

**ASSISTED REPRODUCTIVE TECHNOLOGY (ART) METHODS IN
ESTABLISHING ALTERNATIVE FAMILY FORMS: CHALLENGES AND
PROSPECTS**

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Abstract

Expansion of lineage through natural birth has remained a constant desire for all socially accepted couples in human history. However, in cases of reproductive constraints or infertility where biological or natural pregnancy does not get implanted, couples need to look for alternative mechanisms to realize their pregnancy and childbirth. Thus, the term “Assisted Reproductive Technology” (ART) refers to those methods that are used in noncoital, technically assisted reproduction where gametes are manipulated, or embryos are created outside the body. The various ART methods, though promote conception and induce pregnancy, come with several social, legal and moral implications. This research paper focuses on debates and discussions that revolve on an overall linkage of family achieved through ART process that is claimed to have disrupted kinship ties, descent and family lineage. It also aims to study the institutional constraints that are seen to be gender specific; womanhood and/or motherhood in any patriarchal society is extremely stereotypical and often raises debatable discourses among feminist and queer rights activist, and at the same time puts light on how the mechanism is in practice among single parent family formed either out of choice or death of the partner. ART methods in contemporary times are now widely in practice among different homosexual or non-binary gendered couples who equally want to establish family ties and parenthood. However, the entire process of ART being less cost-effective demands a heavy investment to achieve a desirable outcome. Rising concerns in terms of rapid mushrooming of fertility clinics and ART banks that create menace on the efficacy to provide quality results for celebrating parenthood is inevitable and forms a major focus area of the paper as well. The methodology for this paper is based on qualitative data, with the use of “non-probability” sampling with a sample size of 33 respondents due to time and other logistical arrangements.

Keywords

Assisted Reproductive Technology (ART), fertility, parenthood, family descent, kinship, gender identity.

Methodology

The research for this paper is based on qualitative data for wide and in depth understanding of the research area. This formed the primary data set for the research. The study has been conducted with the use of questionnaires through the survey method and virtual and face to face interviews were held as well. The sampling method used in this research is “non-probability” sampling. Narrowing it down further, in this research “purposive sampling” and “snowball sampling” have been used which falls under non-probability sampling. This is because the desired samples were pre-determined by the researcher based on area of interest, knowledge about the subject matter, gender identity, age and occupation to have a varied interpretational analysis of how the subject is conceived and put to words on an individual level. Snowball sampling helped the researcher have decent sample size for better analysis through selfless efforts of those samples that were available for contact and tracing thereby enhancing the in-depth study of the subject. The research being conducted had a sample size of 33 in total only due to limited timeframe and other logistical arrangements. The samples were analyzed and further interpreted by the researcher based on their knowledge and opinions shared through their narratives on the subject at hand.

Secondary data set in the form of articles, book chapters, news reports too hold a place in this research.

Introduction

Every facet of life is decided the day one is born whereby there occurs an unchangeable ascription of kinship ties and identity roles. Expansion of lineage through natural birth has remained a constant desire for all socially accepted couples in human history. However, in cases of reproductive constraints or infertility where biological or natural pregnancy does not get implanted, couples need to look for alternative mechanisms to realize their pregnancy and childbirth. For a society and human race to continue its existence there certainly is the need for kinship agents who can continue the lineage and to do so is one of the primary agenda behind human reproduction and childbirth. The various ART methods, though promote conception and induces pregnancy, come with several social, legal and moral implications. The primary element around which most debates and discussions revolve is its question on the purity of actual kinship

ties and if adopting such a mechanism is a threat to the protection of family and ancestral lineage, and practice of cultural incest, if any. Though these mechanisms help realize “parenthood”, with special reference to “motherhood” with the aid of known or unknown lineage partners, the child born and raised through such methods are as equals as those born out of natural pregnancy. Thus, the term “Assisted Reproductive System” or “New Reproductive Technology” means to refer to those methods that are used in noncoital, technically assisted reproduction where gametes are manipulated, or embryos are created outside the body.

