as in the case of Singapore it would be problematic for the patients to 'opt-out' and sign forms stating such before they die. The notion of the family's ability to veto the decision of a patient regarding their donation should not be allowed in this

²⁸⁵ I Kennedy & A Grubb *Medical Law Text & Materials* (1989) 1019.

model as it would lead to unnecessary complications. There should also be proper enforcement of the 'opting out' provision as the system will become ineffective if the proper rules and guidelines are not adhered to. This has happened in other countries, such as Singapore, where the 'opt-out' system is perceived as very unsympathetic toward families of patients who have not decided to 'opt-out' and may lead to traumatising of such families as happened in the Sim's case²⁸⁶. However, this notion of the 'opt-out' system will not be as effective in a country such as South Africa where there exist a large number of unsophisticated partially illiterate people in the population. This idea will therefore not be such a good recommendation for South Africa. As mentioned above the 'opt-out' system further infringes on the rights of bodily integrity, privacy and autonomy of a person whose organs are taken for purposes of transplantation and will therefore not be the right solution in South Africa.

5. Special Committee such as the ONT: Adding to the notion of incentives and payments as discussed above, it will be a good notion to legalise the donation of organs between unrelated donors. This should be done under the close scrutiny of a special committee to monitor the provisions of the Act or a transplantation body or agency should be set up under an Act to which each committee reports to every month or every two months to ensure that no fraud or corruption occurs. The body would then report the progress or failure of the system to the Department of Health monthly. This is similar to the ONT as stated in the Spanish model²⁸⁷.

The above reporting mechanism to a national transplantation body not only ensures effective implementation of the scheme but will also ensure transparency of the programme. Progress reports should also include the patients' inputs as to how the system is working, and whether or not it is effective and note matters on how to improve the system if it is not effective. The role of NGOs should also be increased in ensuring that the implementation of the system is carefully monitored, that the views of the public are heard and that the public are protected from being exploited. This is another good way forward for South Africa as situations such as the one which arose with the Netcare St Augustine's Hospital will then not occur if monitored by a special committee such as the ONT. This also has to be allocated a budget so that the committee runs efficiently. The financing could also be assisted by NGOs if the Government cannot handle the strain that will be placed on finances.

²⁸⁶ Gerald Tan note 128 above as discussed under the Singapore model in chapter 3.3 above.

²⁸⁷ Organizaci'on Nacional de Transplantes also called the National Organization of Transplants.

6. Cadaveric donation: This should be engaged with legislation with provision for informed consent of the family and the donor as well as measures to specify under which circumstances such cadaveric organs may be obtained and transplanted. This will not be as effective as most people in South Africa will oppose such donations due to religious reasons. This recommendation will not be such a good way forward for South Africa at this point in time for the above mentioned reason.

7. Legislation defining organ trafficking concepts: Legislation should be amended to define the concepts of organ trafficking, transplant tourism and commercial transplantation. The committees mentioned above should be provided for monitoring organ transplantations that occur between living non-related donors (LNRD) to prevent exploitation. This recommendation is also a good option if South African legislation takes the stand against organ trafficking and then more clarity will be needed in legislation if such an option is taken.

8. Collaborative partnerships: South Africa should establish collaborative partnerships with other countries such as Singapore, Iran, Spain and the UK, to assist it in the effective implementation of its legislation. This is a very good idea as if assisted by other countries that have effective organ transplantation methods then their assistance will help South Africa to have similar effective methods dealing with organ transplants.

9. Xenotransplantation and cloning: The possibility of xenotransplantation and cloning could also help South Africa to curb its problem of organ trafficking by creating more organs to meet the demand and will hence curb the thriving of the black market. As stated above, these methods require effective regulations and need to be perfected before it can be a possible answer to the organ shortage problem. As South Africa has a scarcity of available resources, these methods might take a while to be implemented effectively.

South Africa is a middle income country with a scarcity of resources and implementing such measures may take time before the country has a functioning programme on par with other countries that have dealt effectively with the regulation of organ transplantation to curb black market dealings.

Most of the proposals mentioned above are in line with the principles or proposals in the Declaration of Istanbul and the Palermo Protocol.

These proposals if implemented properly and done without corruption or fraud might be the answer to curbing the organ shortage problem that is experienced worldwide and therefore reduce the demand for black market organs.

