



Research Article

Infertility Induced Silent Stress among Couples in Bharatpur Metropolitan City Chitwan, Nepal

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ABSTRACT

Infertility is often a silent issue, rarely discussed openly in society because of the emotional stress it places on couples. The purpose of this study was to investigate infertility cases, societal attitudes, and couple behaviors at Manakamana Hospital in Bharatpur. This cross-sectional case study included 16 infertility cases 9 urban (Ward 25) and 7 rural (Ward 27) of Bharatpur, Nepal identified from Manakamana Hospital records. Couples were contacted, consented, and interviewed by phone using standardized questions between late March and early April 2025. Key Informant Interviews with local health officials and practitioners supplemented the data. All information was analyzed using MS Excel and SPSS and is presented through tables, graphs, and analytical summaries

The study found that couples experience significant mental, domestic, and social stress due to their inability to conceive. Feelings of shame, low self-esteem, and reduced morale were common among participants. This emotional burden also affected their performance in both household responsibilities and work outside the home. Social pressure was more intense and openly expressed in rural areas, while in urban areas it was present but less openly discussed. Many couples viewed alternative fertility options as helpful pathways to conception and childbirth, offering hope and a way to recover from previous setbacks.



The study concludes that even the label “infertile” can heighten stress levels and negatively influence individuals’ quality of work, thought processes, and overall well-being. The findings highlight the importance of accessible counseling and reliable treatment options for couples facing infertility.

Keywords: Alternative-treatment, infertility, morals and shame, societal, stress.

INTRODUCTION

Infertility has increasingly been linked to modern lifestyles and changing social patterns. Researchers point to factors such as alcohol and tobacco use, exposure to toxic substances, delayed marriage, career pressures, and even environmental pollution and global warming as contributors to rising infertility rates (The Kathmandu Post, 2019). Medically, infertility refers to the inability to conceive or maintain a pregnancy to live birth. In men, it is identified when motile and viable sperm are absent in ejaculation. With advances in reproductive technologies, assisted pregnancy has become more accessible worldwide, leading to the growing use of the more patient-friendly term “subfertility,” which is often used interchangeably with infertility (WHO, 2018; Regmi et al., 2024).

Globally, infertility is recognized as a major public health concern, and Nepal is no exception. In developing countries, its prevalence is estimated at 6.9-9.3% (Boivin et al., 2007). Although infertility appears to be increasing in Nepal, reliable national data remain scarce. Common biological causes include abnormalities in the reproductive tract, poor sperm or embryo quality, implantation issues, and immunological factors (Marc & Fritz, 2011). Lifestyle contributors such as sedentary behavior, heavy alcohol consumption, smoking, delayed marriage, miscarriage, and repeated abortion also play an important role (Sharma et al., 2013). Additionally, large-scale labor migration among young Nepali adults may influence fertility, as long periods of separation reduce opportunities for conception (Subedi et al., 2016). In some cases, migrants returning home may carry sexually transmitted infections, further increasing infertility risk (Gautam & Risal, 2017).

According to the widely accepted definition, infertility is the failure to achieve a clinical pregnancy after 12 months or more of regular, unprotected sexual intercourse (Zegers-Hochschild et al., 2009). Beyond its medical implications, infertility is often described as one of the most stressful life events. In many Asian societies including Nepal parenthood is considered a central social role, shaped by cultural expectations and religious beliefs. As a result, infertility is closely associated with psychological distress, reduced self-confidence,

feelings of guilt and disappointment, and marital conflict (Noorbala et al., 2009). Globally, approximately 33.35% about 5 million people are estimated to be affected by infertility (Vander & Wyns, 2018).

Existing research also shows that infertility can generate significant stress within families, often leading to reduced self-esteem, depression, and anxiety (Biringer et al., 2018). Women tend to be more vulnerable, with anxiety prevalence among infertile females reported at 13.5% (Zhang et al., 2022). Although assisted reproductive technologies (ART) offer effective treatment options and are widely accepted, they involve high financial costs and complex procedures, which may further heighten psychological stress, especially for women (Karimzadeh, 2017; Khyaju et al., 2023).