Ever since the first test tube baby, baby Louise Brown was born in England in the year 1978, it proved to humankind that the mandate to have sexual intimacy between a heterosexual couple to conceive for a baby is not the only and ultimate truth and that pregnancy can now happen in a Petri dish, outside the womb and thereby without not necessarily having direct sexual intercourse. To the conventional understanding of having only two heterosexual partners who biologically reproduce their future lineage holders, the ART methods have presented an alternative image whereby partners involved in the entire gestation cycle has delimited its number of parents from two to close to ten numerically. These different typologies of ‘mothers’ and ‘fathers’ or largely as ‘parents’ include, genetic mother, carrying mother, nurturing mother, complete mother, genetic and carrying mother, genetic and nurturing mother, carrying and nurturing mother, genetic father, nurturing father, and complete father respectively.

Also, since it has been an age-old belief to conceive and have a child only after socially acceptable legal marriage between a binary gender or two heterosexual partners, womanhood or motherhood is a matter of greatest concern in any patriarchal society. More to that, women’s virginity, body, sexuality and gender identity are extremely stereotypical and often raises debatable discourses among feminist and queer rights activist. This is so because certain myths and gender stereotypes revolve around women’s infertility and inability to conceive for a baby in a biological or natural manner. At the same time however, a man’s infertility is mostly veiled from social purview and the blame is pushed being labelled as the woman’s infertility problem that has created a limitation on childbirth and extension of family lineage and kinship ties. Or in certain cases it would be no wonder to find out how a homosexual man would be put to the blames of being an ‘effeminate’ man owing to his infertility concerns in the broader sense of the term. Such areas have branched as an element on the socio-morale constraints pertaining particularly to womanhood who seek ART

benefits. However, with the wake of feminist march arguing on the rigid patriarchal domination and submission of women on men at all fronts, even such discourses are seen in their forums. Stereotypically formed conventional binary gender hegemony has put a limitation on those non-binary gender confirming or the homosexuals in easily having the freedom to feel parenthood using the diverse ART methods. Heteronormativity here need not be boxed as a pre-requisite to 'parenthood'. In rage of such limitations, it has been found out that there is a rage arguing that parenthood is more about freedom and choice rather than heterosexual compulsion of having kids in the finest of biological manner.

Literature Review

Amonker, R. G. et al. (2007) work focuses on the factors affecting fertility in India in the context of the 'Demographic Transition Theory' and the socio-economic development that is inversely related to fertility rates across Indian States. Developing countries like India sees children as economic assets and old-age securities. In the narratives on fertility reduction factors in India, women's or maternal education, family planning, increase in women's labor force participation, a decrease in infant and child mortality, knowledge of contraceptive methods, and ability to control the number of births is all seen as reasons as determining factors. Kaplan's case studies concluded that even children in preindustrial societies were a net economic liability, consuming more resources than they produced until adulthood and suggesting that the Wealth Flows Hypothesis was not a valid explanation of fertility. Increase in quality of children and quantity of children will become less salient through a modernized health system and increased education in prenatal and post-natal care.

Ardakani, Z. B. et al. (2021) work focuses on how the impact of third-party reproduction initiated through ART method(s) has led to several unintended consequences in the relationship between the family and kinship in Iran. Iran has been identified to have sanctioned practice of ART forms a new family structure while abiding by the cultural and religious rules. And that the child resulting from gamete donation will belong to his biological parent. Despite the persistent stigma of infertility in Iranian culture, ART have altered biological family structure by disrupting lineage. Conflict among donors and recipients over child's ownership, situation of 'double relatedness'

among donors who are blood relatives, claim by infertile couple of having produced biological offspring achieved through anonymous donors etc. are all inevitable.