7. 3 Conclusion:

In conclusion, it has been shown that there are aspects in the current legislation in South Africa which does not specifically define organ trafficking, transplant tourism and transplant commercialism. Similarly there is a lack of specific penalties for people who are caught contravening the sections relevant to organ trafficking. There needs to be amendments to the legislation to either criminalise organ trafficking specifically or to allow for the living-unrelated donors to be allowed to donate their organs and receive either an incentive or payment – provided it is under strict regulation as stated above. It would also be useful for South Africa to include in its legislative amendments the principles, objectives and proposals of the Declaration of Istanbul and the Palermo Protocol and some of the provisions in the UK, Iran, Spanish and the Singapore legislatures and models as discussed above²⁸⁸.

The following conclusions are recommended for possibly preventing organ trafficking and the organ shortage problems worldwide and in South Africa:

- a) Define aspects such as “organ trafficking”, “transplant tourism” and “transplant commercialism”;**
- b) Authority such as the UK Human Tissue Authority to be established;**
- c) Incentives, health insurance and allowance for non-related donors;**
- d) Transplant Ethics Committee and the “opt-out” system;**
- e) ONT and cadaver donations;**
- f) Criminalising sale of organs;**
- g) Xenotransplantation and Cloning;**

²⁸⁸ As discussed above in chapters 3 and 4 above.

The above mentioned proposals will only be as effective as the resources available in each country and for South Africa which has a scarcity of resources, some of these proposals put forward will take years to implement to fully bring South Africa on par with other first world countries such as the UK and Spain mentioned above. In the meantime these proposals could be progressively realised such as the incentivised system or provision of health insurance provided to donors as proposed by the Iranian model and creating legislation that specifically defines the terms of “organ trafficking”, “transplant commercialism” and “transplant tourism” as well as the rights which will be given to victims under the proposed legislation, within the availability of South African resources and if consistently applied through the years, will be the answer to solving the organ shortage and organ trafficking problem.

Regarding the worldwide problem these proposals will also be a good way forward for countries that do not have such effective organ transplant systems to try and incorporate these ideas based on the country’s individual needs and also with help through collaborative partnerships.

Glossary of terms:

Apnea Test: Is the testing whether one has the inability to breathe unaided, with no life support systems²⁸⁹.

Brain stem function: Is the functioning of the structure responsible for basic vital life functions such as breathing, heartbeat and blood pressure²⁹⁰.

Cadaver: A dead body which is specifically intended for use in medical education or research²⁹¹.

Cancer: Disease where cells divide at an excessive rate and become abnormal in function; malignancy; neoplasm²⁹².

Cerebral flow: The amount of blood flow to a specific region of the brain²⁹³.

Chronic heart disease: Severe illness with the following symptoms: shortness of breath, palpitations (skipped beats or a 'flip-flop' feeling in the chest); weakness or dizziness; nausea, sweating²⁹⁴.

Cornea: Clear, bowl-shaped structure at the front of the eye. It is located in front of the coloured part of the eye (iris). The cornea lets light into the eye and partially focuses it²⁹⁵.

Cornea reflex: Is an involuntary blinking of the eyelids which are elicited by the stimulation of the cornea (such as touching or by a foreign body), or bright light, though could result from peripheral stimulus²⁹⁶.

DNA: Means Deoxyribonucleic Nucleic Acid and contains replication material namely, genes.

²⁸⁹ [American Academy of Neurology "Practice Parameters: Determining Brain Death in Adults"](#) Published 1994. (accessed on 7 March 2012).

²⁹⁰ "Brain Structures and their Functions" available at:

<http://serendip.brynmawr.edu/bb/kinser/Structure1.html#brainstem>, (accessed on 9th March 2012).

²⁹¹ "Cadaver" available at: <http://www.merriam-webster.com/medical/cadaver>, (accessed on 11th March 2012).

²⁹² "Cancer" available at: <http://www.english-test.net/pcat/vocabulary/meanings/009/pcat-words.php#cancer>, (accessed on 7th April 2012).

²⁹³ "Cerebral blood flow" available at:

<http://medicaldictionary.thefreedictionary.com/regional+cerebral+blood+flow>, (accessed on 12th April 2012).

²⁹⁴ "Heart disease" available at: http://www.english-test.net/pcat/vocabulary/meanings/028/pcat-words.php#heart_disease, (accessed on 3rd March 2012).

²⁹⁵ "Cornea" available at: <http://medical-dictionary.thefreedictionary.com/cornea>, (accessed on 3rd March 2012).

²⁹⁶ "Eye", human."Encyclopaedia Britannica from [Encyclopaedia Britannica \(2006\)](#) (accessed on 17th April 2012).