Across cultures, childbearing is commonly viewed as a key marker of adulthood (Dennison, 2016). In both high-income and lower- to middle-income countries, having children is often a major source of social status, particularly for women (Aronson, 2008). Failure to meet this expectation can lead to stigma and social isolation. In Nepal, cultural norms amplify this pressure: giving birth, especially to a son, is closely tied to a woman's status and self-worth. Delayed or absent childbirth often leads to negative community perceptions, with women frequently blamed for fertility issues regardless of the actual medical cause (Dyer, 2007; Thoma, 2021).

However, existing research in Nepal largely focuses on clinical or biomedical aspects, with limited attention to how societal attitudes, gender norms, and couple behaviors influence infertility experiences. This gap highlights the need for localized, community-specific evidence that reflects both medical and social dimensions. Manakamana Hospital in Bharatpur, a frequently visited facility for reproductive concerns, provides a valuable setting for such an investigation.

The objective of this study is to explore infertility cases presented at Manakamana Hospital and to examine the societal perceptions, community attitudes, and behavioral responses of affected couples. By analyzing both clinical and social factors, this research aims to generate insights that can support more sensitive, accessible, and holistic infertility care in the region.

DATA AND METHODS

Manakamana Hospital in Bharatpur, Nepal, was chosen due to its high patient flow for reproductive health services and its role as a referral point for infertility-related cases in both

urban and rural communities of Bharatpur Metropolitan City. The hospital's detailed patient records and accessibility to both clinicians and community informants made it an appropriate and reliable setting for this study.

This study employed a cross-sectional case study design, suitable for exploring real-time infertility cases while simultaneously capturing the social, behavioral, and medical dimensions influencing affected couples. Both primary and secondary data were used. Primary data were collected through telephone interviews with infertile couples and Key Informant Interviews (KIIs). Secondary data were derived from hospital records, local government health documents, and relevant literature.

The study population consisted of all identified infertility cases recorded at Manakamana Hospital. From this population, 26 couples were selected as the sample 14 from the urban area (Ward 25) and 12 from the rural area (Ward 27) of Bharatpur Metropolitan City. A purposive sampling technique was used, focusing specifically on registered infertility cases available during the study period. All eligible cases were listed, and couples were contacted to confirm their willingness to participate. A structured questionnaire with standardized questions served as the main research instrument for couple interviews. A semi-structured interview guide was used for Key Informant Interviews to explore expert insights on social, environmental, and clinical factors influencing infertility. The questionnaire and KII tools were reviewed by reproductive health experts for content validity. A small pretest with non-sample respondents ensured clarity and consistency. Necessary modifications were made to improve reliability and ensure the tools captured both clinical and social dimensions effectively.

After obtaining consent, telephone interviews were conducted with each participant for a minimum of 10 minutes, ensuring privacy and respecting participants' preference to avoid face-to-face exposure. Data collection was completed over a one- to two-week period, from the last week of March to the first week of April 2025. KIIs were held with local government health officials, District Health Office staff, private medical practitioners, and laboratory and epidemiology personnel. The collected data were carefully checked, coded, and entered into MS Excel before being analyzed in SPSS. Descriptive statistics, tables, and graphical representations were used to present the findings. Narrative analysis was applied to qualitative data from KIIs.

Ethical clearance for this study was obtained from the appropriate institutional review authority. All participants were informed about the purpose of the study, assured confidentiality, and provided verbal consent prior to participation.

RESULTS AND DISCUSSION

In the present study, the mean age at marriage for males was 4.56 years and for females 4 years, with standard deviations of 0.512 and 0.632 respectively. The mean duration of attempts to conceive among couples was 4.13 ± 1.586 years. These findings suggest that couples generally marry at an age considered appropriate for starting a family, yet the extended duration of attempts to conceive indicates significant challenges. This prolonged period highlights infertility as a likely cause of delayed childbearing and emphasizes the need for timely investigation and intervention.

