

Infertility Among Working Women: A Prospective Observational Study in A Tertiary Care Center

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1. Introduction and Literature Review

Infertility is on the rise. One in six couples today will struggle with infertility -the biological inability to conceive or carry a pregnancy to full term. Many factors can contribute to this staggering and continually growing statistic. Most common are delayed child bearing, advanced maternal age, medical conditions, sexually transmitted diseases, obesity and environmental factors. As women continue to work and delay having children, their needs with regard to infertility treatment, has also continued to grow.

The infertility diagnosis can be devastating and demoralizing. Unable to become pregnant, women often feel inadequate, alone and depressed. Infertility treatment is costly, and invasive. Success rates are not guaranteed and insurance benefits may be limited. The emotional, physical and financial stressors associated with the infertility process are often challenging and usually overwhelming, particularly to accomplished career-women who are used to controlling their own destinies, and getting the results they want.

While infertility affects the male and female population at almost identical percentages, it is typically the woman who undergoes the vast majority of invasive and costly medical procedures. These procedures require intense daily monitoring over the course of several weeks, and sometimes months, thus making it necessary to miss work for such treatments as pre-scheduled ultrasound and blood draws, followed by evening injections of hormones. Add-

ing insult to injury, these treatments then cause increasing mood swings, physical bloating and discomfort. It is no wonder that undergoing infertility treatment has been labelled a full-time job.

Infertility is a worldwide problem affecting upto 8 to 12 percent couple (50-80 million) [1]. during their reproductive lives. Problem arises in higher species like in human where the life is not meant to give births only. It has become complexed through evolution and civilization. But the cultural stigma is persisting of being infertile. The internal shock of not achieving nature's ultimate goal merges then with the external rather social issues giving rise to an oppressed psychological being. A million of references will tell you the medical causes of Infertility and about the treatment approach. But lack of focus is there how the infertile people are. India, a country still failing to overcome the gender issues, population explosion, female feticide; it can be clearly assumed the society will not stand an infertile woman. The researcher felt the need to look into the interior of a woman who is internally anxious, sorrowful and socially oppressed.

[2] stated that it is believed that 10% of the general population suffers from some form of infertility in India.

Results from another parallel survey conducted among 100 infertility specialists showed that nearly 63% of infertile couples belonged to the childbearing age (31-40). [3] The acceptance of immediate PPIUCD usage was still low. This might be attributed to

the low achievement of education, perceived concern and fears of complications towards IUCD insertion. The male partner's refusal and religious beliefs also have a role in the usage of postpartum IUCD. Due attention should be given to enhancing educational level of women and effective IUCDs counseling should be given during antenatal care visits to correct misconceptions and fears of complication about PPIUCD insertion.

[4] conducted a study in Ghana, West Africa to explore the implications of infertility for women. He conducted a semi-structured interview to collect data from 107 women seeking treatment in Gynecological Clinics. Based on iterative open coding of the interviews, the focus of the analysis is on mental health, marital instability, social interaction and gendered experiences. The results showed that the infertile women faced severe social stigma, marital strain and a range of mental health difficulties. Many women feel that they shoulder a disproportionate share of the blame for infertility and by extension, face greater social consequences than male partners for difficulties of conceiving.

[5] stated that for many couples, infertility causes a serious strain on their interpersonal relationship, as well as personal distress, reduce their self-esteem, and a loss of the meaning of life. Besides being a medical condition, infertility is also a social situation. One of the important challenges, infertile couple faces, is learning how to manage the infertility and treatment in relation to oneself, with the partner and in the different social arena's family, friends and co-workers.

[6] conducted a study, in Italy, to identify whether attachment anxiety and avoidance dimensions in female and male partners in couples seeking infertility treatment associated with her and his infertility related stress. It was a cross-sectional study. The total sample comprised of 316 females and 316 males. They filled the psychological Questionnaires (experiences in close relationships; Fertility Problem Inventory; state-trait Anxiety Inventory). Paired t-tests were used to examine gender differences on the study variables. Associations between infertility-related stress and the study variables were explored using hierarchical stepwise multivariate linear regression analyses. Attachment anxiety and attachment avoidance were significantly associated with global infertility stress.

[7] conducted a study to examine the association between occupational social class and coping responses, coping responses and infertility-related stress and occupational social class and infertility-related distress. Cross-sectional survey design was used. The study involved 404 women undergoing infertility treatment at a public clinic in Athens, Greece. State and trait anxiety (State-Trait Anxiety Inventory), infertility-related stress (Copenhagen

Multi-centre Psychosocial Infertility) and coping strategies (Copenhagen Multi-centre Psychosocial Infertility) were measured. The results showed that women of low/very low social class reported higher levels of active on fronting coping compared with women of higher social class ($p < 0.001$). A positive correlation between active-avoidance coping and both state and trait anxiety ($r = 0.278$ and 0.233 , respectively, ($p < 0.01$)) was observed. The passive-avoidance coping scale was positively correlated with marital and personal stress ($r = 0.186$ and 0.146 , respectively, $p < 0.01$). All the three kinds of stress (marital, personal and social) were positively correlated with both active-avoidance ($r = 0.302$, 0.423 and 0.211 , respectively, $p < 0.01$) and active-confronting scale ($r = 0.150$, 0.211 and 0.141 , respectively, $p < 0.01$). Infertile women of the lowest social class used more active-confronting coping and more passive-avoidance coping than women of the highest social class. Factors such as low social class and maladaptive coping strategies might contribute to infertility-related stress and anxiety.