Donor: The person who donates their organ to another.

Donee: The person who receives an organ either via a transplant / donation, also known as the recipient.

Gag / Cough reflex: Normal reflex consisting of retching; may be produced by touching the soft palate in the back of the mouth²⁹⁷. The cough reflex consists of three phases: an inhalation, a forced exhalation against a closed glottis, and a violent release of air from the lungs following opening of the glottis, usually accompanied by a distinctive sound²⁹⁸.

Glasgow Coma Scale: Or GCS provides a score in the range of 3 to 15 with patients with a score of 3-8 are said to be in a coma. The total score is the sum of the scores in 3 categories namely; eye opening response, verbal response and motor responses.²⁹⁹

Heart: A hollow, muscular organ, which, by contracting rhythmically, keeps up the circulation of the blood³⁰⁰.

Hepatitis B: Hepatitis B is a potentially serious form of liver inflammation due to infection by the hepatitis B virus (HBV). It occurs in both rapidly developing (acute) and long-lasting (chronic) forms, and is one of the most common chronic infectious diseases worldwide. An effective vaccine is available that will prevent the disease in those who are later exposed³⁰¹.

Hypoglycaemia: Is a condition which occurs when a person's blood sugar (glucose) is too low³⁰².

Hypothermia: Is a potentially fatal condition which occurs when the body temperature falls below 95°F (35° C). Some symptoms are shivering, effect on the nervous systems, co-

²⁹⁷ "Gag reflex" available at: <http://www.thefreedictionary.com/gag+reflex>, (accessed on 17th April 2012).

²⁹⁸ Chung KF, Pavord ID "[Prevalence, pathogenesis, and causes of chronic cough](#)" (2008) 371 *the Lancet* 1364, 1374.

²⁹⁹ "Glasgow Coma Scales" available at: <http://www.unc.edu/~rowlett/units/scales/Glasgow.htm>, (accessed on 17th April 2012).

³⁰⁰ "Heart" available at: <http://www.brainyquote.com/words/he/heart172356.html>, (accessed on 5th March 2012).

³⁰¹ "Hepatitis B" available at: <http://medical-dictionary.thefreedictionary.com/hepatitis+B>, (accessed on 3rd March 2012).

³⁰² "Hypoglycaemia" available at: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001423/>, (accessed on 17th April 2012).

ordination impaired, slurred speech and below 86°F (30°C) most victims become comatose and below 82°F (27.8°C) the heart's rhythm becomes dangerously disordered³⁰³.

Isoelectric EEG: Is associated with brain death. It is a test which is used in confirming brain death. It however, does have some limitations in that it is very sensitive to hypothermia, drugs and metabolic disorders and is limited similarly to that of a clinical examination³⁰⁴.

International Society of Nephrology: Was one of the bodies together with the Transplantation Society that helped to draft the Declaration of Istanbul.

Kidney: The kidneys are a pair of organs that are found on either side of the spine, just below the rib cage in the back. Kidneys: filter waste materials out of the blood and pass them out of the body as urine, regulate blood pressure and the levels of water, salts, and minerals in the body and produce hormones that control other body functions³⁰⁵.

Liver: The liver is an important organ of the body that is responsible for detoxification, metabolism, synthesis and storage of various substances³⁰⁶.

Muslims: Believers in or followers of Islam³⁰⁷.

Next-of-kin: The person or persons who are most closely related by blood to another person, also encompasses a close relative. This person, if nominated, can also make decisions for that person if he/she dies.

Oculocephalic reflex: A test of the integrity of brainstem function. When the patient's head is quickly moved to one side and then to the other, the eyes will normally lag behind the head movement and then slowly assume the midline position. Failure of the eyes to either lag properly or revert back to the midline indicates a lesion on the ipsilateral side at the brainstem level³⁰⁸. Also known as “doll's eyes”.

³⁰³ “Hypothermia” available at: <http://medical-dictionary.thefreedictionary.com/hypothermia>, (accessed on 17th April 2012).

³⁰⁴ M. de Tourchaninoff, P. Hantson¹, P. Mahieu and J.M. Guérit “Brain death diagnosis in misleading conditions” Commentary (1999) 92 *QJM An International Journal of Medicine* 407, 410.

³⁰⁵ “Kidney” available at: http://kidshealth.org/teen/diabetes_center/words_to_know/kidney_def.html, (accessed on 3rd March 2012).

³⁰⁶ “Liver” available at: <http://hepatitis.about.com/od/jkl/q/liver.htm>, (accessed on 17th April 2012).

