CHAPTER I
INTRODUCTION

Parenthood is one of the major transitions in adult life for both men and women. Fertility has been one of man’s desired attributes since the beginning of recorded history and remains a driving need for young couples today. Reproductive health implies to individual’s right to reproduce and freedom to decide when and how often. This right has been enshrined in United Nations Declaration of Human Rights, Article 16:1, which states that “Men and women of full age, without any limitation due to race, nationality or religion have a right to marry and found a family.”

World fertility has declined dramatically in last 50 years. Although fertility in developed countries have been decreasing to very low levels until 1970 and mid 1980, however, Asian countries experienced different fertility trends in the last 50 years. Today, different regions in Asia are experiencing varied fertility levels. Fertility is one of the major life events which affect many aspects of household life like mothers and children health.

Infertility however, continues to be a major worldwide problem, where infertile couples focus their attention on what they have failed to accomplish to conceive and soon start neglecting other goals and needs in their lives. Infertility exerts an enormous toll on both the affected individuals as well as the society. Couples in their most active and productive years are distracted by the physical, financial and emotional hardships of this disease. For these couples, infertility is more than a disease; it is a devastating life crisis which can adversely influence their general health, marriage, family relationships, job performance and social interactions. Couples experience stigma, sense of loss and diminished self esteem in the journey of their infertility. The burden of infertility includes psychological, social and physical consequences such as anxiety, depression, helplessness, marital intimidation, abandonment, physical violence and financial burden.
BACKGROUND OF STUDY

Infertility has been recognized as a potentially serious, costly and burdensome problem for affected families. It is a medical circumstance that not only has health implications for those involved but is also a condition linked to individual human rights. The international conference in Bangkok (1988) described infertility as a global public health problem with physical, mental and social dimensions. International conference on population and development (ICPD) in Chicago (1994) mentioned infertility as a serious injury in reproductive health.

Definitions of infertility differ, with demographers tending to define infertility as childlessness in a population of women of reproductive age, while the epidemiological definition is based on "trying for" or "time to" a pregnancy, generally in a population of women exposed to a probability of conception.

The medical/clinical definition (from WHO) refers to infertility as a “disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse”.

According to National Institute for Health and Clinical Excellence Guideline 2004 “infertility is defined as failure to conceive after regular unprotected sexual intercourse for 2 years in the absence of known reproductive pathology.”

As per the American Society for Reproductive Medicine, “infertility is a disease defined by failure to achieve a successful pregnancy after 12 months or more of regular unprotected intercourse, however if female partner is 35 yrs of age or older time period is reduced to 6 months of regular unprotected intercourse.”

Infertility can be classified under two categories:

1. primary infertility
2. secondary infertility

As per definition given by WHO “Primary infertility is defined as the inability to become pregnant (or have a child) despite actively trying for a certain number of years” whereas secondary infertility is termed as “inability to become pregnant (or have a child) despite actively trying for a certain number of years and had been pregnant in past.”
Infertility has no limits. It exists in every culture, in different social classes in all over the world. Prevalence of infertility varies depending on the definition, i.e. on the time span involved in the failure to conceive.

Since the early 1950s, demographic surveys have shown a steady reduction in birth rates in all European countries, with non significant variations between regions and social classes. Approximately 15% of population is affected by infertility in high income countries and this percentage is even higher in low income countries with ranging between 9%-30%. \(^{10}\) (Figure 1.1)

![Fig.1.1. Percentage of Women Aged 25-49 years with Infertility, By Region, 1994–2000 (according to data collected from WHO website).\(^ {10}\)](image)

As of mid-2007, based on 25 population surveys sampling 1,72,413 women it was estimated that 12 months prevalence rate for infertility ranged from 3.5% to 16.7% in more developed nations and from 6.9% to 9.3% in less developed nations with an overall estimated prevalence of 9%. Substantial geographical differences in the prevalence were noted, and these differences were largely contributed by different environmental, cultural and socioeconomic influences. \(^ {11}\)