Bailey, A. (2011) work focuses to argue for situating moral judgments about Indian surrogacy in the context of Reproductive Justice. She cites that in Western feminists' responses to contract pregnancy, it falls loosely into two interrelated moments: post-Baby M discussions and feminist biomedical ethnographies. Bailey notes that it is often assumed that Indian feminists will share Western concerns over baby-selling, the commodification of reproductive labor, contract pregnancy and alienation, the binding nature of contracts, and women's reproductive autonomy. Also, decisions most popular media coverage bolsters the global infertility industrial mission by framing surrogacy work in the language of autonomy, choice, and liberty. There is also concern raised in the context of the profit-driven infertility industry which cannot be trusted to follow the ICMR's 2008 draft bill on ARTs. Her work puts light on how women face common maladies such as anemia, malaria, and HIV/AIDS also indirectly increase chances of maternal death. They also face additional risks of falling into a cycle of multiple pregnancies in their efforts to have children who survive. Unfortunately, the persistence of gender-based discrimination in food, nutrition, and health care has increased anemia rates over the past ten years. Even some of the most basic health services are beyond the reach of most Indian women.

Baker, M. (2005) work focuses on how family life has been transformed with birth control, women's stronger presence in higher education and paid work, global labor markets, and greater emphasis on personal choice and individual fulfillment. research that suggests that heterosexual couples typically choose to use medically assisted conception to reproduce ordinary nuclear families that permit them to feel normal and socially included in a world that associates parenthood with such values as maturity, normality and adult. it has been found out that social research clearly indicates that procreation is considered intrinsic to heterosexual marriage, gender identity and 'normal'. However, parallely same time, these technologies also offer new opportunities for lesbian women to become mothers without the risk of unscreened sperm, to enjoy safer hospital conditions, and to avoid heterosexual. the study revealed how the inability of women to reproduce interferes with friendships and family relationships and makes them feel like social outcasts. Also, the research suggests that how women who remain voluntarily childfree continue to be perceived as morally flawed and mothers who adopt children are not always seen as real mothers. There have

also been claims where guilt and marital stress is attached as the husbands lamented that infertility and medically assisted reproduction had destroyed their sex life completely. In terms of cost effectiveness of the treatment, the husbands who were interviewed tended to discuss the high cost but most women tried to avoid answering the question about costs, saying that they had not calculated them and preferred to see the medical interventions as 'worth the money'.

Deomampo, D. (2013) work focuses on how transnational surrogacy in India is interpreted based on several interview schedules that were conducted with the surrogates. Her work reflected how Indian surrogate mothers take up a diverse set of roles and responsibilities, and in contrast the relative positions of the surrogate and the agent or caretaker have results in intraclass divisions that engender further stratification among women. The article overall does a critical analysis of transnational surrogacy as offered through reproductive tourism with a focus on the views and experiences of the women without whom gestational surrogacy would be impossible, to reveal how women express agency in the context of structural constraints and social inequalities. Narratives collected from the interview subjects namely, Antara and Nishi illustrate the unique contours of stratified reproduction in the context of transnational surrogacy.

Fasouliotis, S. J. et al. (1999) work focuses on how the rapid evolution and progress of the ART techniques reveal certain social issues that are attached to it alongside certain existing religious, cultural and social behaviors towards the techniques used. Across countries, professional bodies recommend the use of ART exclusively to legally married heterosexual couples or to couples in a stable relationship with 2 years cohabitation. However, the inclusivity of beneficiaries as single mothers or lesbian or gay couples is taking a form overtime. Recent societal changes enable women for delayed childbirth with initial importance given to personal career; age not viewed equally among men and women's older women is considered unable to have a child in comparison to older men's ability. Knowledge of the process involved in birth of the child conceived through ART raises a strong ethical question. Also, informed consent among donors and recipients and written consent among unmarried couples are another ethical area of concern.

