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Research article

AN UNBORN HOPE: A STUDY OF PSYCHOSOCIAL CHARACTERS, CHOICES AND MOTIVATIONS AMONGST INFERTILE COUPLES AT AN ART CENTRE AT PUNE

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A B S T R A C T

Background: Infertility leads to enormous stress in all dimensions of couple's life. There is scant knowledge about the prevalence of infertility, involuntary childlessness and the seeking of fertility treatment and only few longitudinal studies are there about the psychosocial consequences of infertility and its treatment. Infertility is undeniably a major life crisis and psychologically stressful for many couples. However, there still remains a major research lacuna in this area. With this background in mind, a cross-sectional study of the psychosocial factors of infertile couples based in a tertiary care hospital is proposed.
Aims and objectives: To study the various psychosocial factors influencing the choices, motivations and overall mental health and well being of infertile couples at an ART centre, Pune. And study its association with various socio demographic factors.
Methodology: A cross sectional, hospital based study conducted in a tertiary care centre infertility centre of Pune. It was a questionnaire based study which also included Tuebingen scale for quality of life.
Results: 80% males and 74% female felt that it's necessary to have a child, 22% males and 12 % females were under family pressure. 56% males and 64% females were distressed, 76% males and 80% females use to get hurt on childlessness remark. 12% males and 52 % female felt guilty for their partner (p-0.00).12% males and 22% told that their sexual desire has been decreased and 6% males and 18% females told that they feel less satisfied after sex (p-0.009). 40% males and 64% females believed that biological child is superior to adopted child (p- 0.001), 36%males and 24% females felt that there is social stigma attached with adoption (p- 0.001), 56% males and 58% females had plan to adopt in future.

INTRODUCTION

Infertility leads to enormous stress in all dimensions of couple's life [1].Clinically a couple is defined as inability of a sexually active non–contraceptive couple to achieve pregnancy in one year. There is scant knowledge about the prevalence of psychosocial consequences of infertility and its treatment.

Infertility is undeniably a major life crisis and psychologically stressful for many couples. It is estimated that about 8%–10% of couples experience some sort of infertility in their reproductive lives [2]. In India, primary and secondary infertility figures, as given in WHO studies, are 3% and 8%, respectively [3,4]. Evidence from a village-level study in the state of Maharashtra in India puts the level of infertility at 6%–7% [5]. According to the recent National Family Health

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The WHO estimates the overall prevalence of primary infertility in India to be between 3.9 and 16.8 per cent. [7] Estimates of infertility vary widely among Indian states from 3.7 per cent in Uttar Pradesh, Himachal Pradesh and Maharashtra, to 5 per cent in Andhra Pradesh, and 15 per cent in Kashmir. Moreover, the prevalence of primary infertility has also been shown to vary across tribes and castes within the same region in India[8-12]

The psychosocial profile of subjects consulting a fertility clinic is midway between that of normal subjects and that of individuals suffering of psychological problems [9]. High fertility problem stress and high marital benefit were associated with high importance ratings of patient-centred care and intentions to use professional psychosocial services [7]. It was also found that group interventions which had emphasised education and skills training (e.g., relaxation training) were significantly more effective in producing positive change across a range of outcomes [8].

A systematic scrutiny of the literature yielded 706 articles that paid attention to emotional aspects of IVF treatment of which 27 investigated the women's emotional adjustment with standardized measures in relation to norm or control groups. Most studies involved concurrent comparisons between women in different treatment phases and different types of control groups. However, there still remains a major research lacuna in this area. [10]

When couples are confronted with infertility they may choose among several options like asking for medical help, adoption, fostering, alternative medicine etc. Studies reveal that medical help and ARTs, which have low success rates, are preferred in 80% cases as compared to adoption [13]. However, these choices are guided by several psychosocial factors. They have other profound effects as well. In a study by Wischmann T *et al* (2001), functionally infertile couples were found to be `anxious and depressive persons'. Many women suffered from dysmenorrhoea, functional sexual disorders, and functional disorders in the gastrointestinal and cardiovascular problems, all of which may have a psychosomatic component [14].

The inability to have children affects men and women across the globe. Infertility can lead to distress and depression, as well as discrimination and ostracism [15, 16]. Menning used the psychological stages of the grief and loss model (surprise/shock, denial, anger, bargaining, and acceptance) to explain the infertility experience, it was discussed that the guilt, anger, depression, and withdrawal that may follow the discovery of impaired fertility. [17]

With this background, a cross-sectional study of the psychosocial factors of infertile couples at a tertiary care hospital was carried out.