Comprehensive information in developing countries regarding infertility prevalence in four developing regions that is Sub-Saharan Africa, North Africa/ West Asia, Central Asia/South and Southeast Asia, Latin America/Caribbean is provided by DHS Comparative Report No.9. In view of DHS information gathered between 1995 to
2000, the evaluated prevalence among women in age group 25-49 yrs for primary infertility was between 1.5% and 2.9%, where as for secondary infertility, it was from 12.7% to 30.2%. Highest rates were reported in Sub-Saharan Africa. As of mid-2002, it was estimated that more than 186 million ever-married women age 15 to 49 yrs in developing countries (excluding China) were infertile because of primary or secondary infertility.\textsuperscript{12}

In a systematic analysis of 277 health surveys revealed that primary infertility prevalence among child bearing women varied by region in 2010 from 1.5% in Latin America to 2.6% in the North Africa/Middle East region. Highest infertility prevalence was South Asia, Sub Saharan Africa, North Africa/Middle East and central/Eastern Europe and Central Asia. The prevalence of primary infertility declined 0.06 percentage points in South Asia. In 1990, Sub Saharan Africa and South Asia had the highest prevalence in primary infertility and in 2010 they were 4\textsuperscript{th} and 2\textsuperscript{nd} highest in seven regions respectively.\textsuperscript{13}

The prevalence regarding primary infertility within the Sub Saharan Africa region varied (figure 1.2).\textsuperscript{13} It was lowest in East Africa and Southern Africa. Primary infertility prevalence also varied within Latin America region: some Caribbean countries had prevalence of 2.5% or greater in 2010 where as Central Latin America had prevalence of 1.6 % or less.
The prevalence of secondary infertility ranged from 7% in the high income region and 7.2% in the North Africa/Middle East Region to 18% in the central/Eastern Europe and central Asia Region (figure 1.3). One in every four couples in developing countries were found to be affected by infertility.

**Fig 1.3: Prevalence of Secondary Infertility among Women, In 2010**

Facts from a study in 2010 revealed that 1.9% of women aged 20-44 yrs 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).

Infertility estimates (primary and secondary) calculated at the end of the reproductive span of females have been found to be eight percentage in India, 10% in Pakistan, 11% in Sri Lanka, 12% in Nepal and 15% in Bangladesh.

**INDIA**

Based on the census reports of India for 2001, 1991 and 1981, researchers showed that infertility in India has increased by 50% since 1981. The marital infertility rate has gone up from 11% to 16%. The WHO estimates the overall prevalence of primary infertility in India to be between 3.9 to 16.8 percent. Research studies quote that 25% of total couples suffering with infertility are in India alone.
As per the DLHS – 3 survey in India, around 8.8% of currently married women in the reproductive age group had infertility problems, with wide variation ranging from 14% in West Bengal to just 2.5% in Meghalaya. At the national level, around six percent women have primary infertility whereas two percent have secondary infertility. It was found that 6.7% women experienced or facing primary infertility. Women belonging to poorest wealth quintile, Sikh religion, scheduled caste, getting married before 18 yrs of age and having less than five yrs of marriage have high prevalence (>7%) of primary infertility.\textsuperscript{19}

The prevalence of infertility was found to be highest in Bihar (12.5%) followed by Chhattisgarh (11.4%), Uttar Pradesh (10.2%), Jharkhand (9.5%), Odisha (7.6%) and Madhya Pradesh (7%). Prevalence of infertility was found to be more among women aged 30 years and above. In Bihar, Odisha and Chhattisgarh, the prevalence of infertility is found to be more among women aged 30 - 39 years compared to women aged 40 - 49 years, however the prevalence was found to be more in women aged 40 - 49 years in Uttarakhand, Rajasthan, Uttar Pradesh, Jharkhand and Madhya Pradesh. (Table 1.1) Prevalence of infertility was higher in rural than in urban women in all states except Madhya Pradesh.\textsuperscript{18}
### TABLE 1.1
Prevalence of Infertility among Currently Married Women Aged 15-49 Years In India and States, 2007-08

