Abstract - Stem cell treatments have been a monumental discovery back in the 1800s. In the year 1968, two siblings were the first to be treated successfully with bone marrow transplant for a immunodeficiency. This influenced many countries globally including Sri-Lanka to perform stem cells research. These cells are extracted from a human embryo (Blastocyst) and then allowing it to grow in a laboratory environment to form healthy cells of any function. But unfortunately this extraction will destroy the Blastocyst. Thus today the concept is tainted with controversies as the Blastocyst itself has the Right to Life and that right is violated. Hence many countries have a tendency to vote against stem cells research while others have solid Acts and strong legal backgrounds to support such. The objectives are to uncover the reasons behind the ethical and legal controversies of Right to Life and to explore into the legal framework of other jurisdictions to understand their laws for stem cells research. This research will be carried out Based on a Doctrinal methodology inclusive of legal propositions and literature such as text books, case laws, online articles and journals. In conclusion this paper proposes the expansion of the legal system of Sri-Lanka and gives recommendations to build up the domestic laws by focusing on the international arena to strengthen the new technological advancements of biomedicine by overcoming the issues of human rights, as it will suit the medical needs of the society.

Keyword - right to life, stem cell research, Sri-Lanka

I. INTRODUCTION

To explain the process of stem cells research scientifically, it includes the primary fusion of the egg cell with the sperm cell to form a fertilized egg. That is also known as a Zygote, which later on will multiply through a process called Mitosis to from a group of cells named a Blastocyst. The Blastocyst consists of stem cells which will be extracted for the purpose of stem cells research. The importance of the above-mentioned cells is that they do not have a specific function. At the early stages of the stem cell, it can be clinically engineered to form a range of cell including but not limited to brain cells, muscle cells, tissues cells, etc. With time this will be examined and allowed to multiply in a Petri dish at a laboratory to form a “stem cell line”. After its implantation on a damaged group of cell, the function of a stem cell would be to help in the regeneration and the re-growth of healthy cells. An example of a hypothetical situation being, if a person met with an accident and damaged the hand and the muscle movement was restricted by this accident, the damage area can be clinically implanted with stem cells to form new tissue so the patient can regain the access to movement. Stem cell treatments are very promising as it had so far helped many patients to recover from destructive diseases and many breakthroughs were possible including treatments to replace neurons damages, stroke, Alzheimer’s disease, Parkinson’s disease. Moreover, it is capable of repairing heart and brain cells as well as to produce insulin and many other powerful recoveries. Stem cells treatments are very much useful because at times transplants of organs may be rejected by the recipient’s body. But there is a lesser chance of a clinically produced stem cell organ to be rejected in such a way (Guneratne, 2014). It is evident to have encouraging results obtained by experiments on animals to prove these claims and many such successful transplants worldwide were performed on humans as well. But in today’s society a dilemma is spreading as, during the extraction of the stem cell from the embryo on the 5th day, it will cause the destruction of the embryo or the Blastocyst all together. People believe this to be similar to performing an early abortion. These scandalous
controversies are mainly because, many religions in Sri Lanka is against aborting on the fact of Right To Life and the ethical and moral dignity of a fetus. Due to this most of the stem cells were then to be extracted through a method named In-Vitro-Fertilization (IVF) in laboratories and clinics. This process also known as tube babies are for the couples who are not able to reproduce naturally. Therefore the doctors shall extracts the eggs and sperms into a Petri dish and let an embryo grow artificially for this process. Nearly a dozen eggs will be extracted from the ovaries and they will be left under the supervision to see if it fuses with sperm cells of the father to form a Blastocyst. Finally out of the dozen Blastocyst, four or less will be inserted back into the Mother’s Womb for fertilization. While the remaining ones in the laboratory will be discharged as medical waste. This is where the stem cells will be extracted for research and treatments. But it’s done under the approval of the donors. This process is carried out in a large number of countries which Sri Lanka is one of them.

