HUMAN GENOME & MODERN REPRODUCTIVE TECHNIQUES: LEGAL AND HUMAN RIGHTS ISSUES

ABSTRACT OF THE THESIS

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Abstract

The spectacular development in molecular biology and genetics has opened up new areas in the medical field. The modern biological advances relating to human genome is ready to manipulate our lives, claiming potential benefits along with enormous repercussions. In the present era science and technology are playing an increasingly important role in every facet of lives of the people. Science and technology are racing ahead, law and human rights are looking helplessly from the sidelines. Law moves a little slowly while technology moves quite rapidly, the result is that technology is running out of legal control. In consequence, there may be grave damage to human rights as well as the very basic structure of the society.

Apart from other technologies, human genetics is intrinsically related to human life itself and have potential to affect the basic human rights and established social norms. It has a dramatic impact on family relations and traditional family structure. Taking into account the potentials of human genetic advances, it becomes pertinent to regulate this technology. Now the questions are; who can regulate it? Whether ethical codes are sufficient to provide enough restraint against the misuse of this technology or they need legal regulation?

Here the role of law becomes more important. The prime motto of science as well as of law is to serve the society and provide maximum happiness among the people. But the problems relating to law-human genetic interface are so complex that it is not easy to identify the legal problems. These problems are not purely legal but linked with ethical, moral, social and economic ones.
Patenting of human genetic materials is in practice. The patent laws in various countries are too lax which also allow patenting of gene fragments, the function of which is not fully known. This paves the way for commercial exploitation by various pharmaceutical companies. The patent regime which has been introduced to encourage the research works, benevolent to the mankind is failing to make a balance between individual interests and social good.

Infertility of couples is a traumatic stigma in their life. According to the multinational study conducted by the World Health Organisation (WHO) there are 80 million infertile couples in the world and approximately 15% of them are in our country. New scientific developments, through Artificial Reproductive Techniques (ART) have attempted to resolve such problems of infertility. Although Artificial Reproductive Techniques (ART) may not be a public health priority but it is a central issue in the lives of the individuals who are unable to have or procreate child. To such couples Artificial Reproductive Techniques (ART) is a ray of hope in their life. Originally Artificial Reproductive Techniques (ART) was developed to treat infertility but with the passage of time its use was multiplied even to get baby for single parent and thus technology was commercialized, because of it more and more controversies started. Assisted Reproductive Technologies (ART) such as artificial insemination, In-Vitro Fertilization (IVF) and Surrogacy have though shaken the traditional technologies but are beneficial to many infertile couples, enabling them to become parents and create families. The emerging legal and human rights issues because of these advancements have posed a herculian task before the legal researchers.
Many gay couples are coming to *In-Vitro Fertilization* (IVF) clinics to have children with the help of these technologies. There are also chances of selling of gametes and embryos. Such chances have increased where by many developed countries have banned for creating embryo in lab to carry experiments. In such a situation they are approaching to developing and under developed countries for embryos. These events are raising many legal and ethical challenges before our law makers. So there is urgent need to resolve these legal and ethical issues.

Apart from above mentioned challenges there are many other challenges e.g. parentage of child born through donated gametes or embryos or by gestational surrogate, rights of child born through *In-Vitro Fertilization* (IVF), rights and liabilities of donor of gametes, which also demands urgent solution. In this work legal and ethical issues related to *In-Vitro Fertilization* (IVF) and gestational surrogacy, and the possible solution of such issues have been discussed. For this purpose related laws of different countries and some foreign case laws have also been analyzed.

The courts are posed with various complex problems relating to family laws. The laws relating to this new reproductive technology are not uniform and vary from country to country on the basis of their particular political, cultural and religious set up.

Artificial insemination by donor presents and also poses many problems; such as, whether it amount to adultery or cruelty, entitling for divorce? What about the anonymity of sperm donor and the resulting child’s right to know his genetic origin? What would happen if a single women wishes to be artificially inseminated?
The problems relating the surrogacy arrangements are also varying—which mother law should recognize, genetic or biological? Whether contract pregnancies are legally valid? What would happen if surrogate mother refuses to hand over the child? Whether does commercialization of surrogacy arrangement lead to the exploitation of poor women? and many more.

Human cloning and Stem Cell Research, the most alarming aspect of genetic revolution, have re-opened the debate on assisted reproduction. It encompasses various issues as personal autonomy, individuality, procreative liberty, etc. So, it becomes very essential to develop better understanding of these technologies and there is need to think in advance.

The tremendous advances in pure science made during the last few decades have completely changed the relation between science and society. Through its technological applications, science has become a dominant element in our life. With the astonishing developments and advancements, the tentacles of law have been no longer confined to traditional matters and issues, and that is why law has demonstrated its application in every nook and corner of ongoing disciplines. Field of science particularly medical science is not an exception to this stark reality. It is evident from the numerous innovations that the approach and method of studying law have also been changed. Hence, it is a well known fact that law has got some sort of its elements in almost all the walks of life. Whether these issues can be sorted out by prohibitive laws or they require a deep inquiry into its nature and its impact on the forth coming society? It is the main question before the legal scientists.

