ORIGINAL ARTICLE

Psychological Impact of Sub Fertility on the Couples

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ABSTRACT:
Objective: To evaluate the psychological aspect of subfertility and treatment on the couples.
Methodology: This Prospective survey study was carried out in the department of Obstetrics and Gynaecology at a private hospital in Lahore, Pakistan. 40 couples undergoing fertility treatment were enrolled. A Self-report questionnaire included age, level of education, social status, duration of marriage , duration of infertility, causes of infertility, duration of treatment, social stress, effect of infertility on marital relationship, expected likelihood of achieving pregnancy, anticipation of stress during treatment, and emotional reactions to infertility was given to all the participants of the study.
Results: The majority (70%) of women undergoing fertility treatment were of ages 25-34 years. 62.5% couples were married for 1 to 5 years. Majority of couples were educated and belonged to the middle-class family. 55% had been undergoing treatment for 3 years and more. In half, the causes of infertility were known. 67.5% had failed treatment and 32.5% became pregnant with treatment. All the couples experienced emotional trauma with treatment and needed psychological help despite the outcome. 62.5% suffered with depression, 30% anxiety and 7.5% had anger. 15% women needed psychiatric medication besides counselling and behavioural therapy. 60% couples had sexual dysfunction leading to marital problems. 80% couples complained of behaviour changes. Specific questionnaires were structured for assessing different psychological aspects on infertile women, men or couples. The hospital Anxiety and Depression Scale and demographic and fertility information questionnaire was given to all infertile couples. The psychological impact was more on females 82.5% compared to males 17.5%. All the couples underwent social pressure.
Conclusions: Psychological factors play an important role in the infertility. It is important to manage this devastating problem, which has cultural and social impact.
Keywords:
Infertility, Mental health, Stress, Counselling, Psychosocial factors, Assisted reproduction

INTRODUCTION:

According to World Health Organization, definition of infertility is unable to get pregnant after 24 months of trying and this definition is used in clinical practice and research.[1] Infertility affects about 10%-15% of couples of reproductive age.[2,3] The infertility rates vary between countries and regions. Infertility is a medical condition but also has social and economic issues. It is a chronic stressor with long-lasting negative social and psychological consequences. In recent years, the number of couples seeking treatment for infertility has increased due to factors such as delaying childbearing in women and development of new successful techniques of fertility treatment.[3,6] The increasing awareness of infertility has given consideration to the association between psychiatric illness and infertility. Some studies in literature have suggested that psychological factors may be a primary cause of infertility, others have suggested that the state of infertility itself can provoke psychological symptoms.[7] Researchers have looked into the psychological impact of infertility and prolonged exposure to infertility treatments on mood and well-being. Infertility has an effect on a couple's mental health. Different psychological factors have been shown to affect the reproductive ability of both partners. The mechanisms by which depression could directly affect infertility involves the physiology of the depressed state such as elevated prolactin levels, disruption of the hypothalamic-pituitary-adrenal axis, and thyroid dysfunction.[4]

The inability to conceive children is a stressful situation for couples. The consequences of infertility are manifold and cause social repercussions and personal suffering. Infertile individuals experience the distressing emotions, which include shock, grief, depression, anger, and frustration, loss of self-esteem, self-confidence, stigma.[5,6,7,8]

The way in which people deal with infertility is partly affected by the values and socio-cultural norms of the community in which they live. In an Asian society, women childbearing is associated with stabilizing their marriage and closer bonds with the spouse family. Thus, childbearing for women is expected to bring happiness

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and family harmony.[9,10] There is a lot of pressure on couples to have a child after the first year of marriage and this pressure increases during third and fourth years.[11] Their relationships may suffer not only with the spouse, but also with friends and family members offering well-meaning but misguided opinions and advice. Couples dealing with infertility may avoid social interaction with pregnant friends and families with children. They may have anxiety-related sexual dysfunction and other marital conflicts.[5, 12, 13]

There is enough evidence that lower stress levels mean better female and male natural fertility, though there is no conclusive experimental evidence that lower stress levels result in better fertility treatment outcome.[14] Psychological interventions, especially those emphasizing stress management and coping-skills training, have been shown to have beneficial effects for infertility patients.[15]

METHODOLOGY:

This prospective study was done in the Mid-City hospital, a multi-disciplinary private hospital in Lahore offering fertility services to infertile couples. All sub fertile couples under 40 years of age were included and the participants with any mental health organic diseases were excluded. Forty couples undergoing fertility treatment were enrolled. Questionnaires were given to all couples undergoing infertility treatment. This questionnaire included age, level of education, social status, duration of marriage, duration of infertility, causes of infertility, duration of treatment, social stress, effect of infertility on marital relationship, expected likelihood of achieving pregnancy, anticipation of stress during treatment, and emotional reactions to infertility.