³⁰⁷ “Muslim” available at: <http://wordnetweb.princeton.edu/perl/webwn?s=muslim>, (accessed on 17th April 2012).

³⁰⁸ “Oculocephalic reflex” available at: <http://medical-dictionary.thefreedictionary.com/oculocephalic+reflex>, (accessed on 17th April 2012).

Oculovestibular reflex: The vestibulo-ocular reflex (VOR) is a reflex eye movement that stabilizes images on the retina during head movement by producing an eye movement in the direction opposite to head movement, thus preserving the image on the centre of the visual field. For example, when the head moves to the right, the eyes move to the left, and vice versa. Since slight head movement is present all the time, the VOR is very important for stabilizing vision: patients whose VOR is impaired find it difficult to read using print, because they cannot stabilize the eyes during small head tremors. The VOR does not depend on visual input and works even in total darkness or when the eyes are closed. However, in the presence of light, the fixation reflex is also added to the movement³⁰⁹.

Opt- In System: System whereby the donors of organs do not have to donate their organs but can voluntarily opt into donating them.

Opt-Out System: System whereby the donors' organs will automatically upon death be donated or transplanted unless the donor has opted out of donating his / her organs.

Palermo Protocol: In 2000 the United Nations reached an agreement on a definition that identifies three critical components to human trafficking: the **act**, the **means** and the **purpose**. An act includes actions such as “recruitment, transportation, transfer, harbouring or receipt of persons”. The means include using “threat or use of force, coercion, abduction, fraud, deception, abuse of power or vulnerability, or giving payments or benefits”. The purpose is predominantly one of exploitation including “prostitution of others, sexual exploitation, forced labour, slavery or similar practices, removal of organs or other types of exploitation”³¹⁰.

Pupillary reflex: The pupillary reflex or pupillary light reflex is the reduction of pupil size in response to light³¹¹.

Recipient: The person whom receives the organ via transplantation / donation also known as the donee.

Renal disease: Also known as kidney disease and is the term used to describe any damage that reduces the normal functioning of the kidney³¹².

³⁰⁹ “Vestibulo-ocular reflex” available at: <http://www.britannica.com/EBchecked/topic/626984/vestibulo-ocular-reflex-VOR>, (accessed on 17th April 2012).

³¹⁰ “Palermo Protocol” available at: <http://www.palermoprotocol.com/>, (accessed on 17th April 2012).

³¹¹ “Pupillary Reflex” available at: http://www.sciencedaily.com/articles/p/pupillary_reflex.htm, (accessed on 17th April 2012).

Sedation: Sedation is the act of calming by administration of a sedative. A sedative is a medication that commonly induces the nervous system to calm³¹³.

Sepsis: Sepsis is an illness in which the body has a severe response to bacteria or other germs. This response may be called systemic inflammatory response syndrome (SIRS)³¹⁴.

Severe systemic disease: A systemic disease is one that affects a number of organs and tissues, or affects the body as a whole. Although most medical conditions will eventually involve multiple organs in advanced stage (e.g. Multiple organ dysfunction syndrome), diseases where multiple organ involvement is at presentation or in early stage are considered elsewhere³¹⁵.

TB: Means Tuberculosis (TB) is a potentially fatal contagious disease that can affect almost any part of the body but is mainly an infection of the lungs. It is caused by a bacterial microorganism, the tubercle bacillus or *Mycobacterium tuberculosis*. Although TB can be treated, cured, and can be prevented if persons at risk take certain drugs, scientists have never come close to wiping it out. Few diseases have caused so much distressing illness for centuries and claimed so many lives³¹⁶.

Trafficking syndicate: Means a black market scheme which involves organs being elicited from poor donors from many countries and then transplanted to richer recipients in dire need of an organ transplant.

Transplant Ethics Committee: Committee charged with overseeing the donation of specific organs between donor and recipient under the Singapore Human Organ Transplantation Act.

Transplantation Society: One of the bodies that was responsible in drafting the Declaration of Istanbul.

³¹² "Renal disease" available at: <http://medical-dictionary.thefreedictionary.com/kidney+disease>, (accessed on 17th April 2012).

³¹³ "Sedation" available at: <http://medical-dictionary.thefreedictionary.com/sedation>, (accessed on 17th April 2012).

³¹⁴ "Sepsis" available at: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001687/>, (accessed on 20th April 2012).

³¹⁵ "Severe systemic disease" available at: M Douglas & M Anderson *Dorland's Illustrated Medical Dictionary*, 28th edition (1994) (Harcourt Brace & Company) 489, 1653.