Although the human genetic advances are more prevalent in developed countries but Assisted Reproductive Technologies (ART) are becoming familiar in countries like India. No country can escape from these technological
advances. So it becomes very essential to develop better understanding of these technologies and legislate better laws to deal with the problems arising out of it.

1. The Choice of Topic:

The present study mainly concentrates and guides the choice:

a) To identify the nature of the problem arising out of human genetics and its impact on basic human rights.

b) To compare legal position in various countries over patent laws, Surrogacy, In-Vitro Fertilization, Cloning and Stem Cell Research.

c) To analyze the provisions concerned under International legal and human rights instruments.

d) To know about the present Indian position regarding patent laws, Surrogacy, In-Vitro Fertilization, Cloning and Stem Cell Research.

2. Need for the Study:

There is a very close relationship between science, law and society. The scientific, legal and technological developments have great impact on the values of the society. Recent developments in molecular biology and genetics have posed new challenges before the law and have raised ethical, social, cultural, economic and legal issues for human beings.

The present study is an attempt with a view to locate various issues relating to Human Genome, Stem Cell Research and Modern Reproductive Techniques and to suggest to overhaul our legal system in tune with these developments. It is expedient to have integrated look over the various legal and human rights issues along with the comparative legal position in various countries because these technological advances have potential to infringe the basic human rights. Such a great issue cannot be left to the scientists alone but it
requires a strong regulatory mechanism, not solely based on ethical codes but on legal considerations.

3. The Objective of the Study:

Due to the development of reproductive technologies and its commercialization, many ethical and legal issues have emerged which are still unresolved. Modern Reproductive Technologies and Genetics pose various challenges before law and human rights not only in India but in the entire world. They are compelling the lawyers and human rights activists to cope with these technologies by redefining the legal and human rights instruments in tune with the current pace of molecular biology and genetics advances.

The proposed works intends to locate various legal and human rights issues relating to Patenting of Human Genome, Stem Cell Research and Modern Reproductive Technologies emphasizing the role of law. Recent developments in molecular biology and genetics have forced us to rethink and redefine our legal system.

Thus an interdisciplinary discussion of such an important area is imperative and quite necessary. The proposed research study is an attempt to look at the various legal and human rights issues related with Human Genome and Modern Reproductive Technologies along with comparative legal position in various countries.

4. Hypothesis:

The research work proceeds on the following hypothesis:

a) Present development in the field of human genetics has serious impact on the society and the extent is unlimited because of constant development.
b) The innovation and application of human genome, stem cell research and modern reproductive technologies is at its pinnacles but to deal with the outcome there is no comprehensive legislations in our country and should be developed with the required pace.

c) The Constitutional provisions and judicial response in relation to breach of privacy and confidentiality issue arising out of human genetics are not so explicit to resolve the problems.

d) At present the field of human genetics and modern reproductive technologies is a very hot issue not only in India but in rest of the world as well. To meet out the challenges a legal mechanism should be evolved, developed and proper restriction should be imposed on these kind of technologies.

5. Scope of the Study:

a) The concept of Human Genetics, Human Genome, Stem Cell Research, patenting of genetic materials and especially about Modern Reproductive Technologies.

b) Evolution and progressive development in regulation and guidelines by Indian Council of Medical Research in India in the field of Modern Reproductive Technologies.

c) Steps taken by United Nations through the Conventions to tackle the problem arising out of human genetics.

d) Laws relating to Patents, Human Genome, Stem Cell Research and Modern Reproductive Technologies in various countries along with judicial response, Conventions at International level and present Indian perspective.

e) Legal limitations, difficulties and possible remedial measures.
6. Impact of the Study:

The new technology may be a bane or boon to the society and human civilization, specially the molecular biology, human genetics and modern reproductive technologies which is so closely related to human beings. The subject matter of the study is so delicate that it has its own inherent controversies and concerns. Therefore, the impact of the study would certainly helpful to add the knowledge and to develop legal framework in India on the subject.

7. Research Methodology:

The proposed Research work is doctrinaire and analytical. It is based on critical, descriptive and analytical study of various legislations of different countries, International and regional Conventions and present situation in India. The proposed study has been carried out in a very objective, systematic and unbiased manner. All the primary as well as secondary documentary sources have been utilized to make the study advanced, orderly and methodical. Various reports, articles, judicial decisions, international, national, Constitutional norms and national measures have been taken as important research tools. The research has been pursued by consulting various institutional libraries. The study will certainly enrich the existing knowledge about the legal and human rights aspects relating to modern reproductive techniques.

CONCLUSION AND SUGGESTIONS: Please pursue the work.