

ETHICAL NOTION REVOLVING AROUND NEW REPRODUCTIVE TECHNOLOGY IN INDIA

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ABSTRACT

This paper discusses the ethical notion revolving around new reproductive technology in India. Present study is based on fieldwork based in Delhi, which includes interviews with doctors and patients.

Keywords: Ethics, New Reproductive Technology

Since the beginning of settled human life, reproduction and motherhood has been seen as synonyms of each other. Over the past 30 years, innovations in the science and technological front have proved to be fruitful but at the same time it has raise various ethical questions which needs to be answered from time to time. As Latour argues, the agent of this double construction – science with society and society with science – emerges out of a set of practices that the notion of deconstruction grasps as badly as possible¹. Science and society are two side of one coin, one can't be studied without the other. This work will try to understand the various ethical and moral notions regarding infertility as a medical issue and how science and technology impact on each other. The whole notion of assisted reproductive technology deals with both the aspects of society, social relations and technology. Social relations are not as simple as technology which makes the importance of ethics in the whole procedure. This article is based on the thesis written regarding the various issues of infertility based in Delhi.

India has among the lowest public health expenditure in the world. In 2010, at 1.1 percent of GDP it represents the fifth lowest country in the world. In India, more than 70 percent of health expenditure in the country comes from out of pocket (Rao 2016, 198). After the course of privatization in 1991 we were not able to establish a concrete health system which can take care of all. India's population policy has seen drastic change from population control to reproductive health. In last decade we started facing the crisis of low fertility and some major reproductive issues. According to WHO report, researchers found that in 2010, 1.9 percent of women aged 20-

¹ Bruno Latour (1993), "We have Never Been Modern". Harvard University Press, Cambridge University Press.
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44 years who wanted to have children were unable to have their first live birth (primary infertility) and 10.5 % of women with a previous live birth were unable to have an additional live birth (secondary infertility). New reproductive technology indeed caters to the population who is dealing with infertility but it is not cost-effective. Further in India, it is largely concentrated in the hands of private clinics which is far from the reach of groups which are belonging to lower income categories.

Helene Ragone (1996), tries to bring out the issue of separation between intercourse and reproduction due to advent of technological advancement. In her work she tries to deal with the concept of surrogate mother and adoptive fathers and mothers². When it comes to child born out of surrogacy, the question is who is the real mother comes into picture. The surrogate pregnancy, unlike a traditional pregnancy, is viewed by the surrogate and her family as work which is occurring only in the context of payment being done in lieu of this work. The new form of reproductive technology have introduced a new set of social ties which are devoid of natural one. Many scholars have argued that in recent NRT (New Reproductive Technologies) scenario, child born of gametes donated from the same person will meet up as adults and might get married and produced children which can be seen as incestuous relationship (Edward 2004, 756). There are various implications of new reproductive technology which can results in situations which don't fit in the existing relations or there procedure is not according to moral and ethical norms.

Various feminist scholar have given definition of NRTs, as a phenomenon which is regressive in nature. According to Gaard " NRT's rhetoric of choice is implicitly antifeminist when it invokes a form of victim-blaming by attributing rising infertility rates to middle class women who delay child bearing while struggling to launch their careers" (Gaard 2010, 105). So, there is dichotomy where at one hand we want to produce children and on the other hand we don't want to adopt them as they will not be genetically our own. The thought dying childless is so terrifying for many couples that they are in desperate need of NRT services. For some patients secondary infertility is also seen as a major issue because of which they want to opt for assisted reproductive technologies. Introduction of these technologies have put various question marks on the family and kinship networks. In earlier times people used to adopt within family, so that there is purity of lineage, but present scenario has changed the whole definition of purity and pollution. In developing countries where people have difficulty in accessing the health facilities for normal ailment, things becomes different when it comes to ailments related to infertility. There is a hidden phobia in mankind of dying childless and upon which private health enterprises are blooming their ART services.

² Helena Ragone(1996), "Chasing the Blood Tie: Surrogate Mothers, Adoptive Mothers and Fathers". American Ethnologist , Vol 23, No.2 . 352-365.

According to Danish legal and bioethical discourses, there are conventional and gendered understanding of reproduction. While sperm is framed as “naturally” moving away from the male body as adventurous “mini-men”, eggs are domesticated, a part of women’s identity. In this discourse, eggs not only are limited in number and reside inside the women’s body, but also are framed as closely related to the egg donor’s gender identity (Krolokke 2014,142).

3.1 Ethical implications around treating Infertility

Marriage in Indian society is being seen as one of the important landmark in one’s life and way to carry forward the lineage. According to Bhardwaj, marriage for Hindus is the first socially prescribed and step towards motherhood. It is a sacred duty on two levels, first the bride giver (father) has a duty to give the daughter away in marriage on time, second the bride taker (husband) has a duty to beget children from his lawfully acquired wife (Bhardwaj 2016,48). To become a mother is seen as a sacred duty of the bride who is brought to carry forward the lineage. If the wife is not able to perform her main duty than she is considered to be worthless. Infertility can be seen as one of the major hurdles in achieving family life. Hindu scriptures also advocates that barren wife can be superseded in the eighth year of marriage³. On the other hand same rule can’t be applied to male member of society. In such cases help of artificial insemination is being taken, it can also be seen from the epic called Mahabharata, where “Pandu”, “Dhritrashtra” and “Vidur” were born with the help of Ved Vyas. So treating infertility has always been a matter of ethical issue as not only emotion but also the values are involved. In today’s scenario same applies for donating eggs, ovum, sperms and surrogacy. The major emphasis is on the genetics of the child but in that process the cultural upbringing has taken a backseat. On one hand ART gives options to people to experience parenthood but on the other hand it is advocating that achieving motherhood is necessary. The dichotomy of ART services raises the question that for whom benefit it is being used. ART draws attention to complex field of expectations and values concerning motherhood and childbearing that shape assisted reproduction as a social practice (Ryan 2009,809).