Frohlick, S. (2015) work focuses on the phenomenon of Euro-American women as mobile social actors who bear a child out of their marital relations with local men in Costa Rica and the various material-relational effects of their reproductive decisions. reproduction. Kin relations formed through processes of international leisure travel and the geographical mobilities enjoyed by women

offspring and transnational residents moving between Costa Rica and countries in the global north were structured thoroughly by asymmetrical movement across national borders that reflect the governance of travel in late modernity. Cross-border procreation was a way for natural conception being championed over adoption and medically assisted pregnancy. As a result, travel as a regular tourist versus travel as a reproductive tourist, provided Euro-American women in Costa Rica with opportunities to move outside of the reproductive options within their home nation, which they felt were limited, and to explore other options as privileged mobile reproductive subjects.

Kelly, Sm et al. (2002) work that focuses on the Assisted Reproductive Technology has been astounding with significant clinical and embryological advances. The cryopreservation techniques used; intracytoplasmic sperm injection; In Vitro Fertilization and others however while treating infertility comes with several socio-economic and moral constraints that need to be surpassed. Newer developments like Preimplantation Genetic Diagnosis (PGD)IVM, new drug regimens etc. with the older techniques while in use draws on to the complications like cysts formation, infection or hemorrhage, iatrogenic OHSS, Ovarian Cancer, thromboembolism that are likely to occur. Development in the application has enabled higher pregnancy rates with multiple pregnancies that are controlled through limited embryo transfer. emotional and psychological stress encountered on success and failure in the use of ART is also inevitable.

Larijani, B. et al. (2007) work focuses on how in the field of gamete and embryo donation debates have existed for a long time on grounds of ethical consideration alongside the religious aspect to it. there are numerous ethical concerns about its indications, the recipients, donors, and children, the potential risks and safety, as well as payment options, commercialism or commodification, informed consent, confidentiality and disclosure, conflicts of interests, distributive justice, banking of the gametes and embryos, and the quality of services rendered. Confidentiality, disclosure and protection of privacy are key ethical issues accompanied by profound legal, religious, social and cultural questions. Surrounding banking lies a multitude of ethical concerns about appropriate informed consent, commercialization of banks, use and storage of gametes from deceased donors, disposal of unused embryos, quality of services rendered, safety, precise supervision and monitoring, prevention of transmission of serious diseases to both recipients and offspring etc.

Madeira, J. L. (2015) work focuses on the ART of informed consent where patients must sign lengthy consent forms for IVF procedures and embryo cryopreservation and disposition, and

potentially must complete other forms if they use donor gametes or opt for intra-cytoplasmic sperm injection (ICSI) or preimplantation genetic diagnosis (PGD). She notes that trust may shine even brighter than autonomy as a star at the center of the informed consent galaxy and that it is difficult, if not impossible, for medical practice to both effectively support patient decision making and successfully guard against legal liability. Her work also highlights how comparative assessments of these technologies can answer one of the most important, yet uninvestigated, questions in informed consent i.e. are consent documents inextricably linked to bureaucratic institutional interests and litigation protection in American culture, in cultures of practice, and in patients' perceptions to render them ineffective as compared to other mediums.

Neyer, G. et al. (2011) work focuses on the feminist lines of argumentation on motherhood and reproduction since the 1970s and the identification of shifts in their recurrent issues. The work puts light on how discourses on feminism show how ART has putrefied biological motherhood and altered the entire conceptual understanding of motherhood and reproduction. This technology enabled reproduction has not enabled women's reproductive freedom despite its eloquence of choice as said to be there in ART methods. It was argued that under all these circumstances, becoming mothers implies complying with systems which deny women the right to self-determined motherhood, and which exploit their maternity, while refraining from motherhood and motherly work becomes a means of resistance against these systems. ART has also enabled deconstruction of motherhood as mothers become decomposed into ovarian, uterine and social mothers. This fracturing of motherhood corresponds to what many feminists regard as the goal of ART. Feminists maintain that this decomposition of motherhood devalues motherhood and women and creates new and unprecedented cleavages and exploitative hierarchies among women. The accessibility of ART especially in the form of prenatal diagnostics, has also increased the pressure on women to produce the 'perfect baby', of the desired sex or quality thus, making choice turned into a eugenic obligation.