<table>
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<tr>
<th>Sn.</th>
<th>India/States</th>
<th>Prevalence of Infertility</th>
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<tbody>
<tr>
<td>1.</td>
<td>Meghalaya</td>
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<td>2.</td>
<td>Arunachal Pradesh</td>
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<td>Andaman and Nicobar Island</td>
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<td>7.</td>
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<td>8.</td>
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<td>9.</td>
<td>Dadra and Nagar Haveli</td>
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<td>Chandigarh</td>
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**Source:** India 2014: Population and Development

Several of the Indian states, many of them as big as the popular countries in the world, such as, Andhra Pradesh, Himachal Pradesh, Delhi, Tamil Nadu and Maharashtra have been experiencing a dramatic and unprecedented fertility decline, reaching below replacement level of Total Fertility Rate.
According to Delhi IVF Fertility Research Center, the gravity of the problem can be assessed by the fact that almost one in six couples in the metros have trouble conceiving on their own and need treatment.

In Haryana, 11% of married women aged 15 - 49 years have infertility problem. District wise distribution of prevalence showed highest incidence in Kaithal (15%) followed by Panipat (14.9%). Overall prevalence ranged between 7.3% to 15% (Figure1.4) It has been reported that in all districts of Haryana one in every ten ever married women have infertility problem including primary and secondary infertility. Among currently married women aged 20-49 years, who have been married for at least five years, two percent were childless and among them 1.6% had problem in conceiving. Among the ever married women between 40-49 years, 0.9% of them were childless. Among currently married women aged 20-49 years, childlessness was high among the women with 10 or more years of education (2.2%), 10 or more years of education of husband (2.2%) and low among non-literate women (1.8%), women whose husbands were non-literate or less educated (1.9%), and women from poorest households (1%). Among women who had primary and secondary infertility, 89.4% and 86.1% had sought treatment respectively. More than 90% women who had infertility problem took treatment in Hissar, Gurgaon, Panchkula, Kurukshetra, Panipat, Rohtak, Sonipat, Ambala, Faridabad and Yamunanagar.21
High prevalence of infertility may be explained through contributing factors or cause of infertility which varies due to cultural and regional differences.

Causes of infertility can be grouped under three general sources: physiological dysfunctions, preventable causes and unexplained issues. More than one fifth (20% - 30%) of infertility cases are explained by physiological causes in men, 20% - 35% by physiological causes in women and 25% - 40% of cases are because of a problem in both partners. In 10% - 20% no cause is found. Contributors to infertility can be anatomical, genetic, endocrinological and immunological problem. Physiological causes of infertility include: tubal blockage, abnormal ovulation, congenital malformation and endometriosis. Male factors include issues with sperm counts, motility and quality and ejaculatory dysfunction. Unexplained factors can emanate from the male or female. In addition to the core prevalence of infertility due to physiological conditions, additional cases were caused by the incidence of preventable condition such as infection, life style factor, advancing maternal age and environmental and occupational hazards.
The causes of infertility vary from country to country and in different cultural, environmental and socioeconomic groups. Hypothalamic-pituitary-ovarian axis disorders with anovulation are commonest causal factors in Kuwait. On the other hand, tubal factor infertility related to infections is more common in Africa, South America and India. In developing countries most common cause of primary and secondary infertility is infectious disease and subsequent damage or blockage of the fallopian tubes. In Sub Saharan Africa up to two thirds of infertility in nulliparous women where as up to one third of the infertility in other parts of the developing world and up to one quarter in the developed world is reported due to tubal blockage. Other infections and parasitic disease such as pelvic tuberculosis, schistosomiasis or malaria can also cause infertility.

