



Psychosocial Problems in Women Attending Infertility Centre of Kathmandu Valley

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Abstract

Introduction: Infertility is a complicated and situational crisis which is most of the time mentally frightening, emotionally difficult, financially challenging, and physically unpleasant. Infertile couples are dealing with a variety of emotional challenges in addition to physical problems. The aim of this study was to identify the Psychosocial problems of infertile women attending infertility center in Kathmandu. **Methods:** Cross-sectional analytical research design was conducted to assess the psychosocial problems of infertile women between 24th July to 9th September 2022. Non-probability purposive sampling technique was adopted to collect the data from 345 respondents of the gynecological outpatient department of HAMS Hospital, Dhumbarahi, Kathmandu, Nepal. Data was collected through a structured interview method, using Nepali version of K6 distress tool and questionnaire related to the social problems. The obtained data were analyzed by using descriptive and inferential statistics using SPSS version 16. **Results:** Study findings revealed that the high Psychological and social problems were present in infertile women which is 59.1% and 75.7% respectively. There is statistically significant association was found between education level, Job status, type of infertility, duration of treatment and psychological problems likewise, the statistically significant association was found between education level, Job status, type of infertility, duration of treatment and social problems (P-value < 0.05). Psychological problem is positively correlated with social problems ($r = 0.600^{**}$). **Conclusion:** Based on the findings of this study, it is concluded that psychological problems and social problems were higher among women attending infertility clinics. Therefore, it is recommended that health personnel who take a history of the client need to conduct and provide Supportive counseling sessions during her treatment period.

Subject Areas

Sociology

Keywords

Infertile Women, Infertility, Psychological Problems, Social Problems and Psychosocial Problems

1. Introduction

Infertility affects millions of people of reproductive age worldwide. Infertility is perceived as a public health issue of the universe and it is experienced as a negative. [1] A study in USA among 786 women 21.8% of infertile women had been emotionally or physically abused whereas 80% of infertile women found embarrassment related to infertility. [2]

A study among 150 infertile women in India 62% had moderate psychosocial problems and 4% had severe psychosocial problems. [3] In Nepal, infertile women continue to face discrimination in many aspects of their personal and social lives. [4] majority of infertile women suffered from psychological problems, anxiety and depression as well as social problems like isolation and feeling of loneliness as a result of Infertility [5] An in-depth study with 15 infertile women in Rupendehi, Nepal revealed that 60% of infertile women have faced psychosocial problems, where 80% of them were anxious and depressed and 47% were suffered from different violence. [4] this study aims to identify Psychosocial problems of Infertile Women attending infertility center in Kathmandu.

The findings of the study will provide the baseline data about the prevalence of psychosocial problems of infertile women. Infertile women who are recognized as having psychological problems might get the opportunity to consult with psychiatrists for further evaluation and treatment.

2. Methods

A cross-sectional analytical study from August 2021 to April 2023 in the Gynaecological department of HAMS Hospital. The sample size was calculated taking 68% of prevalence with 95% confidence interval using formula $n = z_{pq}^2 / e^2$ formula, considering 5% non-response rate final sample size was 345. After obtaining permission from the Research Committee of SoNM (Lalitpur Nursing Campus). Ethical approval was obtained from the Institutional Review Committee of the Patan Academy of Health Sciences (IRC-PAHS ≠ PNM2206071638). Formal Permission was obtained from the centre and each respondent before data collection. A non-probability Convenience Sampling technique was used to select samples with meeting inclusion criteria, married women between 25 - 45 years, and women diagnosed with primary and secondary infertility. The researcher herself collected data through face-to-face interviews using a semi-structured interview schedule in a separate room by maintaining privacy with 8 - 9 respondents per day by giving 20 - 30 minutes to each respondent.

The semi-structured interview schedule consisted of three parts; so-

socio-demographic characteristics, psychological problems were assessed by the validated tool of Kessler's psychological distress scale (k6) [6]. Which was 5 point Likert type scale, where 6 items were present and the Cronbach' alpha for K6 psychological distress scale was 0.86. Social problems assessing tool had total 20 items. Which was 5-point Likert-type scale. It was developed by researcher herself. Face validity and content validity of the social problems assessing tool was done by consulting subject experts and the content validity index was 0.9. Reliability was measured by pre-testing in 10% of the sample size *i.e.* $n = 32$. Cronbach' alpha was 0.7.