³¹⁶ "TB" available at: <http://medical-dictionary.thefreedictionary.com/tuberculosis>, (accessed on: 20th April 2012).

Utilitarian Approach: ethical principle which views the consequence of the action and if the consequence of the action yields a good or favourable outcome for the majority of people, then that action should be carried out.

Acronyms:

AIDS: Acquired Immune Deficiency Syndrome

DATPA: Dialysis and Transplant Patient's Association.

ESRF: End-Stage Renal Failure.

HIV: Human Immune Virus

HLA: Human Leukocyte Antigen

HTA: Human Tissue Act.

HOTA: Human Organ Transplantation Act

LRD: living-related donor(s) / donation.

LNRD: living non-related donor(s) / donation.

MCSTD: Management Centre for Transplantation and Special Diseases.

MOH: Ministry of Health.

MTERA: Medical, Therapy, Education and Research Act.

NHA: National Health Act 61 of 2003.

NHS: National Health Services.

NGO: Non-governmental organization

ONT: National Organization of Transplants (Organizaci'on Nacional de Transplantes)

ULTRA: Unrelated Live Transplant Regulation Authority.

URLD: Unrelated- living donors.

WHO: World Health Organization

Bibliography / References:

► International Instruments:

- Declaration of Istanbul first published in 2008.
- Guiding Principles on Human Organ Transplantation WHO, 1991.
- Palermo Protocol of 2000.
- Protocol against the Smuggling of Migrants by Land, Sea and Air of 2000.

► Statutes:

South Africa:

- Human Tissue Act 65 of 1983.
- National Health Act 61 of 2003.
- Prevention of Organized Crime Act 121 of 1998.

Regulations (South Africa):

- Regulation 9 of the General control of Human Bodies, Tissue, Blood, Blood Products and Gametes regulations in GN R180 GG 35099 of 2 March 2012.

India:

- Transplantation of Human Organs Act of 1994.

Singapore:

- Human Organ Transplantation Act 15 of 1987, revised on 31st July 2005.
- Medical (Therapy, Education and Research) Act, took effect in 1973.
- Interpretation Act 10 of 1965, revised on 31st December 2002.

Spain:

- Ley de Transplantes, 1979.

United Kingdom:

- Human Tissue Act of 2004.

► Cases:

- John Robbs, Arif Haffejee, Neil Christopher, Madhav Naidoo, Lindy Dickson and Melanie Azor v The Deputy Director of Public Prosecutions for the Province of KwaZulu – Natal, Case no: 13510/2011, (Judgment delivered on 14th December 2012).
- State v Netcare Kwa-Zulu (Proprietary) Limited, Commercial Crime Court, Regional Court of Kwa-Zulu Natal Case No 41/1804/2010, (8 November 2010).
- The State v Samuel Ziegler , Commercial Crime Court, Regional Court of Kwa-Zulu Natal, Case No 41/1816/2010, (23 November 2010).

► **Books:**

- American Academy of Neurology "*Practice Parameters: Determining Brain Death in Adults*" (Published 1994).
- Gudmundur A *A Thematic Guide to Documents on Health and Human Rights: Global and Regional Standards* (Martinus Nijhoff Publishers, volume 2, 1998).
- Ian K & Andrew Grubb *Medical Law Text & Materials* (London: Butterworths 1989).
- Jonathan H *Medical Law and Ethics* (Oxford University Press, 3 ed, 2010).
- Sheila A. M. M *Contemporary Issues in Law, Medicine and Ethics* (Dartmouth Publishing Company, 1996).

► **Encyclopaedias / Dictionaries:**

- Encyclopaedia Britannica (2006).
- M Douglas & M Anderson *Dorland's Illustrated Medical Dictionary*, 28th edition (1994) (Harcourt Brace & Company).

► **Electronic / Newspaper Articles:**

- ‘New Kidney Scandal’ IOL News 26 February 2011 available at: <http://www.iol.co.za/news/new-kidney-scandal-1.1032853>, (accessed on 6th November 2012).
- Dr Lim Boon Hee “SGH could have handled removal of organs better” *Strait Times Forum*, 10th February 2007.
- Harry Chia Kim Seng “Tussle shows need to educate the public on HOTA” *Strait Times Forum*, 10th February 2007.