II. STEM CELL RESEARCH PROGRESS

Stem cells, which were found in the early 1800s was primarily a group of cell that has the capability to turn into any typed bodily cell. With time, in 1968, the first bone marrow transplant was performed to successfully treat two siblings with severe combined immunodeficiency (Murnaghan, 2018). With years of astonishing results from such treatments, many countries have now infused these miraculous treatments to its medical books. Dr. Geetha Shroff from New Delhi India, who was one of the first to develop human embryonic stem cell lines, was one of the few to help on curing many diseases. Over the past decade she has treated up to 10,000 patients suffering from diabetes, spinal cord injuries, cardiac conditions, Parkinson’s diseases etc she has been able to isolate the stem cells were then to be extracted through a method named In-Vitro-Fertilization (IVF) in laboratories and clinics. This process also known as tube babies are for the couples who are not able to reproduce naturally. Therefore the doctors shall extracts the eggs and sperms into a Petri dish and let an embryo grow artificially for this process. Nearly a dozen eggs will be extracted from the ovaries and they will be left under the supervision to see if it fuses with sperm cells of the father to form a Blastocyst. Finally out of the dozen Blastocyst, four or less will be inserted back into the Mother’s Womb for fertilization. While the remaining ones in the laboratory will be discharged as medical waste. This is where the stem cells will be extracted for research and treatments. But it’s done under the approval of the donors. This process is carried out in a large number of countries which Sri Lanka is one of them.

Stem cells research can affect the world at large by breaching few of the Human rights namely “freedom from torture, freedom for privacy as well as Right to Life”. In the Sri Lankan context, freedom from torture is a crucial right that is expressly Stated in Article 11 of the constitution (the constitution of the democratic socialist republic of Sri Lanka, 1978) that “No person shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment...”. Thus, the destroying of Blastocyst for stem cell treatments is considered as an issue of torture because this choice comes with a certain cost. Further Right to privacy under UDHR (UN General Assembly, 1948) Article 12 and ICCPR (International Convention on Civil and Political Rights, 1966) Article 17, subsequently states that no person shall be subjected to arbitrary or unlawful interference with his privacy. Therefore in the international Arena it can be seen through case laws such as Meyer v. Nebraska (1923) which explains why right to privacy should be extended to stem cells as well. Further it also states as to why the protection of personal autonomy even at the stage of an embryo is vital. Moreover the case of Union Pacific Railway Co. v. Botsford (1891) explained in its judgment that “no right is held more sacred, or is
more carefully guarded, than the right of every individual to the possession and control of his own person, free from all restraint or interference from others, unless by clear and unquestionable authority of law.” The right to privacy has a lesser application in Sri Lanka compared to the international arena.

Focusing the research mainly on Right to Life The concept of stem cells research and its adverse influences on the Right to Life are some of the utmost fundamental questions in today's society. With this the question of when human life begins and what a person means may arise. Similarly, the question of whether human embryo is a person or not is one of the biggest debates of this decade. The destruction of an embryo can be a form of homicide for some. Critics have come up with two statements in the Western society. Where, an embryo is a person from conception therefore destroying it would be a homicide. On the other hand, if it’s not a person they will not be any protection required and destruction of such embryo is permissible. These questions can never be answered as there is no stringent law worldwide nor there are any international laws that gives a proper legal framework to be applied globally for stem cells research and regarding its effects. But this article shall propose the upbringing of stem cells research in Sri Lanka as domestically Sri-Lanka already conducts such research and there has so far being no downside to it in Sri-Lanka or of International arena.

V. ETHICAL AND LEGAL ISSUES INVOLVED WITH STEM CELL TREATMENTS

A new avenue into biotechnological advances has emerged through the development of Science and Technology human life is directly or indirectly affected through these developments. The final conclusions and answers may create controversial facts that might be unethical. Stem cell treatments and research had brought a curiosity among medical professions and the general public. The controversies for this process started as the removal of a stem cell from the Blastocyst had caused the damage or the death of the rest of the embryo (the Blastocyst). Thereby people who are against this process state that a human life starts at the point of the formation of a fertilized egg and they ethically claim this to be an unsound practice. Most of the arguments of stem cells are depending on the right and the wrong of destroying an embryo based on the moral status of it. The two ends of this is that stem cell treatments shall provide medical care to even diseases that it scares of treatments. While on the other hand, the human life or the dignity of another who is yet to be born is diminished and destroyed.

Currently, the debate in Sri Lanka which opposes the human embryonic stem cell research is the dependency on human embryo for potential development of a therapeutic cure for other diseases. The notion among the society is that this process is similar to abortion as it destroys the embryo. Furthermore, it is accepted worldwide that there is two sides for this dilemma. That is, the right of the sick and the right of the Unborn. Thus bringing forward the argument of the moral status of the embryo there may be other issues such as embryo donation, medical risk that may happen during these processes of extraction and such, the commercialization of the stem cells, the clinical trials and its ethics.