During the course of study conducted at Maulana Azad Medical college, there were patients who were coming from nearby places to put their best foot forward when it comes to the infertility treatment. On asking women about their issue there were statements like “*anda nahi banta hain*”⁴, “*tubes block hain*”, “*pati ke paani main kami hain*”⁵ and “*pata nahi doctor abhi test boli hain*”⁶. Assisted reproductive technology centers during OPD hours were crowded and people used to wait for their turn for checkup or report collection. In private health facilities, female

³ Aditya Bhardwaj (2016) “Conceptions Infertility and Procreative Technologies in India”, Orient Blackswan. Pg 56

⁴ Eggs are not being formed.

⁵ Problem in sperm of the husband

⁶ Not detected yet doctor has asked for the tests

patients had less scope for interaction between each other as they are accompanied by their husband or relative, but in public health facilities like Maulana Azad, men are not allowed in the waiting area of female patients so they have their time to discuss their personal issues. During this period they discuss their medical problems, what did doctor said to them, how their respective family is reacting to their situation. They only know that there is medical issue in them or in their husband which is causing delay in reproduction.

The interesting debate which evolved with the introduction of new reproductive technologies was the need and use of assisted reproduction. In the present the patients who were interviewed were from economically weaker section, those who cannot afford to spend on other health ailments but they were ready to take a chance for the infertility treatment. Doctors who are working in the OPD had fair sense of knowledge regarding the pressure on the patients but they were not able to help in dealing with their pscological stress. There is a difference between what doctors were saying and patients wanted to believe regarding their medical condition. The question arises that ethics are always involved in any kind of medical treatment but when it comes to infertility people's emotions are attached , the child gives them a sense of belongingness which makes the whole effort worth it. While the private clinic providers are providing the services with the promise of positive results (which becomes the focus point of patients who are coming for treatment) and on the other hand the public enterprises who are providing such services are not advertising themselves, for them it is more of application of their research rather than earning profit. For instance in Maulana Azad there is only one day for infertility OPD, whereas there is heavy load of patients coming for infertility treatment.

Fig no 1. Various factors revolving around infertility treatment

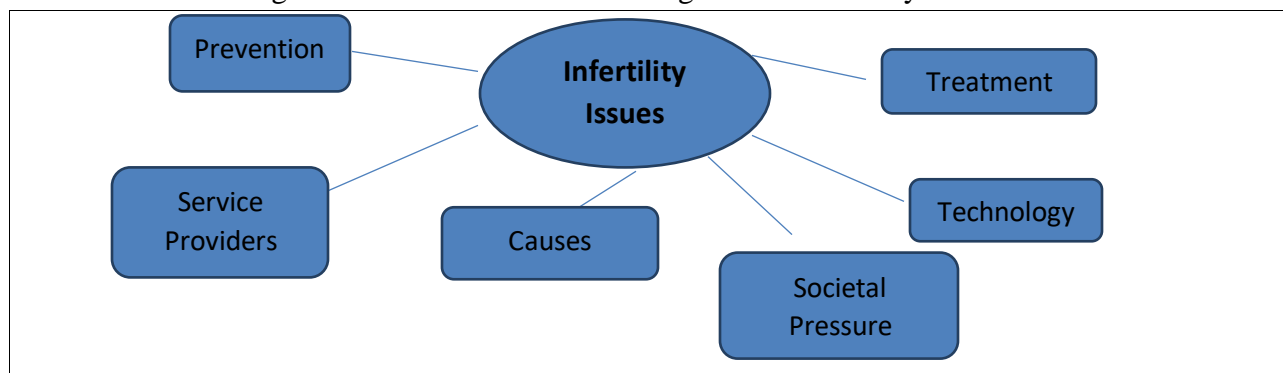


Fig no 1 shows different factors related to infertility issues where treatment, technology and societal pressure plays an important role and prevention is being least discussed. Societal pressure leads patients to opt for treatment which is directly related to technology. In this viscous

circle, the cause behind infertility is not been discussed as it should have been. More focus is on detection and treatment, this is so much that many times patients don't want to try on their own. There are various ethical notions regarding new reproductive technologies which have been a topic of discussion since last debate. Focus on technology give rise to bio ethical questions and ability to maintain life in different forms. Another question arises that technology is for betterment for society or for profit making and ownership of the technology is yet important issue which comes up time and again. With the introduction of technological advancements there has been change in the public health structure and treatment of various medical issues, but on the other hand it has affected the lives of common people in both positive and negative manner. Hyperstimulation is a type of drug therapy where drugs are given for stimulation of ovaries, this can lead to extreme mood swings and other complications. Most of the time patients are not being explained about the drug therapy and there is no system to monitor the drug therapy. Implementation of sustainable medicine involves a move toward public health models of prevention, health promotion, and greater personal responsibility for one's own health status (Simms 2004, 215).