- Lyse Comins ‘Surgeons in Bid to Quash “Kidneys” case’ *The Independent on Saturday* 24 November 2012 at 2.
- Michael Smith, Daryna Krasnolutska and David Glovin “Organ Gangs Force Poor to Sell Kidneys for Desperate Israelis” *Bloomberg Markets Magazine* 2nd November 2011 available at: <http://www.bloomberg.com/news/2011-11-01/organ-gangs-force-poor-to-sell-kidneys-for-desperate-israelis.html>, (accessed 13th July 2012).

► **Journal Articles:**

- d) A Bagheri ‘Compensated Kidney Donation: An Ethical Review of the Iranian Model’ (2006) 16 *Kennedy Institute of Ethics Journal* 269, 276.
- e) A Ghods & M Mahdavi, ‘Organ Transplantation in Iran’ (2007) 18 *Saudi Journal of Kidney Diseases and Transplantation* 648, 655
- f) A J Ghods & S Savaj ‘Iranian Model of Paid and Regulated Living-Unrelated Kidney Donation’ (2006) 1 *Clinical Journal of the American Society of Nephrology* 1136, 1145.
- g) A J Ghods ‘Renal Transplantation in Iran’ (2002) 17 *Nephrology Dialysis Transplantation* 222, 224.
- h) A J Ghods, S Savaj & P Khosravani ‘Adverse Effect of a Controlled Living Unrelated Donor Renal Transplant Program on Living Related and Cadaveric Kidney Donation’ (2000) 32 *Transplantation Proceedings* 541.
- i) AH Rizvi, AS Naqvi, NM Zafar, E Ahmed ‘Regulated compensated donation in Pakistan and Iran’ (2009) 14 *Current Opinion in Organ Transplantation* 124, 125.
- j) B Miranda, J Canon & N Cuende ‘The Spanish Organizational Structure for Organ Donation’ (2001) 15 *Transplantation Reviews* 33, 34.
- k) B Miranda, M Fernandez Lucas, C de Felipe, M Naya, JM Gonzalez-Posada and R Matesanz “Organ Donation In Spain” (1999) 14 *Nephrology Dialysis Transplantation* 15, 15.
- l) Chung KF, Pavord ID "Prevalence, pathogenesis, and causes of chronic cough" (2008) 371 *the Lancet* 1364, 1374.
- m) D McQuoid-Mason ‘UKZN Anniversary symposium on the medico-legal and ethical implications of human tissue use’ (2011) 4 *SAJBL* 13,14.
- n) E Shum , A Chern “Amendment of the Human Organ Transplant Act” (2006) 35(6) *Annals Academy of Medicine Singapore* 428,429.

- o) FL Delmonico, R Arnold & N Scheper-Hughes et al 'Ethical Incentives – not payment – for Organ Donation (2002) 346 *English Journal of Medicine* 2002, 2005.
- p) J Allain, Commentary, "Trafficking of Persons for the Removal of Organs and the Admission of Guilt of a South African Hospital" (2008) 19 *Medical Law Review* 117,122.
- q) J F Douglas 'Live kidney donation under the Human Tissue Act' (2006) 3 *North Ireland Ethics Forum* 52,58.
- r) 'Legal and illegal organ donation' - Editorial, (2007) 369 *the Lancet*, 1901.
- s) LL Bailey, SL Nehlsen-Cannarella, W Concepcion, et al. "Baboon-to-human cardiac xenotransplantation in a neonate" (1985) *Journal of the American Medical Association* 254(23) 3321, 3329.
- t) M Slabbert & H Oosthuizen 'Establishing a market for human organs in South Africa, Part 1A: proposal' (2007) 28 *Obiter* 44,47-8.
- u) M. de Tourtchaninoff, P. Hantson¹, P. Mahieu and J.M. Guérit "Brain death diagnosis in misleading conditions" Commentary (1999) 92 *QJM An International Journal of Medicine* 407, 410.
- v) N Scheper-Hughes 'Keeping an eye on the global traffic in human organs' (2003) 361 *the Lancet* 1645, 1645.
- w) Organ trafficking and transplant tourism and commercialism: the Declaration of Istanbul Summit' (2008) 372 *the Lancet* 5, 6.
- x) P N Furness 'Human Tissue Act: reassurance for relatives at a price' (2006) 333 *British Medical Journal* 512.
- y) PP Rood ,DK Cooper 'Islet xenotransplantation: are we really ready for clinical trials?' (2006) 6(6) *American Journal of Transplantation* 1269,1274.
- z) R M Meloche 'Transplantation for the treatment of type 1 diabetes' (2001) 13 *World Medical Journal of Gastroenterology* 6347, 6355.
- aa) R. Matesanz, "A decade of continuous improvement in cadaveric organ donation: the Spanish model" (2001) Volume XXI Supplement 5 *Nefrologia* 59, 61.
- bb) R. Matesanz, B. Miranda, C. Felipe "Organ procurement and renal transplants in Spain: the impact of transplant coordination" (1994) 9 *Nephrology Dialysis Transplantation* 475,575.
- cc) RWL Major 'Paying Kidney Donors: Time to Follow Iran?' (2008) 11 *McGill Journal of Medicine* 67,69.