Patel, T. (2013) work focuses on the trauma of infertility experienced in Indian society and efforts of women to access ART especially in an era of economic liberalization and inequitable access in public health care. Infertility treatment tries to circumvent the infertility condition rather than promising a cure for infertility. It calls for a multiparty intervention to enable one off conception and birth. Women's infertility conditions like blocked fallopian tubes, poor ovarian functions, etc.

and even more serious medical impairment, such as a missing uterus or egg production are treated through donor eggs and/or surrogacy services. Social stigma on infertility is comparatively less than that faced in India. The processes of privatization and globalization have a strong bearing on enhancing the spread of ARTs in India since the mid-1990s.

Taylor, B. (2005) work focuses on how reproductive technologies in their aim in treating infertility has blurred the boundaries between biological and social basis of kinship. The varied ART methods that challenge cultural constructions of parenthood and kinship are interpreted as ‘collaborative reproduction’ as given by J. Robertson. The techniques used have separated and distinguished between the genetic, gestational and social aspects of reproduction with ten varied terms denoting fatherhood and motherhood. The question of ‘who is the child’s real father and mother?’ are quite debatable for ARTs have deconstructed ‘motherhood’ as unified biological process and children’s kin are determined solely through their parents. It has also enabled dead people to reproduce through cryopreservation techniques and preserve family ties. However, with eggs donated by an infertile women’s sister in continuing family bloodline the practice of involuntary ‘Incest’ draws to another dimension of debate over kinship preservation.

Findings & discussions

Ever since the inception of humankind, women have been largely considered sexually important due to their natural ability to conceive future generations. However, this aspect has largely been a subject of strong scrutinizing and suspicion, especially in a patriarchal society. To have insights on this aspect as part of this research, the respondents were asked what their opinion on reported cases of female infertility are living in a patriarchal society where a woman’s body, sexuality and gender identity is brought into suspicion and scrutiny due to her inability to conceive and towards biological childbirth. Majority of the respondents stated that women face the brunt of such processes and are expected to give birth because of a supposed ‘natural’ function of their body, which ultimately makes no sense and contributes to their bodily limitation. Overtime this leads to severe psychological stress in the minds of the affected woman and makes the situation go from bad to worse as the case maybe. Such a regressive mindset denotes glorification of patriarchy and that needs to change as mentioned by the respondents.

The Assisted Reproductive Technology methods(s) through its treatment on infertility and childlessness comes with certain social and moral limitations both on the part of the individual or couple who aims to seek for the benefits of the mechanism and the larger society as well. While being asked to the respondents to see their opinion if the ART method(s) does or does not disrupt the lineage and morality of the child who is born using ART method(s) came with a mixed set of opinions. The respondents said that in most cases of ART method(s), genes from at least one parent are infused in the child's birth and that the parents only had to take the help of a technologically oriented reproduction tool to have a baby. Therefore, it cannot be said to have disrupted family's lineage. Also, that the lineage of the family can be calculated according to various means through the multitude of ways of calculating descent and the morale of the family does not matter in reproduction, which involves individuals and their decision to reproduce or give birth to a child. The procedure involved in the birth of a child is not relevant to say in terms of her/his/their morality and so there is no space for investigation of disruptions if any. The morality of the child involved in the ART case is something that has its relation to the cultural and moral lessons of life, how a child is socialized post birth within and outside of the family. The respondents showed concern on the development of a healthy fetus and birth of a healthy baby which is more important and that ironically it is morally inappropriate to discourage couples or individual who seek to be benefited by the services of ART mechanism. That individuals with actual or direct blood relations can cheat someday so it's not right to say that using other methods of reproduction may disrupt the lineage or morality of the family. Some opined that lineage though has a genetic aspect to it, cultural conditioning can produce the same effect in terms of maintaining the hereditary qualities that are beyond biological traits. There have also been responses recorded where the respondent feel that lineage is an outdated, patriarchal construct and holds no much personal importance. Also, as recorded, failure in conceiving even through ART method(s) could be very harrowing at times for the family especially the women who suffer a lot both physically and mentally and therefore, concerning more and more on such aspects owes no severe importance over successful implantation of a fetus on the womb of a woman.