More over infertility can't be studied without taking into account the overall reproductive health of women, especially in developing nations like India. Most of the cases of secondary infertility are preventable with proper health care. The leading preventable causes of secondary infertility are reproductive tract infections, sexually transmitted diseases, and medical interventions under hygienic conditions (Ryan 2009, 809). Among most of the cases these causes comes in later stage when things usually go out of hands. In developing nations there is still hindrance in accepting hygienic menstrual practices or using contraceptives for prevention of STDs. In India , many unsafe abortions are being conducted which becomes leading cause of secondary infertility issues. Most of the time patients are unaware of their medical problems before they are married, for instance many women during the study said they were having problems in their periods even before they got married. Childbearing is being seen as one of the important functions of women and if this is not performed then they are categorized as incomplete. Many feminist scholars have argued that ART supports that notion of motherhood which further degrades the position of women. Motherhood is not a biological expression but more of a social notion, one who can give comfort like a mother can be seen a motherly figure. Moreover mother is seen as someone who is selfless, a person who is selfless will devoid of ego and her own wants. In Hindu culture because of these reasons women are being worshiped as a goddess. The softness which becomes the basic essence of womanhood, becomes it's one of the major weakness. When it comes to feminist point of view, some of them have welcomed these technologies as scientific progress. They see NRT (New Reproductive Technologies) as a further extension of women's reproductive rights self-determination, for which they argue that all women across the globe should have access to them. Another position of feminist takes a neutral stand and don't advocate NRT's altogether.

Third more radical view is rejection of NRTs altogether. According to this view reproductive technologies are enhancing patriarchal and technological control over women because they remove reproduction altogether from women and put it into the hands of medical engineers and violate the integrity of the female body (Gupta 2000,68).

According to Raymond, "Another fundamental principle operating in the defense of technological reproduction is that persons have a biological need to reproduce" (Raymond 1995, xviii). Various terms like genetic continuity, biological fulfillment, and reproductive imperative and maternal instinct mystify motherhood and fatherhood. According to Ryan (2009), "The value placed on childbearing and the pressure to reproduce in a given society is an important part of the background for understanding why infertile individuals and couples go to great lengths to overcome infertility"⁷. Quiroga argues that ART way of functioning currently supports the heteropatriarchal model of family, where purity of the kinship relationship is being emphasized⁸. The biological children are seen as symbol of couple's unity which have both the traits of the parents. Heredity is usually understood simply as the transmission of characteristics and traits from parent to offspring, where the difference between physical expression of genes (phenotype) and the actual inherited genes of the parents (genotype) is obscured. In this line of model, women are held responsible for carry forward the lineage and ART becomes the resort for such people. Technological advancement in a way supports the idea of importance of genetical ties, but in that process it forgets to deal with socio-cultural issues present in the society. According to Cahn, "to some extent ART has brought ambiguity and uncertainty into kinship relations, including the fundamental categories of motherhood and fatherhood and is undermining the traditional family" (Cahn 2013, 33). Many scholars who are working on the issue of ART will agree with the notion that change in the nature of reproduction have given birth to new set of kinship relations which are different from the traditional one. Some of the important questions regarding ART technology is related to the ethical and practical issues arising from such techniques, for instance who is the actual mother of the child, one who gives birth or the one who is involve in bringing up the child. Questions regarding the sanctity of the genetic engineering and commercial exploitation of embryos challenges the supportive face of technology all over the world (Shroe et all 1992, 295).

Even though the genetic parents may have been married to one another, gametes from the dead spouse may be treated in the same way as those of an anonymous donor, so the biological child is not the husband/donor's legal child (Cahn 2013, 35). There has been instance in U.S.A where

⁷ Maura A Ryan (2009), "The Introduction of Assisted Reproductive Technologies in the "Developing World": A Test case for Evolving Methodologies in Feminist Bioethics". 34(4). 805-825.

⁸ Seline Szkupinski Quiroga (2007), " Blood is thicker than Water: Policing Donor Insemination and the Reproduction of the Whiteness. 22(2). 143-161.

the wife has used the stored sperm of her late husband who died of cancer. Through the process of IVF, she has been able to conceive but years later federal court did not issue social security to that child as they didn't consider it natural (Cahn 2013,36). This case shows that in front of law there are still questions which need to be understood from the point of view of both the parties. For instance during most of the fertilization process, many embryos are formed so that there are multiple chances of getting pregnant but if pregnancy happens within one embryo, then parents are asked what should be done with other embryos. There the ethical question arises that whether these embryos should be destroyed as they are part of human body or they should not be destroyed as they were formed for a particular purpose. Most of the times these dilemmas give birth to insecurities regarding technological advancement and its effect on society.

Childbearing feels crucial to a woman's self-concept, diagnosis of infertility leads to shock, causing profound emotional upheaval, loss of self-esteem and anxieties (Leff 2010,119). Infertility can be seen as one of the life-changing emotional turmoils which need immediate attention. In many cases it leads to disturbance in family life, where the pressure of having a child disturbs day to day routine. Egg donation is one option to deal with infertility, it is used when a woman carries a hereditary syndrome or is unable to produce fertile eggs due to menopause, genetic malformation, ovarian failure or sterility following surgery or chemotherapy (Leff 2010,120). The question arises whether it should be done without any cost or it should bear cost to the patients. In many cases when a nearby relative is ready to donate their eggs, it can be done in an altruistic manner. When it comes to India, there are few people who are ready to donate their eggs for research purposes, although there is a monetary market for both eggs and sperm. An IVF treatment costs around one to two lakhs of rupees with 30 to 35 percent success, this is advertised with high rates through ART clinics. Most of the clinics advertised high success rates with a guarantee and even do they counsel patients regarding the procedure most of the patients believe that with IVF their infertility can be totally cured. Male infertility is easily curable but it raises many ethical and moral questions as in most of the cases male patients don't get ready for artificial insemination. During an interview conducted with the doctor of Apollo Cradle the doctor said that if sperm count is low then the person and his family members try to hide it. In many cases they often ask the practitioners to hide this fact from their respective spouses. On the other hand if there is an issue with the female then there is a lot of pressure to conceive. In one such incident a mother-in-law straight away said that this is her last chance to conceive and after that she will remarry her son. There were many cases in ART centers where people were emotionally burdened due to their inability to reproduce. Infertility is an issue that affects both men and women in an equal manner, the only difference is that males have an option to escape.