[8] this study reveals that the main reasons for induced abortion are socio-economic stresses and a lack of support from partners (28–31). In cases where women informed their partners about the pregnancy, the principal decision maker was often the male partner who pressed for pregnancy termination indirectly by declining his financial or social responsibilities or directly by demanding the woman terminate the pregnancy. In some cases, the male partner misled the woman, overruling her decision to continue the pregnancy by arranging an unsafe abortion without her consent. A lack of financial security seemed to diminish participants' perceptions of available options. Furthermore, as mentioned above, gender-based power relations hindered women from actualising their decisions. Previous studies from Uganda and Ghana have disclosed similar findings where women's decision-making power regarding abortion was restricted by gender norms and power imbalances (30–32).

[9] conducted a study, in Chennai, to assess the impact of positive therapy upon the stress levels in infertile women. The Method used was randomized clinical trial. The total sample was 120 (60 in experimental group and 60 in control group). The results have shown that in experimental group the Posttest stress level ($M=164.30$, $SD = 19.03$) was less than the pretest stress level ($M = 247.51$ $SD = 23.14$) and the difference was statistically significant at $P < .001$ level. In the control group there was no statistical difference between the pretest ($M = 246.65$ $SD = 22.18$) and Posttest ($M=247.06$ $SD = 21.89$) stress levels. The results can be attributed to the effectiveness of positive therapy and has direct implications for nursing practice.

Table 1: Types of Outcome measures

DEPENDENT VARIABLES	INDEPENDENT VARIABLES
Causes of infertility	Occupation
Incidence of infertility	Habit of addiction
Experience of sexual life	Daily life schedule
Adequacy of coital exposure	Duty shifting
Choice of treatment mode	Educational status
Experience of sexual life	Occupation
Psychological condition	Educational status/Husband's reaction/Social reaction/Duration of treatment/Type of medical intervention
Choice of treatment mode/ Affordability of treatment	Family income
Treatment related psychological sufferings	Family income/Attitude of the treatment provider
Satisfaction towards treatment	Affordability of the treatment
Provision of counselling	Psychological Condition

2. Rationale for the Research Project

There is virtually very little information on the impact of infertility on working female populations. Infertile individuals from these segments of populations tend to be invisible and have practically been ignored.

There are inadequate social policies related to infertility and the advancement of new policies related to the infertility, especially infertility among working women has been very slow as they are oppressed with dispute over one "s fundamental right to reproduce. Policy discussions related to infertility have been complicatedly knotted with adoption policies and thus have encouraged legal and emotional discussions which has delayed policy making. Recent studies on infertile populations indicate significant psychological and social impacts of infertility, particularly on women. Although there is more assumption than actual research on men than women, infertility is also assumed to effect men differently than women. Because the nature of infertility is cyclic, infertility often produces responses typically seen with other major loses. Thus, social work intervention could be useful to those dealing with infertility.

The social aspects of infertility can be ameliorated through better medical care and awareness. Sexually transmitted diseases (STD's), considered as an important cause of infertility, often get hidden and undiagnosed especially among women. Those inadequate accesses to affordable treatment for resolution of STD's thus result in future infertility problems.

The profession of social work not yet given adequate efforts in advancing research related to infertility and as a result reluctant in advocating or providing social work intervention to those impacted by infertility. Social work has believed the myths related to infertility and has viewed infertility as not of significance to the population typically served by social work.

3. Aim and Objectives

3.1. Aim

To identify the causes of infertility, psycho-social consequences, availability and accessibility of infertility treatment and need of

social work intervention in the field of infertility among working women.

3.2. Objectives

1. To explore the reported causes of infertility among working women.
2. To identify the psycho-social consequences of infertility on working women.
3. To explore the availability and accessibility of infertility treatment.
4. To assess the need of social work intervention in the field of infertility among working women.

4. Materials and Method

Study design: Prospective observational study

Study period: One year

4.1. Inclusion Criteria

All working women visiting Obstetrics and Gynecology OPD in reproductive age group (18 to 45 years) with complaints of infertility for more than one year with bilateral Fallopian tubes patent, not on Birth control pills with regular history of menstruation.

4.2. Exclusion Criteria

1. Currently pregnant
2. History of ovarian surgery, infertility
3. Major chronic disease
4. Radical pelvic surgery
5. Radiation treatments
6. Known Endometriosis
7. Patients with Hepatitis C, Hepatitis B and/or HIV/AIDS

4.3. Sample Size

We planned to enroll 125 patients for this study.

5. Statistical Analysis

Statistical analysis will be performed using appropriate statistical tests like Chi square test, Fischer's test or Mann-Whitney test etc. Unpaired student's t-test will be used to determine the significance

of the infertility patients. Statistical comparisons will be undertaken only between those patients who received treatment in accordance with the random allocation. Intent to treat analysis will be done.

The study will comprise of baseline assessments before conceiving with lifestyle intervention program and post pregnancy. During the study period, the treatment of the patient shall continue as usual and no interference shall be made at any point in the treatment process. Further, the research team will be separate from the clinical care team of the patient.

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