On the other hand, a section (relatively less) of the respondents about the question at hand opined that the use of ART methods disrupts consanguineous lineage but does not necessarily disrupt the morality of the family. They were also of the opinion that there would be difficulty in the long term in tracing one's lineage with the use of such a method. Few respondents had limited to no

knowledge in this regard and therefore could not give satisfactory response that would otherwise have elevated the assessment and truly exploration as part of the study.

To investigate if children born using ART method(s) and those born biologically are same or different in any kind, all the respondents greatly opined that child born either way are the same. In their view, a child is considered a child because of her/his/their age and not for the process involved through which they came to this world. Interestingly, a respondent mentioned that until and unless any other person tells us that the child is born not biologically but with the assistance taken by her/his/their parent through the ART method(s) can we know about it. This is largely because a child's exteriority cannot reveal the way of its birth. Such an aspect should never be judged or discriminated against in any form, as doing so with a child born using ART method(s) might overtime affect its psychological aspect in life. From a scientific procedural standpoint, since the methods employed in reproduction whether traditional or ART - lead to the same cascade of biological processes leading to the development of a fetus, there is no functional difference between the methods. Being born not from the vaginal canal but initially in the medical lab at the hands of the doctors, will cause no such difference to the baby. A section of the respondents believed that more importance be given to the health aspect of the baby born in either form. It is true that babies born using ART method(s) have certain complications and such aspects need to be addressed more.

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response that would otherwise have elevated the assessment and truly exploration as part of the study.

In a patrilineal society where lineage which is of ascribed status moves from generation to generation through the fraternal line, this can be a subject of challenge and non-conformity for those children born using ART method(s) adopted due to male infertility. On being asked to the respondents if a child born using ART method(s) in cases of male infertility in a patrilineal society can challenge not to adopt the lineage of the social father and instead adopt the lineage of their choice, a mixed set of responses were received on the same. A host of the responses said that lineage in such cases can be adopted as per one's own will stating that let lineage be more a matter of personal preference and freedom. It is subject to family decision and might vary across cases, therefore, generalizations made are not appropriate in this regard. It opens new horizons for other gender-oriented persons and the focus should be on 'guardianship' of the child born. Another set of respondents opined that adopting alternate lineage pattern other than that of the social father might affect in the smooth running of the society due to lineage dysfunctions. The social father too is the father and in most cases of male infertility, the biological father is mostly kept secret and the respondents think it appropriate and that is how things should be. It has been lamented to be unfair and a point for confusion too. A relatively critical analytical viewpoint received was that the child may choose to adopt another lineage, say of his biological father, but the question that ponders deeply for analysis is that if the biological father will want to accept the child or otherwise. Simply adopting another lineage by one's own choice is not as easy as it seems as it comes with other implications.

The conventional social understanding of a family form for centuries has been a family form of two socially married heterosexual adults cohabiting together with the aim of biological procreation. However, with the rise of feminist and queer ideologies the conventional family form has been primarily challenged with homosexual or queer couples now aiming to establish a family form of their kind. The respondents on being asked about their opinion is whether families should be confined to stereotypical heterosexual relationships, there were a mixed set of opinions derived. Most of the respondents opined that family is a space of expressing love and warmth irrespective of an individual sexual orientation and therefore must be accommodative to all kinds of family forms irrespective of what someone feels, thinks or believes. There is a call for a more liberal than

a narrow-minded society. The respondents were also of the view that a family not only talks about biological reproductive family but also the concept of chosen family.