Until the early 1990's biomedicine had little to offer to men suffering from male infertility issues. Options were limited to artificial insemination which was not acceptable in Muslim countries. Then intracytoplasmic sperm injections were invented, in which poor quality of sperm is directly injected into oocytes under highly controlled laboratory conditions (Inhorn and Carmeli 2009,25). In such cases of low sperm count, when women are asked regarding the infertility issue of their husband then they said that they were trying their level best.

The situation was more difficult for Muslim women due to restrictions in their religion which do not allow sperm donation in case of shortcoming in male counterpart. According to Bhardwaj the biomedical perspective on infertility reflects the values in medicine and society, so infertility is being seen as a health issue whose treatment had to be done⁹. In a societal norm it becomes a moral responsibility to reproduce and carry forward the lineage in that process the thin line between natural and man-made gets blurred. Franklin (1997) suggests that women express two primary aims in relation to IVF: If they succeed they achieve the ultimate goal of a take home baby, and if they fail at least they know they have tried everything (Bharadwaj 2016,7). In Indian context, if one is not able to produce naturally then it becomes his/her duty to look out for an option. Most of the cases couple want to try ARTs before opting for adoption or giving up the idea of children altogether. The pressure to use the technology is such that even people from lower income group also want to avail the opportunities given by technological advancement. Further in many cases where the health budget is tight, costly reproductive technologies divert money from high priority health problems to benefit a small segment of the infertile population (Bharadwaj 2016,21).

Center of ethical discussions regarding the exchange of human components lies an important societal distinction between those entities deemed sacred and those deemed profane. Sacred resources entities, or products are culturally viewed as "above" or "outside" the commercial or economic sphere (Hirschman 1991, 361). Douglas in *Purity and Danger* (1996) writes about the cultural importance of identifying and classifying objects, people, place and events as sacred and profane (ibid). There is a mark difference between transferring the vital organs and giving someone non-biological things which makes donations of gametes, sperms and procedure like surrogacy more complicated affair. There are people who donate gametes for monetary purpose as well and altruistic for of surrogacy is becoming topic of discussion in recent times. The whole notion of giving someone a life is seen to be very precious and the importance of motherhood comes from that only. When someone borrows any biological organ from the other person both the giver and the donor engage in a kind of relationship. These new kinds of bonds are not being involved in the kinship scenario. For instance Helena Regone talks about adoptive mother and father and one who gives birth, then what kind of relationship does the actual mother shares with

⁹ Aditya Bharadwaj (2016), "Conceptions- Infertility and Procreative Technologies in India", Orient Blackswan.

the father. The new technology brings up the fact that the baby which is born is not out love and passion of the parent but with the result of the upcoming technology. Couples cannot actually come in long term relationship with the surrogate or any other person who has donated gametes and sperms. With the advent of technology the moral face of the society also comes into picture. If one can become parent by accepting surrogacy or any other reproductive assistance then why not people opt for adoption. One of the major reason is importance given to heredity which is understood simply as the transmission of characteristic and traits from parent to offspring, where the difference between physical expression of genes (Phenotype) and the actual inherited genes of the parents (genotype) is obscured (Quiroga 2007, 145). This scenario cannot be seen in the case of adoption which becomes the reason that most of the people want to have their own biological kin. In a way infertility as problem is constructed by the society and whose solution can be provided by the society itself. Bourdieu notion of habitus comes into picture where power of the habitus derives from the thoughtlessness of habit and habituation, rather than consciously learned rules and principles. Socially competent performances are produced as a matter of routine, without explicit reference to a body of codified knowledge and actors are performing their action without knowing what they are actually doing (Jenkins1992, 77) After marriage second step comes with the birth of the child, if this does not happen for a longer duration then societal routine gets disturbed which becomes a matter of concern for not only the couple but also for the people which are associated with them. Various Hindu rituals also denotes the notion of practice such as at the time of marriage, Hindu bride is given a toy or doll to signify that her married life will be successful and she will be able to carry forward the lineage. The marriage becomes a base on which people expect family to be extended through biological form.

Infertility is one issue but its treatment has many ethical and moral components involved in it, such as who all are to be disclosed about the issue of infertility.

One of the doctor said that many patients don't want the person accompanying them to know that what kind of treatment they are taking. In many cases it becomes a reason for embarrassment for both the partners as many a times it becomes difficult for them to accept their shortcomings.