Critics have pointed out the breach of the rights of a person to individuality, autonomy and selfhood by conducting these treatments and research. But leaving behind the issues it is also evident that good has come with such stem cell research as well. For example, the general liberty is justified, freedom to make personal reproductive choices, the freedom of scientific inquiry to achieving a sense of immortality, treatment for infertility and as a insurance at times of need. Eventually even as preventive measures of genetic diseases.

VI. LEGAL FRAMEWORK IN SRI-LANKA FOR STEM CELL RESEARCH AND RIGHT TO LIFE

There are no expresses rights guaranteed in the 1978 Constitution of the Democratic Socialist Republic of Sri-Lanka for Right to Life, even though it is implicitly recognized as of chapter 3 under the fundamental rights. According to many commentators the crucial question arose regarding this right was at the incident of the murder of journalist Richard de Soyza in the year 2000 (nayana, 2003). Almost a decade after the previous incident, a fundamental rights application was filed on behalf of an army deserter who have been taken into custody and tortured to death by the offices of police station Payagala. This is the case of Kottabudu Durage Sriyani Silva V Chanaka Iddamalgoda, Officer in Charge, Police Station Payagala and Six others((1991) 2 Sri LR 301), which recognized that right to life, is available in the Sri-Lankan Constitution with the emergence of a series of incidents through police brutality at its most disregarded form. In this case, it was said to be an infringement of Article
11, Article 13(2) and Article 17 which includes torture, unlawful detention and the right to apply the Supreme Court for relief. The court recognizes the deprivation of life could happen and this is ought to be permitted by law that has been justified in certain situations such as for self defense. There it was argued that life of a person can only be taken away in means and methods that are permitted by the law. But this was inconsistent with the notion of Right to Life. As of today the supreme court of Sri Lanka follows the foot prints of the International Human Rights Law to interpret fundamental rights on the basis of Sri Lanka’s obligations.

In 2014, Sri Lanka had brought its innovations in the side of stem cells and regenerative medicine associated with the launch of the Sri Lanka national stem centre at the Institute of Biochemistry Molecular Biology and Biotechnology University of Colombo. Even though human cloning is banned, therapeutic cloning and gene cloning can be advantageous for the future generation under certain rules and regulations.

VII. LEGAL FRAMEWORK OF OTHER JURISDICTIONS

The Universal Declaration of Human Rights (UDHR) Article 1 states that “All human beings are born free and equal in dignity and rights......” But in this the word “born” was to express the fact the fetus and embryo is not granted human rights. Further, down the lane an amendment was proposed but rejected which wanted to delete the word "born" by the UDHR, because it is important to protect the Right to Life from the moment of conception. Furthermore, the Convention on the Rights of the Child doesn't recognize the Right to Life until the child is born. The main protection for the child is given under the Covenant on Civil and Political Rights Article 6 which states that “every human being has the inherent right to life”(Patil, 2014). This article brought the debate of not even the In-Vitro-Fertilization methods or stem cell treatment but also of the infringement of the rights of the unborn. At the same time Article 6 was the basis for the legal issues for the legality of liberal abortion laws in the US Supreme Court. There have not been a constitutional statute or a ruling against a matter of Right To Life but a matter under the 14th amendment regarding fetus not being a person had come up to debate. This is presumably extended for embryos as well.

Moving to the American Convention on Human Rights, Article 4 on Right to Life expressively states that every person has the right to have his life respected. This right shall be protected by law and from the moment of conception. No one shall be arbitrary deprived of his life. Even though the information commission is responsible for the interpreting and the monitoring of these American conventions, it is stated that this right and this protection is not absolute. Further, the European Convention on Human Rights Article 2(1) provides that “Everyone's right to life shall be protected by law”. This section was taken into consideration in the case of the Paton v United Kingdom European Commission of Human Rights (App. No. 8416/78, 3 Eur. H.R. Rep. 408 (1980)). It was stated that this aforementioned article does not include the right of an “unborn child” and the absolute right is always after the birth. Similarly, in the case of Vo. V France ([2004] ECHR 326 ) the European Court of human rights pointed out under this Article, the unborn child is not regarded as a person and even if the unborn child do have a right to life it is implicitly limited by mothers rights and interest such as her Right To Life, health and privacy.