Sexually transmitted infections such as Chlamydia and Gonorrhea are also most common preventable causes of infertility. Undiagnosed or inadequately treated Chlamydia and Gonorrhea in women can lead to pelvic inflammatory disease (PID) which can lead to infertility. Chronic Chlamydial genital infection can lead to infertility in men. As per estimation, 40% of women in developed countries with inadequately treated Chlamydia developed PID with 20% of those ending up in infertility due to tubal scarring. These rates could be higher in developing countries.

Tuberculosis is another major cause of infertility in both men and women in Indian subcontinent. In a study of women with infertility and amenorrhea/oligomenorrhoea 68% of women reported past history of tuberculosis, where as among women who were coming for assisted reproduction prevalence of genital tuberculosis in tubal factor infertility was 49%.

A diverse group of issues such as obesity, weight gain and loss, eating disorders, malnutrition, use of nicotine, alcohol or caffeine are other preventable causes of infertility. Though these factors are important but their effects on infertility are considerably less than those of infection. It is reported that abnormal weight gain reduces fertility and decreases time to conceive in women with a BMI less than 19 and more than 25. Where as in men, BMI less than 20 or greater than 25 has been associated with reduction in sperm quality. Use of nicotine in men, negatively affects sperm production, motility and morphology where as in women, the constituents of cigarette smoke may affect the follicular microenvironment and alter
hormone levels in luteal phase and fallopian tube contractility. \(^{30}\) Caffeine and alcohol consumption has been reported to prolong the time of pregnancy although mechanisms are unclear. Caffeine has been associated with higher levels of early follicular estradiol (E\(_2\)) in women. \(^{30}\) Chronic use of alcoholic beverages in men has been reported to reduce libido, adversely affects hormones and sperm production on testes. \(^{31}\)

Exposure to certain environmental toxins have been shown to adversely affect reproduction. Exposure to radiation, pesticides and solvents has been associated with sperm values below normal. \(^{32}\) Psychological stress may reduce reproduction in females via menstrual disorders due to interference with normal function of the hypothalamic - pituitary axis there by altering gonadotrophin secretion and inhibiting ovulation, where as in men it reduces sperm count, progressive sperm motility and normal sperm percentage.

Advanced maternal age is another common cause of infertility in the developed world. With increase maternal age, ovulatory function and egg quality decrease while there is increased risk of disorders such as endometriosis. As women delay conception to pursue education and vocation, they face potentially increased risk of infertility.

There are several types of treatments available for infertility, depending upon the nature of the infertility problem. Infertility treatment can be either traditional or biomedical. Important techniques include fertility drugs, artificial insemination, intrauterine insemination and other high technology also known as Assisted Reproductive Technologies (ARTs) like donor egg or sperm, In Vitro Fertilization, Intracytoplasmic Sperm Injection, Donor Eggs and Surrogacy.

Multiple factors affecting the success rate of ARTs includes age, diagnosis, length of infertility and number of previous IVF attempts. There have been over one million babies born as a result of ARTs since the birth of first baby born as a result of IVF in 1978, with Europe leading the world in terms of number of treatments. Among the couples who seek medical advice, less than half the couples actually receive any specialist infertility treatment. These estimates are true for both in countries where generous access to treatment, such as Denmark where treatment is provided and countries in which access is very restricted like Gambia. \(^{14}\)
The European Society of Human Reproduction and Embryology (ESHRE)\textsuperscript{33} has estimated that at least 1500 IVF cycles per million people are needed to meet demands. Denmark and Australia has been reported to be first and third in IVF treatment ratios with 1251 and 954 IVF cycles per 100,000 women of reproductive age respectively. New Zealand was lower at 328 while the United Kingdom had 326 and interestingly United States had lowest IVF treatment ratios with only 237 cycles per 100,000 women of reproductive age.\textsuperscript{34}