Infertility as an issue is felt individually and also in collective manner. This process is similar to the process of habitus and practice. Practices are the product of the habitus, reproducing itself to confirm it as true (Jenkins 1992, 80). This makes an impact on subconscious mind which makes a particular practice usual to day to day life, for instance for most of the patients new reproductive technologies are essential as for them adoption is not option for natural birth. The importance of genes directly shows the impact of society on personal relationships and ethics. The amalgamation of technology and society has been able to reproduce different set of understanding of motherhood, family, and kinship and its existence altogether. India becomes an

interesting case for study of impact of new reproductive technology as there are variety of consumers who are availing these services with their own respective concerns and doubts. For instance a patient belonging upper middle class aged in her late thirties working in a MNC wants to have a child so that her family should get complete and on other patient belonging to lower middle class background married early wants to have children as she feels incomplete without them or in worst cases she might have to face domestic violence because of her incapability to reproduce. During interviews many women said that they got married at the age of fifteen years and presently married for more than a decade. Early age at marriage, lack of awareness regarding sexual intimacy, and reproductive health have made crippled when it comes you taking decision regarding their own body. These women were housewives involved in taking care of their respective families and coming to the facility in a hope that one day their dream of having a children will be fulfilled. Women who were married in their adolescent had to face lot of changes due to initiation of their married life at an early age. Marriage comes with inherent expectations of sexual activity and reproduction as it follows the pattern of patriarchal society (Gorge 2002, 207). Bourdieu argued that our identities are never defined simply in terms of our individual characteristic; our identities place us in particular social spaces that we come to understand, through embodiment as our place within dialogical actions. Habitus gives meaning to practices when it encodes certain cultural belief and practices (George 2002, 219).

The time at which initiation of the sexual activity occurred plays a pivotal role in various reason behind infertility issues. Usually women are not being told about safe sexual intercourse and knowledge about their own reproductive system. Most of the patients complained that they had irregular periods before marriage as well, but they didn't thought that it will be a cause of concern for them. New reproductive techniques are seen as immediate solution to various infertility issues, but most of the time doctors also fails to make patient understand that exact reason behind their infertility. Doctors which were interviewed said that that hard task in such services is to tell the patient that her cycle has failed which they refused to believe in spite of doctors telling them that it is not hundred percent guarantee. There are various cases where patients got so much disappointed that they blamed the ART centers. So for patients who were able to conceive through this technique were ever thankful to the center and those who couldn't were highly disappointed so much that they blamed the center for their failure. For any reproductive technology huge stake is involved and if that is not fulfilled then creates a gap between the doctor and patient relationship.

3.3 Changed meaning of Reproduction.

Medicalization of reproduction and the emergence of new reproductive technologies have also attracted increasingly scholarly attention. Women's altruism is taken for granted in the pursuit of

reproductive research, the advancement of reproductive science gives a new meaning to the process of giving life (Raymond 1995, 47). The ethnography of birth, childbearing, and the management of both fertility and infertility have developed new trajectory of research which deals with the issues of reproduction (Ragone and Franklin 1998, 4). Facing infertility issues makes things even more difficult at the family front where people are expecting you to give certain result. The whole meaning of reproduction takes a different meaning altogether, where it no longer remains a private affair. The new reproductive technologies presents the image of science as altruistic. Technologies like IVF and surrogacy are presented as the ray hope for patients suffering from childlessness. In reality, there are many layers to the usage of reproductive technologies and one of them is economic aspect. During the course of fieldwork I came across various patients who were coming from other states just for getting themselves treated.

One such patient was Afsana was just 22 years old and her husband was doing a private job. They were living in Delhi, in order to get the desire treatment. There were many patients like Afsana who had to shift from their native place so that they can access new reproductive technologies. The treatment becomes extremely challenging for those who are coming from economically weaker sections. They have to deal with emotional, financial and physical difficulties for the sake of their children. Many patients also argued that even if they take loan for their treatment, they are not sure that they will be able to conceive or not. As a couple many times people have to face the consequences of the treatment, husbands find it difficult to see their wife to go through the pain of the treatment and many cases they find difficult to accept that they are the reason behind infertility.

According to a research, one in ten couples are unable to conceive on their own and infertility experts argue that there are more number of people who are demanding eggs and younger generation finds it easier to donate. The whole notion of reproduction which was between men and women only, with the advent of new reproductive technology there has been change as more people get involved with other factors which include the whole chain of donors. Donation of

eggs or any kind of fertility services comes in the area of law and ethics. Technological & contractual reproduction has also been defended as reproductive choice. Feminist liberalism has transformed women's reproductive abuse in technological and contractual reproduction into women's reproductive need, in the same way that the sexual liberals reconstructed the sexual abuse of women in pornography and prostitution as women's sexual pleasure (Raymond 1995, 95). The new found technology on one hand gives answers to the difficulty of not conceiving and on the other hand creates question regarding the absence of ethics and morals while using these technologies.

In this whole process the infertility clinics becomes the intriguing and dynamic cultural sites where human reproduction is the prime goal. They draw on culturally specific meanings of reproduction and upcoming changes (Cussins1998, 68). During interviews with the doctors it came out that most of the private facilities advertised themselves as highest success rate when it comes to new reproductive technologies. Doctors from hospitals such as Ganga Ram Hospital have explained that before the initiation of the procedure they explain to the patients about the treatment and its success chances, there are some patients who really wants assurance or hopeful that this will be the last resort. Physicians also said that they also advised the patients to try naturally before they go for the procedure. Doctors share that many cases they also feel helpless and unnecessary blamed if the procedure gets failed. Creating a life becomes an utmost responsibility of the team working with the patients. Usual atmosphere in private health facilities is totally different when it comes to public health facilities. Private health facility are more organized when it comes preparing the health history of the patients, couples are being counseled for the whole procedure and their queries are being taken care of. In most of the clinics many foreign tourist visits the ART centers for the treatment. Clinics have variously codified guidelines as to who may be treated, and will discuss patients among themselves and at group meetings as well (Cussins 1998, 72). According to embryologist working in Appollo hospital explains that when any ART procedure is failed then a group of specialist sits together and finds the cause behind the failure of the ART procedure. There are series of questions which are being asked to the new patients such as how long they were trying to get pregnant, have they seen

infertility specialist before, how often they have sexual intercourse and their occupations (Cussins 1998,80). Doctor from Appollo Craddle discussed that once a female patient came for the IVF procedure stating that her husband was gay and they didn't have sexual intercourse regularly. Most of the doctors face ethical dilemmas where they have to be just the viewer of the situation as they can give suggestion and can't take a stand out of it. There is constant pressure on doctors as well to perform the treatment to produce positive results. Other than being a doctor sometime they have to also act as counsellors to deal with the failure of the treatment. The patients who are coming for the treatment just wants the hope that they will be able to conceive.