RESULTS:

The frequency of age, number of years the couples were married, social set up (independent living or extended family system), educational status and job description of male partner has been shown in Figure-1 and 2. The duration of treatment has been given in Figure-3. In half 50% (20), causes of infertility were known and the other 50% (20) had unexplained infertility. All (100%) couples experienced emotional trauma with treatment and needed psychological help despite the outcome. 62.5 %(25) suffered with depression, 30% (12) anxiety and 7.5 % (3) had anger (Figure-3). 62.5% (25) couples had initially approached general practitioner, 22.5% (9) couples used remedies advised by family and 15% (6) took advise from religious leader before seeing the fertility specialist. 67.5% (27) had failed treatment, whereas 32.5% (13) became pregnant with treatment. 15% (6) women needed psychiatric medication besides counselling and behaviour therapy. 60% (24) couples had sexual dysfunction leading to marital problems. 80% (32) couples complained of behaviour changes. The psychological impact was more on females 82.5% (33) compared to males 17.5% (7). All (100%) couples underwent social pressure

Figure-1

Age of the female (Years)	Number of years they were married	Extended vs. Independent family
25-29 (16)	1 to 5 (25)	extended (28)
30-34 (12)	6 to 10 (13)	independent family (12)
35-39 (7)	More than 10 (2)	
20-24 (5)		

Figure-2

Level of education of the female	**Level of education of the male partner**	**Profession of the male partner**
Illiterate (1)	illiterate (1)	business men (11)
Primary (1)	secondary (7)	professionals (7)
Secondary (11)	graduate (8)	bankers (6)
Graduate (16)	Post graduates (11)	lecturers (9)
Post graduates (11)		private company employees (7)

Figure-3

Duration of the treatment (Years)	Cause of infertility	Emotional Trauma in couples
1 to 2 (18)	known (20)	Depression (25)
3 to 4 (17)	unknown (20)	Anxiety (12)
5 to 6 (3)		Anger (3)
Greater than 6 (2)		

Figure-4

Initial treatment	male vs female	psychological impact on females
By general practitioner (25)	male (7)	Psychological medication (6)
Home remedies (9)	female (33)	Counselling and behavioural therapy (34)
Advice by religious leaders (6)		

DISCUSSION:

Mental distress has been suggested to be an etiological factor in infertility,[16] and has been linked to increased risk of diminished ovarian reserve.[17] However, the existing literature supports the hypothesis of infertility causing mental distress than the other way round.[16,18] It has been reported that women who seek medical care for infertility have higher levels of mental distress and symptoms of anxiety and depression and lower quality of life compared with control samples without fertility problems.[16,19-24] One-third of women seeking help for infertility scored above the cut-off values for a mental condition.[20,25,26]

In a study done by Chen et al[27] on 112 participants, 40.2% had a psychiatric disorder. The most common diagnosis was generalized anxiety disorder (23.2%), followed by major depressive disorder (17.0%), and dysthymic disorder (9.8%). Our study showed 15% had psychiatric disorder, 62.5% suffered with depression, 30% anxiety and 7.5% had anger. There was less number of psychiatric disorders in our study, whereas depression and anxiety were higher. There is a possibility we may be missing the number by incorrect diagnosis or the sample size of our study was small. In another study,[28] half of the patients dropped out of fertility treatment as a result of emotional distress. Various other studies showed that major reason for discontinuation of infertility treatment were psychological stresses.[29,30]

In a prospective study done by Dhaliwal et al[31] on one hundred and twenty infertile couples, psychological components were found to play a significant role in infertility of unknown etiology. Similarly in our study, half of the couples had infertility of unknown etiology. It may be worth exploring that infertility might have been due to psychological causes.

The psychological impact was more on females (82.5%) compared to males (17.5%). Most researchers have also concluded that infertility is more stressful for women than it is for men.[16,32,33,34] The woman's age is the most important factor influencing the success of fertility treatment. Over half (53%) of women receiving fertility treatment were aged 20-29 years which was a positive indicator for fertility treatment outcome. Fertility declines at age of 30 and more steeply from age of 35 (Figure-1). 32.5% became pregnant with treatment, which was a pretty respectable outcome. According to Human fertilization and embryology authority in 2010, women having in vitro fertilisation resulting in a live birth (national average) was 32.2% for women aged under 35.[38]

Infertility has a major impact on women's quality of life and emotional well-being. The resulting interpersonal problems extend to women's sexual relationships, with a high proportion of infertile women reporting sexual problems[5,12,35] which were also highlighted by our study (60% sexual dysfunction). Family-influences play an important role in the outcomes of infertility.[9] Family interference is either felt as a negative pressure or as an encouragement. 70% of our couples lived in extended family system. Economic is a specific distressing factor for the infertile couple. The infertility treatment fee globally is quite high in relation to the average income. However, participants in this study were able to afford the cost of treatment. This might be because the couples had to reduce their expenses and save all their money for infertility treatment. There was a possibility that family might have contributed to these expenses. The fact that more than half of the couples recognised their fertility problem within five years of marriage showed the importance for couples for having children at an early age. Majority of the couples had initially approached the general practitioner which indicated the awareness of the problem and took steps in the right direction.

CONCLUSION:

The psychological dimension of infertility affects all aspects of couple's personal lives including social and economic ones. The vulnerability can be tackled by implementation of evidence-based screening for psychological distress and appropriate referral for

support. The training of staff in communication skills, promoting shared decision making and prioritizing psychological interventions can improve the outcome. More large-scale, long-term prospective cohort studies which address the social as well as psychological consequences of infertility are needed. Further research is needed to understand the association between distress and fertility outcome, as well as effective psychosocial interventions.

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