Despite the potential of ARTs, there is considerable debate over the cost and accessibility of infertility treatment. Although ARTs offers hope to the infertile to bear a biological child, these are not available usually at public health facilities but are increasingly being offered at private clinics. Cost of ART treatment varies between $2,000 to $15000 per IVF cycle in different countries.\textsuperscript{35} As services are expensive and highly commercialized, the high cost of ART tends to create a situation of exploitation of infertile couple. Moreover, IVF success rates depend on a number of factors including age, number of embryos placed and cause of infertility with average success rate of less than 30% for every egg retrieval performed.\textsuperscript{36}

Infertility treatment has its potential risks. In addition to the risks related to any invasive medical procedure, ovarian hyperstimulation syndrome caused by ovulatory drugs can itself be life threatening. Among women who underwent ART antenatal health and birth outcomes are worse than those who got natural conception. In case of successful treatment commonest risk is the increased risk of multiple births. Neonatal complications such as prematurity, low birth weight and high infant mortality have higher rates in multiple births. Mothers of multiple babies also suffer increased complications like hypertension, anaemia, postpartum hemorrhage etc. Research has shown that the use of ICSI with IVF, in certain cases of male infertility may enhance the risk of infertility and some sexual birth defects among male children. This risk however, is still low (less than 1% conceived with IVF-ICSI).\textsuperscript{37} Harvard School of Public Health reported that women aged 35 and older who took fertility drugs were twice as likely to have a child with a mild ASD as women in the same age group who used no infertility treatment.\textsuperscript{38} These technologies are rapidly mushrooming in pronatalist developing societies, where children are highly valued and desired, parenthood is culturally mandatory and childlessness is socially unacceptable.\textsuperscript{39}
In India along with allopathic system of medicine, other Indian systems of alternative system of medicine (Ayurvedic, Yoga, Unani, Sidha, Homeopathy, herbal, traditional medicine, religious/faith healing) are also used by couples for infertility treatment.\(^{16}\) Couples seek varied traditional method and religious practices, including visits to temple, observing tantric rites, wearing charms, participating in rituals and visiting astrologers.\(^ {18}\)

Childlessness has become an increasingly important public health concern. Demographic data suggests that infertility is a significant issue throughout the world. This includes ARTs which are mostly unaffordable, of varying cost and success rates. A lot of research has been devoted for the advancement of procedures, but couples suffering, personal disappointment and social stigma of infertility cannot be ignored.

**NEED OF THE STUDY**

Reproducing and upbringing of children has been a part of life since the beginning of mankind. At the International Conference on women held in Beijing in 1995, “the right of men and women to…the best chances of having a healthy child” was endorsed. World Health Assembly in 2004 adopted five core points of the WHO sexual and reproductive health package. One of these was the global need for provision of high quality services for family planning including infertility services. This was followed by United Nation’s Millennium Development Goals where, universal access to reproductive health was stated as one of the target to be achieved by 2015.\(^ {40}\)

Motivations for parenthood and perceived meaning of children vary among cultures. In broad terms, in high income countries the desire for parenthood is expressed as a wish for personal happiness and fulfillment and children are said to be valued as they enhance the relationship and are enjoyable. In resource poor setting, the continuation of family line, compliance with religious and societal expectations and assurance in old age were additional reasons stated for the wish for the child.\(^ {41}\) In a review of studies relating to the value of children to parents and community in African countries, it was found that children secure conjugal ties, offer social security, assist with labour, confer social status, secure rights of property and inheritance, provide community through reincarnation and maintain the family lineage and satisfy emotional needs.\(^ {42}\)
While national policies and international donor organizations even today single-mindedly pursue programs to prevent unwanted pregnancies, they do little less to address the needs of childless couples. Family planning programs have largely devoted their resources and singularly pursued problems of excessive fertility rather than sub fertility. However, it is only after the 1994 international conference on population and development (ICPD), held in Cairo, program of action included provision of services for “prevention and appropriate treatment of infertility” in the reproductive healthcare package of services. The Indian National Population policy mentions it briefly in the context of providing information, counseling and regular supply of medicine but only for tribal communities, displaced and migrant population who may not need fertility regulation” (MOHFW 2000).40

Infertility has been recognized as a potentially serious, costly and burdensome problem for affected families. Inability to have children leads to losses such as the loss of individual, physical and mental well-being of couples, life goals, position, reputation, self-confidence and loss of privacy and grief. Research has proved that the quality of marital relationship is a significant predictor of overall happiness and well-being, while poor marital quality is associated with many family and community problems. Infertility has been associated with marital problems and conflicts, and has serious implications for the mental and social well-being of those involved.