Nazia was 25 years old and married at the age of 18 years. She was having a daughter of 5 years and her husband was working in a private firm. She complained that she was having extreme white discharge, weakness and inflammation in uterus. She was working as a part time bottle cutter to support her family, so that they can manage the expense of their treatment. On asking that why she wants to have another child, she replied to "complete the family".

There were many patents such as Nazia who were struggling with the economic and health condition but still they were trying their level best to come to the facility and get themselves treated. In previous times when the reproductive technologies were not that popular, people having one kid use to satisfy themselves that at least they have one. The change in the pattern of reproduction have also effected the definition of the family. Patients were trying to the risk and travel from far off areas wait for hours just to get the appointment of the doctor. There was sense of failure with the women as they were not able to provide the dream family to their respective husbands and their families. They are made to feel guilty about themselves so much that other than the discomfort of the treatment, they are ready to bear the pain of waiting for the treatment. The need for genitical ties becomes the core of the formation of family, where reproduction becomes essential to carry on with the race (Brein 1981, 26). While talking to the women waiting for their turn I realized that within the broad category of family there is sub-family which constitutes of husband, wife and their children. Female patients complained that they have to listen to their respective relatives regarding their in capability for producing a child. They can't

treat the children of their respective in-laws as their own, and because of that feeling that want a child of their own. The whole dimension of reproduction and family life have changed over the period of time. Earlier there were huge families where the children belonged to family or a community, but now children belong to their parents or vice-versa. According to Brien, "The ethical essence of the family lies in the dependence of infants, which makes the first demand on people to think of the welfare of another rather than only on personal survival" (Brien 1981, 26). Childbirth becomes essential to form a family, and without which the couple are seen as incomplete. Women's family role became centered on child care and taking care of men, this is what has been culturally transmitted from generation to generations. Among the patients who were visiting the ART centers, many female patients were as young as 21 years old and on being asked that what problem do they have, they replied that they were not able to conceive. The irony in developed nations especially like India is one hand they are emphasizing on female literacy and on the other hand we are treating a young girl for infertility.

There were various cases where there was lot of interference and involvement of other family members. During one such visit, I came across Shagufta a muslim women around 25 years of age. One of my initial question to strike up a conversation used to be asking the age at which they got married, it gave me fair idea about the level of awareness they will be having regarding their own reproductive health. Coming back to Shagufta, she got married at the age of 22 years which is considered to be apt among Indian household. She was accompanied by her mother-in-law who was bit reluctant in me asking her questions regarding her private life. She had a history of miscarriage and ectopic pregnancy and since then she was not being able to conceive. The patient was comfortable to discussing her personal experiences with the pregnancy but her mother in law was not. My second question was regarding their place of residence, on which she said they came from greater Noida which took them around 1.5 hours to reach the present facility.

The taboo against infertility makes it a more private matter, one that should not be discussed with strangers. Childlessness is seen as matter of shame and even if it is

corrected with the help of new reproductive technology, people don't want to disclose it. The mother-in-law of the present patient didn't wanted me to interfere with the personal matter, because of which she was continuously interfering in her daughter-in-law conversation with me.

New reproductive technologies are trying to provide solutions to infertility but there are few loopholes which are still present in Indian society and its health structure due to which number of infertility patients are increasing rapidly. First taboo on the issues of menstruation and sex, various patients complained that they used to have irregular menstruation even before their marriage but they didn't paid heed on this issue. Irregular menstruation itself shows disturbance in ovulation but due to lack of knowledge and access to public health centers, this issue only comes out when there is issue in getting pregnant. Secondly lack of knowledge regarding sexual infections, white discharge, weakness are some of the symptoms which in long run culminates into reproductive tract infection which creates disturbances in conceiving. Thirdly, life style factors which doctors also say that disturbing life style becomes the reason behind infertility. New reproductive technologies can provide solution which is not hundred percent effective, but there is no emphasis on its prevention. Those who conceive in the very first time for them NRTs prove to be a worthwhile effort but other than that their various females and couples who are not able to conceive even after third and fourth attempt. At the time of embryo implantation doctors usually implant more than one embryo, so that at least one should have a chance to develop, but in many cases all embryos are accepted by the uterus in that situation doctors have to do selective termination of pregnancy known as fetal reduction. It is a technique used to decrease the number of fetuses in utero of women on IVF programs who have become pregnant with multiple embryos (Raymond 1995, 130). In this procedure, doctor insets a needle guided by ultrasound which is filled with potassium chloride into the fetal chest cavity, causing death by heart failure and fetus is absorbed by the woman's body (ibid). Often it has been discussed that whether fetal reduction is morally ethical or not. Multiple implants and superovulation are more examples of another so-called miracle technology gone wrong (Raymond 1995, 131). There are various other factors which are highly responsible for making ART as a risky business , where

science indeed is helpful in finding solution to a particular issue but on the other hand it again represent women's body as some material on which experiments can be done.