The majority of couples reported being married before the age of 25, which suggests that they are getting married at a young age and that this age is appropriate for having children on time. Several studies conducted in the Nepalese context have examined factors associated with infertility. Regmi et al. (2024) evaluated 92 infertile/sub-fertile women and 92 non-infertile women, reporting a mean age at marriage of 32.86 ± 6.201 years. The overall mean age at marriage for both infertile and non-infertile groups was 18.7 ± 2.759 years. Although infertile women had a slightly higher mean age at marriage than non-infertile women, the difference was not statistically significant ($p = 0.21$). FGD found that marriages take place on time in both urban and rural locations, with marriages occurring earlier in rural areas. In rural areas, marriage is performed before to given responsibilities, whereas in urban areas, it is initiated after studies or employment, according to KII and LG.

Figure 1

Age of Couples at Marriage

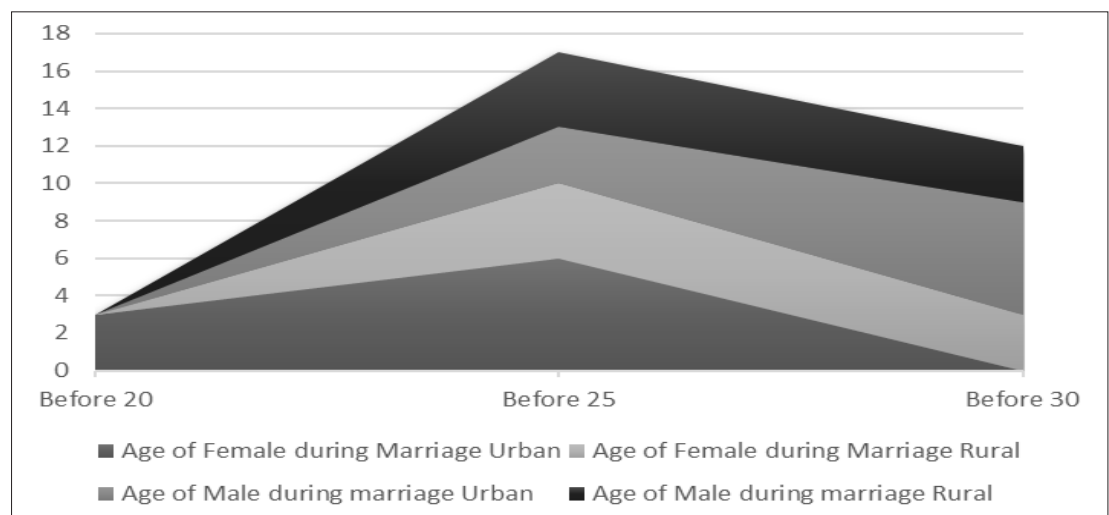
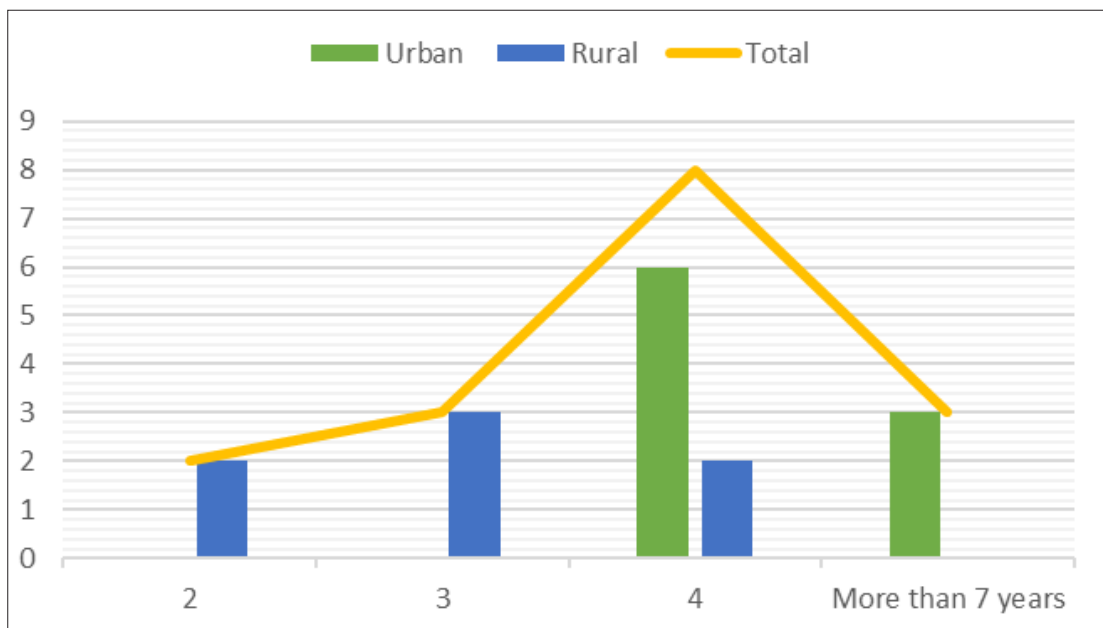