The psychosocial consequences of infertility for couples have been widely described and include increased symptoms of anxiety and depression, loss of self-esteem, frustration, grief, fear, guilt, helplessness, reduced job performance, economic hardship, relationship difficulties, diminished sexual satisfaction, reduced life satisfaction and social isolation and alienation, physical violence and where treatment is available, uncomfortable, painful or life threatening medical intervention.24,43

Evidences generated through literature review suggest that women experience more infertility stress than men.43,44,45 Findings of earlier research is confirmed by recent studies too that concludes that infertility is more distressing for women than it is for men.46,47,48,49,50 Study findings have shown that having a strong desire to up bring a child is associated with increased distress for women as compare to men.51 Husband’s marital, sexual satisfaction and self esteem are reportedly higher than wives. Women devote more in having children and are more treatment seeking than men.52 Infertile
wives reported infertility as having a greater impact on their daily lives and feel a need for more support.\textsuperscript{53} Childless women reported a significantly higher infertility related concerns in terms of life satisfaction, sexuality, self blame, self esteem and avoidance by friends as compared to their spouses.\textsuperscript{54}

Diagnosis does not affect distress levels.\textsuperscript{51,55} Women experience infertility as an unforeseen life disruption.\textsuperscript{56} It is seen that childless women feel that time is slipping away as they tried to explore the interaction between various timetables viz familial and societal, body and treatment.\textsuperscript{57,58} Treatment seeking and feelings of social isolation flawed the leisure satisfaction among infertile women.\textsuperscript{59} Women expressed consistently lower scores on mental health, social functioning and emotional behavior domains in quality of life \textsuperscript{60,61,62} and experienced higher levels of stigma than men.\textsuperscript{50} Studies conducted in Nigeria and Ghana revealed that women’s treatment in community, their self respect and understanding of womanhood depend on motherhood and the women experience social stigma, relationship problem.\textsuperscript{63,64} Although men are adversely affected by infertility, well being of woman is seriously affected by infertility than men. It is a devastating burden on the social, economic and personal well being of those affected majority of which is borne by women. In Taiwan, women in couples with a female cause of infertility were found to have lower self esteem and fewer acceptances by in laws than women in couples where infertility was identified as caused by male factor.\textsuperscript{65} In Middle East, childbearing is regarded as family commitment and women’s social status, dignity and self esteem depend on her ability to procreate.\textsuperscript{66}

The effect of infertility varies by location. In Asia, being infertile has more negative social, cultural and emotional repercussions for women. A study in Bangladesh revealed that evil spirits and physiological defects were perceived as leading cause of infertility and that childlessness places women at risk of social and familial displacement.\textsuperscript{67} In Pakistan, women reported being physically and verbally abused by husbands, in laws for being infertile. Severe mental stress was reported in nearly 70\% of women facing physical abuse and 60\% of the women facing verbal abuse.\textsuperscript{68} In some societies including Egypt, infertile women are even suspected of harming other’s children through their uncontrollable envy and casting an evil eye. In order to avoid this suffering, individuals with infertility are often willing to do anything, even risking their own life by utilizing physically risky remedies.\textsuperscript{39}
In a patriarchal setting, such as in India, bearing children particularly sons largely defines a women’s identity. Motherhood is of great social significance and infertility is perceived as a threat to men’s procreativity and continuity of lineage. Some studies have shown that gender roles take lead in shaping women’s experience of infertility. Infertility being understood as a socially defined life crisis is mistakenly taken as an individual feminine trait. Women are largely blamed for infertility and the negative consequences for them can range from denial of food and health care to being thrown out of the house so that a man can take a second, presumably more fertile wife. Traditionally childless women in India experience stigma and isolation. Infertility threatens a woman’s identity, status and economic security and become a major source of anxiety leading to lowered self-esteem and a sense of powerlessness.