3.4 Is NRTs the ultimate solution ?

A technological change which gave hope to so many people have become the topic of discussion where most of the time women's body becomes the subject of study and treatment. Each procedure of NRT is physically, mentally and economically exhausting. According to Raymond "A substantive right to my body means the body is more than a mere possession and raises the fundamental question regarding the relationship between my body and myself and myself to the class of women worldwide must have (Raymond 2005, 188). The autonomy over one's body has been one of the important questions raised by the advent of NRTs. Women who are going through these procedures have to face lot of hurdles, physically, emotionally and financially as well. Development of technology can't be gender biased, as it should provide solutions where sufferance should be less. For instance IVF is one of the most sought after infertility treatment, if it can be improved so that each patient can be 100 percent sure of conceiving then it will definitely solve the difficulty of many childless couples. Patients who were coming to the ART centers were in a hope that they will be able to conceive, which has bought a shift towards how people felt towards infertility. Earlier people used to think infertility as a bad luck or curse but technology has given birth to new ray of hope which supports their dream of having a child of their own.

According to doctors there are various patients who visited the ART clinics in their fifties or sixties who were coming to their clinic for having a child, most of the time a male child. According to Dr Priya Dahiya said that sometime patients who lost their male child due to untimely death, come for IVF for having a male child. In one such example elderly couple came for the IVF after their son died in a car accident. Similarly in Maulana Azad, there were many patients who have come for secondary infertility. The perception of infertility differs from nation to nation, for instance secondary infertility is major concern in India. The question arises that whether one child is not enough, or people are trying for other as they option. Son preference is yet another issue which makes the whole technological advancement dependent on society. Shildrick argues that opportunities offered by NRTs for body management in the pursuit of both the social utilities of bio power and the control of women are alarming in their widespread and increasingly manipulative procedures (Shildrick1997, 202). Infertility produces stigma and draws question on the whole concept of being a woman and it is further encouraged by NRT procedures. The term modern relates with technological advancement, whereas in the present scenario we are still stuck between accepting new ideas and leaving the old one. Infertility is seen as a disease and women who are suffering desperately want a cure for the issues. Those who

support the ARTs argues that reproduction is the basic right for any human being and technology provides the solution for it. On the other hand, feminist scholars explain that women desire many things, success in their careers, beauty, scintillating partners, yet only the desire for a child becomes a right. Feminist raise the questions about why that one desire is elevated above all others (Brazier 1998,75). There are various question which are left unanswered such as is technology is the only answer to childlessness, what about women who opt for motherhood in their late 30s or 40s, rights of child born to single parents and instead of viewing child birth as an extension to life are we seeing it as compilation of life. Science tries to gives us the solution to a problem, but problem is contextual according to the society.

3.5 Where it leave us then?

The battle between ethics and science is a long one and it continues to grow. Ethics are interested in creating a good man and a good society and science want to improve both quality and quantity of human beings. Childlessness has been more and more transformed into a medical problem through the availability of these technology. The experience of infertility as suffering cannot over the reproductive process (Have 1995, 16). With the advent of new technology, people should also ready for its side effects. So far technology and society are considered as independent entities, problem arises when there is an impact of technology on society. The advantage of the moral over the natural is that the natural phenomena are and must be as we discover them; moral phenomena have to do with intelligent activity which should be used as an instrument of accepting if good and rejecting if bad (Gittler 1941,373). When it comes to new reproductive technologies there is never ending dilemma between right and wrong. There are objections against choosing of skin colour or racial features of the children. The phrase ‘ designer children’ is often used pejoratively to describe the children of parents who are more concerned with fashion and pleasing themselves than with valuing children for the children’s own sake (Harris 1998,22). This is one such aspect of new reproductive technologies and there are many more which contribute to the ethical dilemma which these techniques are introducing. There lot of pressure and stake involved from both the sides of doctors and patients.

During an interview with the doctor of a private health facility (BLK hospital), the doctor expressed her concerned regarding the failure of the technique and reaction of the patients. Some of them refuse to believe that they were not able to conceive, while other find problem with the treatment itself. She further said that sometimes it becomes difficult for them as well to meet up with such an expectations.

There were many such cases discussed by the medical providers where they have to face the failure of the technique in a rude manner through patients. New reproductive technology has indeed find a solution for childlessness but on the same hand it has produce pressure to

produce result and both doctors and patients are on receiving end. Each technological innovation comes with a responsibility and if it is not dealt properly then it creates ripples in societal structure. In present scenario new reproductive techniques have proved to be fruitful for those who have been trying for years for a child but at same time it is also available to those people who might not be actually need of it. For instance couple having one child, there should be rule which states that they can adopt, if they a going for ne reproductive technique especially in public sector where there are limited resources it creates pressure on the existing machinery. Many scholars who have worked on the usage of technology also criticizes post menstrual women opting for new reproductive technology. Stigma regarding infertility is so prevalent that most of the people don't want to share their stories. Most of the time patients come to the clinics without even trying in a proper manner. Most important factor is the cost related to the technology which makes it difficult for lower economic strata to afford it.