Edited coded and the data was entered in SPSS 16. Data was analyzed using descriptive statistics such as frequency, percentage, mean and standard deviation was used to find out distribution of personal characteristics of client (age, education, occupation, family type duration of marriage and duration of infertility treatment) and inferential statistics (chi-square test) was used to examine the association between the selected independent variables and psychological and social problems. And spearman correlation test was used to assess the relationship between psychological problems and social problems. P-value < 0.05 was considered significant.

3. Results

Table 1 shows that most of the respondents were of the age group 25 - 30 years. The minimum age was 25 and the maximum age was 45, with mean $SD = 30.64 \pm 4.4$ years. Education more than half 229 (66.4%) of the respondents had SEE and above education level. Regarding job status higher percentage of 237 (68.7%) respondents were non-job holders. Similarly, more than half of the respondents 227 (65.8%) were from joint families Regarding the duration of marriage nearly half of the respondents 156 (45.21%) had 6 - 10 years' duration of marriage and least of them 7 (2.02%) respondents had more than 16 years.

Table 2 shows that the majority of the respondents 261 (75.7%) had primary infertility and duration of treatment which 214 (62.03%) had less than 2 years of treatment history, however 107 (31.01%) had 3 - 5 years, 14 (4.06%) had 6 - 8 years and 10 (2.89%) respondents had more than 9 years of treatment history respectively.

Table 3 and **Table 4** show that 13 (3.8%) respondents have no/low distress, 128 (37.1%) had moderate distress and 204 (59.1%) of respondents had high level of distress likewise majority 261 (75.7%) of respondents had high social problem and 84 (24.3%) respondents had low social problems respectively.

Table 5 shows that there is statistically significant association between psychological problems and socio-demographic variables (education status, job status, types of infertility duration of treatment) at 95% confidence interval (P-value ≤ 0.05). And **Table 6** shows that there is statistically significant association between social problem and socio-demographic variables (education status,

job status, family type, types of infertility, duration of treatment, at 95% confidence interval (P-value ≤ 0.05).

Table 7 depicts that spearman correlation was used to examine the relationship between psychological problems and social problems. Psychological problem is positively correlated with social problems ($r = 0.600^{**}$).

Table 1. Socio demographic and clinical variables (N = 345).

Variables	Frequency	Percentage
Age in Year		
25 - 30	186	53.9
31 - 35	103	29.9
≥ 36	56	16.2
Mean \pm SD = 30.64 \pm 4.44		
Education Status		
Illiterate	31	9.0
Primary	34	9.9
Secondary	51	14.8
SEE and above	229	66.4
Job Status		
Job holder	108	31.3
Non job holder	237	68.7
Types of family		
Single	105	30.4
Joint	227	65.8
Extended	13	3.8
Duration of marriage in years		
≤ 5	135	39.13
6 - 10	156	45.21
11 - 15	47	13.62
≥ 16	7	2.02

Table 2. Clinical variables (N = 345).

Variables	Frequency	Percent
Types of infertility		
Primary	261	75.7
Secondary	84	24.3
Duration of treatment in years		
≤ 2	214	62.03
3 - 5	107	31.01
6 - 8	14	4.06
≥ 9	10	2.89

Table 3. Level of psychological problems (N = 345).

Psychological Problems	Level	Frequency	Percentage
No/low distress	(0 - 4)	13	3.8
Moderate distress	(5 - 12)	128	37.1
High distress	(13 - 24)	204	59.1

Table 4. Level of social problems (N = 345).

Social Problems	Level	Frequency	Percentage
Low social problem	(<50)	84	24.3
High social problem	(≥50)	261	75.7

Table 5. Association between socio-demographic variables and psychological problems of women attending infertility clinic (N = 345).

Variables	Psychological	Problems	Chi Square Value	P Value
	Mild to Moderate N (%)	High N (%)		
Age group in years				
≤30	78 (41.9%)	108 (58.1%)	0.19	0.663
≥31	63 (39.6%)	96 (60.4%)		
Education				
Below SEE	26 (22.4%)	90 (77.6%)	24.632	0.001
SEE and above	115 (52.2%)	114 (49.8)		
Job status				
Job holder	57 (52.8%)	51 (47.2%)	9.225	0.002
Non job holder	84 (35.4%)	153 (64.6%)		
Family type				
Nuclear	49 (46.7%)	56 (53.3)	2.099	0.147
Joint/extended	92 (38.3%)	148 (61.7%)		
Duration of marriage in years				
≤7	80 (41.0%)	115 (59.0%)	0.005	0.946
>8	61 (40.7%)	89 (59.3%)		
Types of infertility				
Primary	89 (34.1%)	172 (65.9%)	20.33	0.001
Secondary	52 (61.9%)	32 (38.1%)		
Duration of treatment in years				
≤2	113 (52.8%)	101 (47.2%)	33.215	0.005
≥3	28 (21.4%)	103 (78.6%)		

Table 6. Association between socio-demographic variables and social problems of women attending infertility clinic (N = 345).