Heteronormativity and patriarchal mindset marginalize the non-binary community more and make their struggle even harder in this regard. In some of their view they believed that a man is a father, and a woman is a mother and not otherwise and that the biological facts of both cannot be denied. They opined that families based on heterosexual relationships tend to be more stable than those based on homosexual relationships. The distinct roles played by a female-mother and a male-father are essential in the overall development of a child and in their socialization or conditioning. They viewed that as a child's early socialization starts from family, particularly the parents, they believed that for an individual to grow and become part of the community, the influence of both the father and the mother is important because it allows them to understand life from two very different perspectives i.e. male or father figure and female or mother figure perspectives which will condition them for a harmonious coexistence in a healthy environment. Living in a progressive and scientific society where anything is possible, technologically enabled parenthood should not be limited to a section of society exclusively. The respondents also claimed that people's gender identities are irrelevant to their ability to be good parents to acquiesce to societal pressures to accept the institution of marriage. In their interpretation, Indian laws are either ambivalent or in some cases hostile to such scenarios, and there should be an aggressive push to amend said laws. A section of the respondents opined that in some cases where individuals do not wish to enter the institution of marriage or those who aspire to limit to singlehood- they should not be disallowed from establishing a family with children conceived by ART methods. Family is something which is personal and based on love and respect. An individual with non-binary gender identity is independent to choose their own family.

Parenthood has been understood in the greatest sense as the primary aim for a socio-legally married two adult heterosexuals cohabiting together. On being questioned to the respondents about their opinion if ART based parenthood be considered same or different from biological parenthood, majority of the respondents opined that parenthood achieved either way is the same. Parenthood is more about being able to give adequate love and support to the child and to the family at large rather than focusing on its mode of attainment. Societal norms based on patriarchal and misogynistic paradigms only look at parenthood as ownership of a product of a reproductive

process. This is harmful and hinders the ability of individuals to move beyond such parochial constructs and choose happiness for themselves. Therefore, ART based parenthood should be actively promoted.

Women's infertility often leads to stigmatization and marginalization of women among the in-laws especially as well as by mainstream society. It is often considered that a woman is limited to becoming a mother biologically as well as "naturally" and not through any artificial means in second and third world countries. This suspicion is often attached to her history of childlessness, body counts, higher educational qualification, hard working condition etc. This marginalization due to their lack of biological childlessness is always subjected to scrutiny and harassment, bullying and in some cases even abuse. This notion of responsibility is archaic and goes against the scientific understanding of biological processes in human beings. The prejudice is entirely socially generated and therefore almost all the respondents see such aspects as shameful and call for urgent change of social perceptions and understanding on women's body and sexuality and the dominant gaze attached altogether.

Male infertility, however, has been observed to be kept as a latent reality especially in a patriarchal social order. To have interpretations and opinions of the respondents on the aspect of hidden male infertility and the blame that there upon gets lamented on the woman involved in that very heterosexual relationships had insightful points. As opined, such an offense is done because when a male fails to contribute to the natural or the biological process, there is a stigma being attached to manhood or the male body, a kind of semen anxiety is created i.e. loss of manhood and therefore the woman is being blamed for its inefficiency as they hold the submissive position in the society. Therefore, what is expected from within and across is equal acceptance and eradication of shame and stigma for a dignified living.

In today's time with the easy accessibility of OTT platforms and even movie theaters, it has been observed that movies and series are now coming up on themes of ART. To know the opinion of the respondents on this aspect, respondents were asked if they think it is the right way to portray the importance and need of different ways of modern-day reproduction through movies and series. Most of the respondents feel that it is a great concern being shown through the entertainment industry to such a sensitive topic on both big and small screens. The respondents feel that such portrayals can raise awareness, provide representation, and promote understanding of diverse paths

to parenthood. By showcasing the experiences and challenges faced by individuals or couples using assisted reproductive technologies, these media forms contribute to a broader conversation about reproductive choices and help normalize alternative routes to starting a family. In their opinion although depictions of ART in popular culture might not always be scientifically or sociologically correct, they do play a significant role in creating cultural awareness. It might not be the right way, but it can be one of the ways. A few feel that 'No', such portrayals are not right and that things flowing in a natural way is more acceptable and respected than having a kind of a force promotion. A few others have not watched many movies of late which have dealt with this subject except one or two. Most of the movies on this theme that they have watched have been lighthearted and comedic. They also feel that it is not the only sufficient way to deal with public awareness, but it is a necessary step in the right direction in most cases. They think that the narratives require significant modifications and rearrangements in a society so steeped in regressive modes of thought.