When it comes to India, there is huge issue of sex selection which prevails at the time of conception. Patients dealing with secondary form of infertility wanted to have one more child, as they wanted a male child. Couples crossing the reproductive age going for IVF as they or their children want a male child. Any procedure of ART is not easy as it takes huge amount of efforts from both the side of patients and doctors. Then the issue of reproductive rights come where motherhood is seen as a compulsion not as a choice. If anyone see it as choice then they are seen as culprit. The whole notion of marriage, kinship and reproduction comes in the questionable area, if we see motherhood as a compulsory phenomenon in one's life. Over the period of time it has become a rat race where if within 2-3 years one cannot conceive they will consult a doctor. There is no issue in consulting but the question arises in any of the assisted reproductive technology that why people are opting for it, is having a child of their own is the only aim or it is a kind of societal pressure which asks them to have a child. With the advancement of technology we are also able to detect abnormalities in the child so that it can be aborted, then why we are terming disability as an especially able children. Marriage gives husband and wife right to have sexual intercourse and it is there duty to produce a child. Many Indian families still thinks that one can divorce his wife on the context of her bareness. When it comes to reproduction we are not being able to discuss on the right to reproduce and willingness to reproduce. There are many single and homosexual people who want to have child and many married couples who don't want them, so why parenthood should have criteria.

References

Archer Margaret S (2003). "Structure, Agency and the Internal Conversation". Cambridge University Press. United Kingdom.

Barner Barry (2000). "Understanding Agency; Social Theory and Responsible Action." Sage Publication New Delhi.

Bhradwaj Aditya (2016) .*Conception: Infertility and Procreative Technologies in India*. Orient Blackswan Private Limited, Delhi.

Briggs Laura (2010). Reproductive Technology: Of Labor and Markets. *Feminist Studies*, 36(2). 359-374.

Cahn Naomi (2013), "*The New Kinship, constructing donor-conceived families*". New York University Press, New York.

Carmeli Daphana Birenbum and Inhorn Marcia C. (2009). Masculinity and Marginality: Palestine Men's struggle with Infertility in Israel and Lebanon. *Journal of Middle East Women's Studies* 5(2). 23-52.

Cussins Charis (1998). Producing Reproduction: Techniques of Normalization and Naturalization in Infertility Clinics. In (Ed.)Sarah Franklin & Helena Ragona *Reproducing Reproduction :Kinship, Power and Technological Innovation (66-101)*. University of Pennsylvania Press. U.S.A

Donchin Anne (1986). The future of Mothering: Reproductive Technology and Feminist Theory. *Hyptia* 1(2). 121-138.

Franklin Sarah (1998), "Making Miracles: Scientific Progress and the Facts of Life". In (Ed.) Sarah Franklin and Helena Ragona *Reproducing Reproduction; Kinship, Power and Technological Innovation* (University of Pennsylvania Press, Philadelphia.)

George Annie (2002). Embodying identity through heterosexual sexuality – newly married adolescent women in India. *Culture, Health & Sexuality*. 4(2). 207-222.

Gaard Greta (2010). Reproductive Technology, or Reproductive Justice ? : An Ecofeminist, Environmental Justice Perspective on the Rhetoric Choice. *Ethics and Environment* 15(2). 103-129.

Harris John (1998). Rights and Reproductive Choice. In (Ed.) Harris John and Holm Soren. *The Future of Human Reproduction; Ethics, Choice, and Regulation*. (Clarendon Press. Oxford)

Hirschman Elizabeth C. (1991). Babies for sale: Market ethics and the new reproductive technologies. *Journal of Consumer Affairs*. 25(2). 358-390.

Jenkins Richard (1992). *Pierre Bourdieu*. Routledge Taylor & Francis Group London and New York.

Kane Anne E (1996). The centrality of culture in social theory, fundamental clues from Weber and Durkheim. In (Ed.) Stephen P Turner *Social theory and Sociology, The classics and Beyond* (161-180). Blackwell Publishers. Oxford U.K.

Krolokke Charlotte (2014), “ Eggs and Euros: A feminist perspective on reproductive travel from Denmark to Spain”. *International Journal of Feminist Approaches to Bioethics*. Vol 7(2). 144-163.

Lacey Huge (1999). *Is science value free ?; Values and scientific understanding*. Routledge Taylor & Francis Group London and New York.

Latour Bruno (1993). *We have never being modern*. Harvard University Press. Cambridge Massachusetts

Leff Joan Raphael (2010). The gift of gametes-unconscious motivation, commodification and problematic of genealogy. *Feminist Review*. 94. 117-137.

Parkin David (1985). Reason, emotion and the embodiment of power. In (Ed) Joanna Overing *Reason and Morality* (134-149).Tavisock Publications London and New York

Quiroga Seline Szkupinski (2007). Blood is thicker than water : Policing donor insemination and the reproduction of the whiteness. *Hypatia* 22(2). 143-161.

Ragone Helena (1996). Chasing the blood tie: surrogate mothers, adoptive mothers and fathers. *American ethnologist*. 23(2). 352-365

Rao Mohan (2016). The globalization of reproduction in India. From population control to surrogacy. In ed volume by Sarah hodes and Mohan Rao, *Public Health and Private Wealth, stem cells, surrogates and other strategic bodies*. Oxford Publication. New Delhi.

Have Henk AMJ ten (1995). *Medical Tehnology Assesment & Ethics Ambivalent Relations*. Hasting Center Report. Vol 25 (5). 13-19.

Ryan Maurya A. (2009). The introduction of assisted reproductive technologies in the “developing world”: A test case for evolving methodologies in feminist Bioethics. *Signs*. 34(4). 805-825.

Sarojini Nadimpally, Vrinda Marwah and Anjali Sheno (2011). Globalization of Birth Markets: A case study of assisted reproductive technologies in India. 7-27. <https://doi.org/10.1186/1744-8603-7-27>.

Shildrick Margrit (1997). *Leaky bodies and boundaries, feminism, postmodernism and bioethics*. Routledge London and New York.

Shore Cris, Abrahams R.G et al (1992). Virgin births and sterile debates: Anthropology and the new reproductive technologies. *Current Anthropology*. 33(3). 295-314.