Figure 2 reveals that attempts to conceive are higher in urban regions than in rural ones. The couple talked about how they tried for seven years without any success. According to the FGD participants, rural residents eat natural food, work hard, have plenty of tasks to complete, and lack technology and gazettes. On the other hand, there is a greater prevalence of electronic gazes and switch-based labor in these places, which makes individuals lethargic and unhealthy and may be a contributing factor to conception delays.

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Figure 2

Number of Tries to Conceive Baby



According to KII with the Health Office, modern couples heavily rely on pills and medications to treat any illness, which distorts natural growth and delays childbirth. Infertility is the root reason of this. Couples also mentioned that they consult doctors and seek medical advice if the child is delayed. Hiding and trying are frequently prevalent attitudes among

couples. To acquire a path for the future, sharing with one's own family, elders, and closest friends is frequent.

Table 1

Summary of Knowing Relatives and Others about Fertility

Legend		average	Very few	No one knows except couples
Knowing fertility in families	Urban	0	3	6
	Rural	3	2	2
In friend circle	Urban	3	6	0
	Rural	2	3	2
Corporate sector	Urban	3	6	0
	Rural	0	7	0

Table 1 demonstrates that the prevalence of infertility knowledge is concealed inside families and is rarely disclosed outside of them. They don't reveal this because it is a prestige issue. However, in contrast, sharing trust is very popular in friend circles, which also helps couples share information and ask for guidance. The percentage of sharing is quite low among the corporate sectors since there is little sharing in working areas or in the farming profession, and since this is a subject of shame and guilt, it is shameful for them to be exposed as infertile.

In response to a personal question about disclosing infertility, a few respondents said they felt ashamed and guilty about it. They also said that if they disclosed it, others could think poorly of them, which might deter them from leaving the platform or make the area dangerous for them. They don't exchange such information as a result. According to KII and the case study, most people in rural areas have very chatty and sharing social viewpoints. Because women are typically blamed as the main culprit, women's stress levels are higher than men's. Couples are under a great deal of stress due to the additional demands of marriage and the terms "no child capacity."

Table 2

Alternative Mode to Get Child

Mode		Yes	No
Alternative fertility method	Urban	7	2
	Rural	4	3
Surrogacy	Urban	1	8
	Rural	3	4
IVF	Urban	7	2
	Rural	0	7

Alternative Medicine	Urban	0	9
	Rural	5	2

In contrast to the alternative method of childbearing being infertile, the use of alternative methods such as allopathic medicines, surrogacy, IVF, and Ayurvedic and homeopathic medicines is minimal. However, the rate of use is higher in urban areas than in rural ones because all branches of medicine and facilities are available there, and because of the dense population, treatment and medication are available while maintaining secrecy. However, privacy is debatable and such amenities, therapy, and facilities are unavailable.

In certain instances, the respondent stated that the success rate of IVF and alternative medicine is low, and in one instance, the couple reported success with surrogacy; this suggests that the success rate of alternative treatment methods is likewise low. According to KII with Health Officials, the couples are seen accepting recommendations at the local medical clinics. Clinical professionals said that although confidentiality is upheld, couples are nonetheless exposed as a result of several consultations. They also mentioned that couples frequently experience feelings of shame and sharing.