Economic instability acts as a major hindrance in achieving ART. Majority of the respondents believed that in terms of seeking for the services and benefits of the ART method(s), a huge sum of money needs to be produced by the aspiring individual or couple as the services are limited in terms of public hospitals and medical centers. Having less budget restricts them from celebrating parenthood. A good amount of money is involved in these medical procedures to be followed and the surrogate mother needs to be cared for 9 months which requires an extra budgetary implication that one needs to bear. In a country like India where people struggle to afford basic medical facilities which is a basic need for a human being, investing their capital on such a costly affair itself restricts them from breaking the shells of childlessness and their infertility. However, response was also received on lines which stated that not all ART methods create an economic disability as artificial insemination could cost less than test tube babies or other costlier processes of ART. What needs to be focused is the governmental address this concept of technologically enable reproduction to be cost effective by bringing it under their medical schemes and policies and availability of the services in public medical spaces.

In today's time especially in the urban spaces there has been the rapid mushrooming of fertility clinics and ART banks that at some point in time create a menace to the aspiring beneficiaries of the ART method(s) as it might lead to quality deterioration of the same. On being questioned to

the respondents on this aspect, there was a mixed set of responses received. A section of the respondents feels that there is a lack of adequate regulation on the fertility clinics and ART banks and that it needs to be regulated with utmost priority. Lack of regulation as well as control over the procedures can very often lead to medical malpractice and can pose a threat to the health of the parents and the child and raise severe ethical concerns. In the name of providing hope to childless individuals and families, many rackets and scams have come up. The increasing commercialization of these services can prioritize profit over patient well-being, potentially compromising the overall quality of care and the emotional experiences of individuals or couples seeking parenthood.

Conclusion and the way forward...

The coming of Science and Technology has revolutionized the whole of humankind to an unprecedented rate with its contribution to all aspects ranging from health to industry. It has made it possible for things to become a reality which otherwise were not in the capacities of the human taskforce. The application of science and technology on human reproduction thereby treating human infertility issues has been instrumental in shedding hope for family life and continuation of legacy holders and ancestral heritage. However, ever since the success of the first case of ART born baby was recorded, the procedure treating infertility and childlessness has led to several socio-economic, cultural and ethical concerns. Despite the desire to take up the ART treatment, most couples or individuals are unable to due to the treatment being not cost effective. Here is where a government or non-government intervention plays a greater responsibility in ensuring cost effectiveness and greater accessibility by all sections and classes of people. Society needs to evolve in terms of its understanding on the physiological condition of those affected by social exclusivity and stigmatization due to the problem and needs to accept cases of ART with greater ease.

Parenthood is to be considered more a matter of personal choice, love and happiness. But misuse of such a treatment which is recorded in recent studies cannot be encouraged as it creates scars on the good fortunes that the treatment enables. Surrogate mothers for the lust of financial aid and support in heavy sums by the aspiring parents tend to carry a baby irresponsibly and without adequate legal support and such things need to be stopped. Organizations and activist groups working of family, procreation, gender and sexuality need to work on mass mobilization on the

support system that the ART treatment enabled for sexual infertility and childlessness and a greater inclusive acceptance at the larger social level. Legal support through existing ART guidelines and the act need to be strongly enforced to ensure healthy living and family life of all concerned. Alternative parenthood be the option available for those who are in dire need of the benefits provided and expand their family structure and live the life of a parent catering to the care, love and affection of the child born and be raised to be a sensible and responsible social being contributing greater efficiency in the future as an asset, a human resource. Such services have thus benefited the non-binary or gender non-confirming from being a parent not through the commonly held practice of child adoption but through a more refined and truly biological process of childbirth and parenthood in an alternative way significantly different from the conventional form of achieving parenthood.

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