A childless woman is not only stigmatized in the forewalls of the home but also in the community. A study in Mumbai showed that infertile women were not allowed to participate in various auspicious ceremonies, particularly involving child birth and naming. She is called Waanj (barren). There is a superstition that if she touches a baby, the baby will die. Another study at Haryana revealed that infertile women have poor wellbeing in all the dimensions as compared to normal women and have high negative feelings, low self-esteem, poor social support, less freedom and less number of opportunities. In another study in Andhra Pradesh, childless women reported going in social isolation owing to feeling ashamed with anticipated and rude comments at social functions. Seventy percent of women facing infertility were reported to be punished with physical violence and nearly 20% of these women shared incidences of severe violence by their husbands. When the continuity of lineage is threatened, women are likely to lose the incentives as lineage is linked to women’s sexuality and reproductive functions; they are the ones who face the greatest stigmatization, discrimination, trauma and exclusion due to infertility.

As compared to studies done in Sub Saharan Africa, the studies performed in Indian subcontinent reported the more severe level of community effects (54% vs 32%). Also, stigma (77% vs 53%), harassment (69% vs 16%) and exploitation (23% vs 5%) by in laws was accounted for all the more regularly in studies in Indian subcontinent in contrast with Sub Saharan Africa. Whereas, actual divorce as a result of infertility
was more frequently reported in sub Saharan Africa (47% vs 15%).

Women are being targeted for infertility and face social, emotional, psychological, financial and physical hardship more than men. There are no special government interventions or programmes to treat infertility in India. The subject of infertility is generally neglected in research studies to generate evidences of the sufferings and hence in resource allocation as well. Preventive and curative services for infertility have not been a priority in India despite the importance of motherhood.

Both qualitative and quantitative methods of research play important roles in product development. Data from quantitative research provides important information using specific definitions and carefully operationalizing what particular concepts and variables mean. These are best when a set of data needs to be compared in systematic way, make generalizations to the population or test theories with hypothesis. But as Albert Einstein himself put it: “many a things you can’t count really count” quality refers to the what, how, when and where of a thing- its essence and ambience. Qualitative research thus refers to the meaning, concepts, definitions, characteristics, symbols and description of things. The number or numerical descriptions of things and their relationship is not the focus of qualitative research. The main strength of qualitative approach is the ability to probe underlying values, beliefs and assumptions. To gain a full appreciation of a phenomenon, it is necessary to understand what is driving their behavior.

Qualitative research is better meant for conducting meaningful research for lived in experience of childlessness, as it provides a depth of understanding of infertility in terms of woman’s perspective, her feelings, experiences, thoughts, beliefs and cultural values dominating the society that far exceeds what is offered by detached, statistical analysis. In this way interview data is richer than quantitative data as the researcher not only learns how women know infertility, but it gives an insight into how they see and understands their infertility. Qualitative interview data provides answers in an unlimited range of possibilities with an accompanying context. The knowledge gained through qualitative interview is more informative, richer and offers enhanced understanding as compared to that which can be obtained via quantitative research.