Table 3

Perspectives of Relatives and Elders

Perspective		Positive	Negative	Average
Elders behave in family	Urban	6	0	3
	Rural	2	2	3
Younger behave in family	Urban	6	0	3
	Rural	2	0	5
Neighbors Behaves	Urban	0	0	9
	Rural	2	2	3
Community people behalves	Urban	0	0	9
	Rural	3	2	2
Medical people behalves	Urban	3	0	6
	Rural	0	5	2
Close friend react/ Behalves	Urban	0	3	6
	Rural	5	0	2

From a societal standpoint, elderly individuals, such as parents, grandparents, and in-laws, handle infertility in a very good way because it is a prestigious family issue and they act gently as the head of the household. On the other hand, younger people, such as sisters and brothers, have average opinions about infertility and are exposed to it because they are

younger. Neighbor viewpoints reveal a mixed picture of positive and bad outcomes, but in practice, there is a lot of backbiting by neighbors on infertility, which discourages couples and increases their stress levels. The community behaves mediocrely since infertility is seen as a status issue, and because of the male-dominated society, there are negative attitudes about girls and a greater tendency to blame women for low reproduction rates. In response, the couple said that close friends are the ideal people to confide in and that it is beneficial to follow their counsel in order to solve problems.

The results of the survey indicate that the behavior of medical professionals is not good because different tests and sharing are important steps for a couple to cross over. This process is difficult for the couple to deal with because it involves a series of consultations, follow-ups, and consultations that are a little hectic. As a result, the couple responded that the medical professionals' behavior is challenging and that couples are feeling shared because they knew the infertile couples.

Telephone interviews further revealed that women are disproportionately blamed and stigmatized for infertility compared to men. In many communities, delayed conception leads to social pressure directed mainly at the female partner. Despite increasing awareness and the availability of modern diagnostic services, many respondents particularly from rural areas still attribute infertility to supernatural causes such as ancestral anger or divine displeasure. Traditional healing practices are commonly attempted but are often unsuccessful, which prolongs the delay in seeking appropriate medical care.

In conclusion, infertility is one of the difficult tasks and incidents for couples, and this raises a lot of questions, such as who, how, and what comes next. To address this topic, it is extremely tough for all to address the accurate answer of this question and true and share mode of answer through couple is challenging to share all. Infertility has many causes, including genetic, biological, and medical ones. According to medical experts, modern foods are highly contaminated, and the rate of infertility is rising. As a result, this hidden table demonstrates that relationships are normal and positive, but society views women negatively and men as clean chit. Infertility was caused by a heavy workload, modern gazettes, and pharmaceuticals.

Table 4*Couples Opinion on Daily Life Routine*

Couple responses		Enough	low	extreme low	as usual
Amount of Sleep	Urban	4	4	0	1
	Rural	4	0	1	2
Amount of food	Urban	5	0	2	2
	Rural	1	1	0	5
Amount of Happiness	Urban	5	2	1	1
	Rural	1	2	2	2
Responsibilities	Urban	4	1	1	3
	Rural	3	2	0	2

(Source: Field Visit, 2025)

The couples' stress levels were found to be high. The lack of a child has a significant impact on the couple's social and mental standing, and blood pressure and other mental and stress-related illnesses are prevalent among them. As a result, sleep and happiness are clearly restricted and low. Due to age-related considerations, the percentage of happiness may be ordinary, but the couple is the only one who can truly understand their agony, and sentiments of shame and guilt are internal.

The social and financial responsibilities are also seen favorably because domestic duties, such as cooking and managing a livelihood, are responsible tasks that couples are doing their best to manage. However, in cases where there is a lack of child extremism stress and anxiety about future sustainability and remarriage, women are more stressed than men.

CONCLUSIONS

According to the study's findings, infertility among couples in Bharatpur's rural and urban areas is a widespread phenomenon brought on by a number of causes. Modern food, electrification, the usage of contemporary medications, and gazettes are all more prevalent in the research region. Two significant outcomes are infertility and societal attitudes. One of the main causes of the couples' stress and guilt is sharing and privacy. From a social perspective, women are discouraged and men are protected from the opinions of the community and neighbors, but in practice, another problem in the towns assessed is the lack of appropriate medication and

counsel. Infertility is a major problem in urban areas compared to rural ones because of high levels of stress and a lack of natural and physical activities that contribute to the couple's hidden stress. Counseling, professional therapy, and social welfare campaigns are therefore essential.

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