In India, the Right To Life as a basic fundamental right is a guarantee and Article 21 of the Indian Constitution states that “no person shall be deprived of his life or personal liberty except according to procedure established by law.” Similarly, this protection is provided under the Indian Penal Code no 45 of 1860, section 312 to 316 which deals with miscarriages. In the Federal Government of USA on March 9th 2009, the restrictions on funding stem cells Research which was the done by Governance of George Bush was removed. These restrictions were taken away by ex-president Barack Obama. This came as a blessing in disguise for more research to be conducted that are of stem cells. Furthermore, the supreme court of USA in January 7th 2013 rejected the hearing of a lawsuit regarding a blocking of the previously mentioned order no 13505. Thereby similarly promoting stem cell Research and having no say in it through the judiciary.

VIII. RECOMMENDATIONS

When a new constitution comes along in Sri-Lanka as suggested in the year 2017, Right to Life is said to be added to the fundamental rights chapter by the National Action Plan for the Protection and Promotion of Human Rights. This will be formulated by reviewing the scope of Right to Life by the International Covenant on Civil And Political...
Rights the European Convention on Human Rights have adapted along the years. Through the steering committee Reform the Parliament will look into this amendment (Harshana, 2017).

In the future developments in means to obtaining stem cells without harming the embryo will be infused to medical systems in countries globally. This shall decrease the controversial issues of Right To Life as the Blastocyst will not be destroyed. This involves the extraction of these cells specifically without harming the embryo. Thus, shall not change its chance of developing into a healthy individual. This is known as the "Blastocyst transfer method". There have been evidence to state that this particular method have been used on cattle, horses monkeys etc and it has been successful (Matthew, 2005).

Countries must fund this sort of research because it is important for a nation to have a healthy future generation. People should have the right to choose if he or she is ready to die or not. If they are given with the option of using stem cells to cure themselves, they should have the right to choose if they would go along with these treatments or suffer for the rest of their life.

Further, Sri Lanka should have solid legal basis to fund the stem cell treatment and make it a government funding research by sending the word around the country to educate people. Even the legislation that is available does not resemble in a way to encourage these research to have a legal effect. Further, the penal provisions for violations of these rights are unclear. The absence of a strong backbone for the legislative system has been a reason for the rising of many more controversial issues over the year.

The country should establish clinics and a legal body to protect and promote these rights. This would help the development of this research. The work of them should be reviewed and address to beat controversies among the public and the society. Moreover, they have to be periodically supervised to ensure that a high standard of care and quality of these treatments and the facilities that are given for the patients. Additionally, the disposal and the preservation of embryos and stem cells need to be monitored as to whether they are done properly. While during this process it should also be noticed that to carry the research in the way the donors requested, the rights and the autonomy of the couples who are the donors of the stem cells for this research remains not violated and their information which if they request to keep non-disclosed should be kept unrevealed. If the donors want to destroy the spare embryos after in-vitro-fertilization method, without breaching the rights the procedure must be followed as according to the wish of the donors. It can be suggested similar to United Kingdom, Sri Lanka can include a human fertilization and embryo Act to lessen the issues and the burden. As the treatments take a high cost it is unavailable to the poor. These challenges could be overcome if the government funds these researches and make it available for all the patients equally.

IX. CONCLUSION

Stem cells research is one of the greatest advancements of biomedical technology as it has proven to cure patients who suffer from disruptive diseases such as neurons damages, strokes, Alzheimer's disease, Parkinson's disease and also it is capable of repairing heart and brain cells as well as to produce insulin and many other powerful recoveries. Even a cancer treatment can be the future of stem cells. Therefore, a solid basis for such research should be provided in any legal system. Every innovation and advancement of technology comes with its baggage of problems and controversies, to lessen these issues the research must continue to figure out solutions to work forward without breach of human rights and causing ethical issues. In the domestic legal framework, there is a need for a definitive legislation which follows IVF method. Sri Lanka has to bring forward solid laws for Right to Life rather than the judicial decisions. Further, research should be conducted to find out means and methods to extract stem cells without damaging the Blastocyst such as the method that is recently suggested by scientists called the "Blastocyst transfer method" by which human rights such as the Right to Life can be protected. If a country is serious and willing to make compromise solutions for therapeutic technological development such as stem cell therapy, which will help millions of people in the future, giving space for new inventions and further research to extract the stem cells without damaging the rest will be a better solution. Always ethical issues will remain at every innovation. Some pros and some cons will always come up when advances of technology hits the community. But if the legislative body is stringent and a separate legal framework is there to manage these, the benefits can over ride the harm and good will come out of it.
References


Payagala which is Kottabadu Durage Sriyani Silva V Chanaka Iddamalgoda, Officer in Charge, Police Station Payagala and Six others((1991) 2 Sri LR 301)


The 1978 constitution of the democratic socialist republic of Sri-lanka