- dd) S R Glaser ‘Formula to Stop the Illegal Organ Trade: Presumed Consent Laws and Mandatory Reporting Requirements for *Doctors’ Human Rights Brief 12*, no. 2 (2005) 20, 22.
- ee) S Shroff ‘Legal and ethical aspects of organ donation and transplantation’ (2009) 25(3) *Indian Journal of Urology* 348,352.
- ff) TE Starzl , J Fung , A Tzakis , et al. ‘Baboon-to-human liver transplantation’ (1993) 341 *the Lancet* 65, 71.
- gg) V.H. Schmidt & C.H. Lim ‘Organ Transplantation in Singapore: history, problems and policies’ (2004) 15 *Social Science & Medicine* 2173, 2182.

► **Websites / Web Articles and Web References:**

- a) ‘Netcare: Operation Kidney’ on Wednesday, 29 February 2012. Available at: http://www.indiansun.co.za/index.php?option=com_zoo&task=item&item_id=1581&Itemid=64, (accessed on 12th July 2012).
- b) “Palermo Protocol” available at: <http://www.palermoprotocol.com/general/the-palermo-protocol>, (accessed on 9th July 2012).
- c) “The Nasty Side of Organ Transplanting” available at: www.OrganFacts.net (accessed on 15th July 2012).
- d) Altruistic donation Available at: www.kidney.org.uk/MedicalInfo/glossary/glossary.html, (accessed on 5 November 2012).
- e) Department of Health UK available at: <http://www.hta.gov.uk/legislationpoliciesandcodesofpractice/legislation/humantissueact.cfm>, (accessed on 6th August 2012).
- f) Explanatory notes on the Human Tissue Act 2004(c. 30) which received Royal Assent on 15 November 2004. Available at: <http://www.eui.eu/Projects/InternationalArtHeritageLaw/Documents/NationalLegislation/UnitedKingdom/humantissueact2004explanatorynotes.pdf>, (accessed on 28th February 2012).
- g) Ex-Vivo Available at: <http://www.thefreedictionary.com/ex+vivo>, (accessed on 6th November 2012).

- h) Gerald Tan, “Singapore Human Organ Transplants Act (HOTA) [homepage on the Internet]. Singapore” 21 February 2010. Available from:
http://www.geraldtn.com/medaffairs/hota.html, (accessed 22nd July 2012).
- i) Human Tissue Authority available at *http://www.hta.gov.uk/*, (accessed on 12th July 2012).
- j) Nancy Scheper-Hughes “Not Just Urban Legend: Organ trafficking was long considered a myth. But now mounting evidence suggests it is a real and growing problem, even in America”. Available at:
http://www.thedailybeast.com/newsweek/2009/01/09/not-just-urban-legend.html, (accessed 12th February 2012).
- k) Napur Nadir ‘Organ Transplantation Law in India’ (2008) available at:
http://www.legalserviceindia.com/article/1224-Organ-Transplantation-Law-In-India.html, (accessed on 3rd July 2012).
- l) Nivashni Nair ‘Jews caught Organ Trafficking in South Africa’ The Forbidden Truth 15 September 2010 available at: *http://theforbiddentruth.net/archive/index.php/t-10507.html*, (accessed on 5th November 2012).
- m) Paired, pooled and non-direct transplants Available at:
http://www.hta.gov.uk/bodyorganandtissuedonation/transplants/organdonationfaqs.cfm, (accessed on 28th February 2012).
- n) Protocol against the Smuggling of Migrants by Land, Sea and Air. Information available at: *http://www.unodc.org/unodc/en/treaties/CTOC/*, (accessed on 15th July 2012).
- o) Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children Information available at:
http://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XVIII-12-a&chapter=18&lang=en, (accessed on 15th July 2012).
- p) Pruett TL, Tibell A, Alabdulkareem A, Bhandari M, Cronon DC, Dew MA, Dib-Kuri A, Gutmann T, Matas A, McMurdo L, Rahmel A, Rizvi SAH, Wright L & Delmonico FL (2006) *81The Ethics Statement of the Vancouver Forum on the Live Lung, Liver, Pancreas, and Intestine Donor Transplantation* 1386, 1387 . Available at:
http://www.livingdonorassistance.org/documents/Ethics%20Statement%20of%20Vancouver%20Forum.pdf, accessed on (7th July 2012).
- q) South Africa Police Service, ‘Police Secure further Conviction in Human Organ Transplant case’, 15 December 2010, See South African Government Information at:

<http://www.info.gov.za/speech/DynamicAction?pageid=461&sid=15306&tid=25900>,
(accessed on 6th July 2012).

r) T Samdani, “Xenotransplantation - Overview” available at:

<http://emedicine.medscape.com/article/432418-overview>, (accessed 29th July 2012).

s) The Consensus Statement of the Amsterdam Forum on the Care of the Live Kidney Donor - The Ethics Committee of the Transplantation Society’ (2004) 78 491, 92.

Available at:

<http://www.who.int/transplantation/publications/ConsensusStatementShort.pdf>,

(accessed on 7th July 2012).

► **Glossary References:**

a. “Brain Structures and their Functions” available at:

<http://serendip.brynmawr.edu/bb/kinser/Structure1.html#brainstem>, (accessed on 9th March 2012).

b. “Cadaver” available at: <http://www.merriam-webster.com/medical/cadaver>,
(accessed on 11th March 2012).

c. “Cancer” available at: <http://www.english-test.net/pcat/vocabulary/meanings/009/pcat-words.php#cancer>, (accessed on 7th April 2012).

d. “Cerebral blood flow” available

at:<http://medicaldictionary.thefreedictionary.com/regional+cerebral+blood+flow>,
(accessed on 12th April 2012).

e. “Cornea” available at: <http://medical-dictionary.thefreedictionary.com/cornea>,
(accessed on 3rd March 2012).

f. “Eye”, human."Encyclopaedia Britannica from Encyclopaedia Britannica (2006)
(accessed on 17th April 2012).

g. “Gag reflex” available at: <http://www.thefreedictionary.com/gag+reflex>, (accessed on 17th April 2012).

h. “Glasgow Coma Scales” available at: <http://www.unc.edu/~rowlett/units/scales/Glasgow.htm>, (accessed on 17th April 2012).

- i. “Heart disease” available at: http://www.english-test.net/pcat/vocabulary/meanings/028/pcat-words.php#heart_disease, (accessed on 3rd March 2012).
- j. “Heart” available at: <http://www.brainyquote.com/words/he/heart172356.html>, (accessed on 5th March 2012).
- k. “Hepatitis B” available at: <http://medicaldictionary.thefreedictionary.com/hepatitis+B>, (accessed on 3rd March 2012).
- l. “Hypoglycaemia” available at: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001423/>, (accessed on 17th April 2012).
- m. “Hypothermia” available at: <http://medicaldictionary.thefreedictionary.com/hypothermia>, (accessed on 17th April 2012).
- n. “Kidney” available at: http://kidshealth.org/teen/diabetes_center/words_to_know/kidney_def.html, (accessed on 3rd March 2012).
- o. “Liver” available at: <http://hepatitis.about.com/od/jkl/g/liver.htm>, (accessed on 17th April 2012).
- p. “Muslim” available at: <http://wordnetweb.princeton.edu/perl/webwn?s=muslim>, (accessed on 17th April 2012).
- q. “Oculocephalic reflex” available at: <http://medicaldictionary.thefreedictionary.com/oculocephalic+reflex>, (accessed on 17th April 2012).
- r. “Pupillary Reflex” available at: http://www.sciencedaily.com/articles/p/pupillary_reflex.htm, (accessed on 17th April 2012).
- s. “Renal disease” available at: <http://medical-dictionary.thefreedictionary.com/kidney+disease>, (accessed on 17th April 2012).
- t. “Sedation” available at: <http://medical-dictionary.thefreedictionary.com/sedation>, (accessed on 17th April 2012).
- u. “Sepsis” available at: <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001687/>, (accessed on 20th April 2012).

- v. “TB” available at: <http://medical-dictionary.thefreedictionary.com/tuberculosis>,
(accessed on: 20th April 2012).
- w. “Vestibulo-ocular reflex” available at:
<http://www.britannica.com/EBchecked/topic/626984/vestibulo-ocular-reflex-VOR>,
(accessed on 17th April 2012).