Variables	Social Problems		Chi square value	P value
	Low social problem	High social problems		
	n (%)	n (%)		
Age group in years				
≤30	45 (24.2%)	141 (75.8%)	0.005	1.00
≥31	39 (24.5%)	120 (75.5%)		
Education				
Below SEE	15 (12.9%)	101 (87.1%)	12.367	0.001
SEE and above	69 (30.1%)	160 (69.9%)		
Job status				
Job holder	34 (31.5%)	74 (68.5%)	4.342	0.037
Non job holder	50 (21.1%)	187 (78.9%)		
Family type				
Nuclear	37 (35.2%)	68 (64.8%)	9.718	0.002
Joint/extended	47 (19.6%)	193 (80.4%)		
Duration of marriage in years				
≤7	46 (23.6%)	149 (76.4%)	0.14	0.708
≥8	38 (25.3%)	112 (74.7%)		
Types of infertility				
Primary	49 (18.8%)	212 (81.2%)	18.081	0.001
Secondary	35 (41.7%)	49 (58.3%)		
Duration of treatment in years				
≤2	63 (29.4%)	151 (70.6%)	7.932	0.005
≥3	21 (16%)	110 (84.0%)		

Table 7. Correlation between psychological problems and social problems of infertile women.

Variables	Psychological problems	Social problems
Psychological problems	-	0.600**
Social problems	0.600**	-

**Correlation is significant at the 0.01 level (2-tailed).

4. Discussion

The present study findings revealed that most of the women, 204 (59.1%), had

high levels of psychological distress. This finding is consistent with studies done in Ethiopia, [7] and India. [8] Contradict result was found in studies done in India [3] and Nepal [4]. Dissimilar findings could be due to different populations, fewer sample sizes, and high education levels and may be due to uncertainty of having a child and potential pressure or support from the surrounding environment and family or highly empowered women, etc.

Current study findings revealed the prevalence of social problems among women attending infertility center, in which 261 (75%) had high social problems. Similar findings were found in a study done in Nigeria, [9] and Bangladesh. [10] Similarly, a study in Nepal among 62 infertile women reported that 55.35% had social issues related to infertility. [11] Contradict findings to this study was found in study of Turkey, [12] and Bhutan [13]. These findings might be due to social issues related to high infertility where children are seen as an agent of happiness in a married couple's lives. Fear of their husband remarrying another woman, fear of divorce and threats by mother-in-law made women silent and endured the burden of infertility. Most traditional cultures place high social values on fertility, particularly as a demonstration of the consummation of marriage and as an expression of a couple's social role.

There is statistically significant association was found between education level, Job status, type of infertility, duration of treatment and psychological problems and education level, Job status, type of infertility, duration of treatment and social problems (P -value < 0.05). This finding is consistent with the studies conducted in Iran among infertile women ($N = 180$), [14] China. [15] [16] And Contrast finding with this study found on the studies done in India [17] and Iran ($N = 180$). [14]

This result might be due to the level of education and job status which increasing hope regarding the future and decreasing psychological problems. Support from the family would be helpful to reduce the psychological problem, and a longer duration of treatment might decrease the hope of being pregnant and increases the psychological issues and some women married at an early age while others married late but planned the baby according to their interests. Hence, age and duration of marriage have no significant association with psychological problems. The interest and willingness to get pregnant is an individual interest, not only by the pressure or support from the family.

The relationship between overall psychological and social problems. The overall psychological problem positively correlates with the social problem. A study done in Turkey has found similar findings with this study. [16] Infertility is often a silent struggle, which is why most women do not want to share their stories of infertility. Social problems put pressure on an individual, which might increase psychological problems.

5. Conclusion

The present study findings revealed that psychological problems and social

problems were equally prevalent among women attending infertility clinic. Education status, job status, types of infertility and duration of treatment were significantly associated with psychological and social problems. Social problems and the psychological problems were strongly correlated with each other. Based on a finding it can be concluded that increased social problems increase the psychological problem. Infertility not only increases social problems it also dangers to psychological health as well.

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Conflicts of Interest

The authors declare no conflicts of interest.

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