Infertility is a medical circumstance that not only has health implication for those
involved, but also is a condition linked to individual human rights. Extensive search of literature, publication and online search revealed many quantitative studies exploring emotional and physical well being, marital relations and social impact and coping abilities of childless women in the field of social science and anthropology. An overview of these quantitative studies did not reflect comprehensive view regarding childlessness in India. Although many qualitative studies have been conducted in Middle East and European countries but researcher could not identify any study in India covering detailed analysis of infertile women’s experience in relation to personal, social, psychological, emotional, marital and financial aspects of infertility. Studies done by Dillu R\textsuperscript{88}, Obeidat MH\textsuperscript{95} recommended further exploration of impact and consequences of infertility by qualitative means. Hence, based on supportive evidences, personal and professional experience of researcher and with a view to expand horizon of body of knowledge regarding childlessness in India, present study was undertaken to understand the phenomenon of childlessness as viewed by women in northern India. To elicit the lived in experiences of women undergoing ART therapy present study was undertaken as psychological, social and cultural factors influence these experiences.

**PROBLEM STATEMENT**

“A Phenomenological Study of Childless Women’s lived In Experiences at Selected Infertility Clinic of Haryana.”

**AIM OF THE STUDY**

To understand the phenomenon of infertility as experienced by childless women.

**RESEARCH QUESTIONS**

1. How do women describe their experience with childlessness?
2. How does childlessness effect women’s relations with husband, family and society?
3. How does religion, society and family impact the experience of childless women?
4. What is the health seeking behavior of childless women?
5. How do women cope with being childless?
OBJECTIVES

1. To understand the perception of childlessness among women undergoing assisted reproductive technique treatment.

2. To gain insight about the psychological, social and economic consequences of childlessness among women.

3. To explore health seeking behavior and coping mechanism adopted by childless women.

OPERATIONAL DEFINITIONS

- **Childless Women**: it refers to woman who are diagnosed with primary or secondary infertility irrespective of cause, never gave birth to full term baby and seeking ART from selected infertility clinic.

- **Assisted Reproductive Technology Treatment**: In present study it refers to assisted reproductive techniques as ovarian stimulation, intrauterine insemination (IUI), in vitro fertilization (IVF) or Intra Cytoplasmic Sperm injection (ICSI) prescribed as treatment modality for childless women under study.

- **Lived In Experiences**: The term lived in experience here describe the firsthand accounts, impressions and experiences faced by childless women during day to day life as elicited through in depth interview. These lived in experiences may include but not limited to physical, psychological, social, marital, sexual, financial and spiritual experiences in regard of infertility and coping strategies adopted by them.

ASSUMPTIONS

- Becoming a biological parent is a valued and primary role in society
- Every facet of a woman’s psychological functioning is affected by the experience of infertility
- Marital and sexual functions get affected in couples with infertility
- Socio cultural factors play a vital role in framing the importance of parenting
- In depth interview can be an effective technique to explore the lived in experiences of childless women
- Childless women may be using some coping mechanism to deal with their infertility
- Childless women will be able to express their husbands’ view also regarding
experiences of life with childlessness

**DELIMITATION**

Study is delimited to:

- Childless women who are attending the selected infertility clinic for treatment
- In depth Interview schedule delimited to one interaction only
- Childless women who are undergoing assisted reproductive technology treatment (Ovarian Stimulation/IUI/IVF/ICSI).

**SUMMARY OF CHAPTER**

This chapter dealt with the background of the problem, need for the study and statement of the problem, research questions, objectives, operational definitions, assumptions and delimitations.

**ORGANIZATION OF THE REPORT**

The report of the study is organized in five chapters:

**Chapter I** dealt with the background of the study, need for the study, statement of the problem, objectives of the study, operational definitions, assumptions and delimitations.

**Chapter II** presents the related literature review, a brief summary of the research and non research literature.

**Chapter III** describes methodology. It includes research approach, research design, setting, sample and sampling technique, description of the tool, pilot study, plan for data collection and plan for data analysis.

**Chapter IV** enlightens analysis, interpretation of data and theoretical relation of findings.

**Chapter V** discusses findings with available evidences in research related to infertility.

**Chapter VI** contains the summary of study, findings, conclusions, implications, limitations and recommendations for future research.

The report ends with the selected references and annexure.