MATERIAL AND METHODS

A cross sectional study was carried out on 100 couples registered for infertility treatment at the ART centre at a tertiary care centre at Pune over a two month period. Assuming the prevalence of positive psychosocial factors affecting the infertile couples to be 50 per cent, with 95 per cent level of confidence and 10 per cent absolute error, the sample size was calculated to be 96, therefore 100 subjects were selected. Inclusion criteria for selection of study subject were those who were case of primary infertility. Cases of secondary infertility were excluded from sample. The husband and wife were separately subjected to a pretested pre-designed questionnaire by the interviewer after taking an informed consent and assuring them of the confidentiality of the collected data.

The questionnaire was in three parts. First part recorded the Demographic information while the second part addressed the motives for wanting a child, awareness and attitude towards the options available. The third part was meant to assess the general well being and marital harmony. A pilot study was conducted on 10 couples and appropriate modifications were made in the questionnaire

The questions not well understood by the subjects were translated into the vernacular language (Hindi/Marathi) for their convenience. The collected and compiled data was entered in EXCEL and analysed using SPSS software.

RESULTS

Fig1 shows the distribution of age groups among study population. Mean age of the study subjects was 33 yrs for males and 28.4 yrs for females

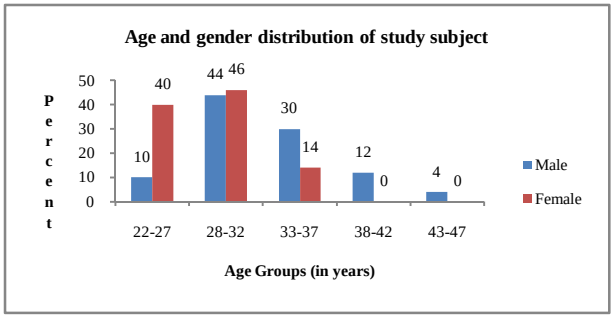

Fig 1 Age and gender distribution of study subject

46% of the men possessed a degree while 35% were educated at least up to the intermediate level. Majority of the women (47%) had a degree qualification followed by an equal number having received high school or intermediate level education (24% each). 96% of the men were employed in jobs equivalent to clerical work in various govt. / non govt. organizations or worked as shopkeepers. No woman in our study was working. Majority of the couples (98%) belonged to the upper middle class. Majority of the couples lived in a joint family (65%) followed by 35% couples that had a nuclear family.

Table 1 shows the response of couples on necessity of having child.

Table 1 Response on necessity of child

Response on necessity of child	Husband	Wife	Level of significance (chi square)
Every family has children and it is a tradition that marriage will lead into family	70	48	0.025
To experience the joy of parenthood.	36	48	0.224
To pass on our family name.	34	28	0.517
Children will take care of me when i grow up.	42	20	0.017
My partner may leave me if we do not get a child.	2	8	0.168

80 men and 74 women in our study believed that having a child is necessary for a good social status, difference was not significant (p value 0.313). With regard to social pressure, In our study we did not find that 22 males and 12 females accepted that they are being pressurized by their family members.

We assessed the knowledge about the options; response is depicted in table 2

Table 2 showing the awareness about options they were aware about

Options	Male	Female	Chi square	OR	95 % CI	
					L	U
Adopting a child from my relatives.	79	81	0.13	0.88	0.44	1.77
Adopting a child from foster homes	81	77	0.482	1.27	0.64	2.52
Treatment for infertility	100	100	-	-	-	-
Will remain childless if does not conceive by treatment	17	7	7.35	3.89	1.38	11

30% of the husbands and 16% of wives accepted that they had approached some baba or non medical persons before trying

the treatment, this difference was statistically significant (p value=0.019).

Only 22% of the males and with not much of difference, 16% females ever gave adoption a thought before trying at ART (p value-0.279). It was observed that 44% of the husbands and 32 % of wives had knowledge of any couple adopting in the community, this difference was not significant. During study it was also brought out that 26% of the male subjects knew about agencies working for adoption whereas only 10% of their female counterparts were aware about the same. This difference was statistically significant (p=0.003). During the response when asked if they thought a biological child to be superior to an adopted child, 40% of the husbands and majority of the wives 64% gave a positive response. This was a statistically significant difference (p=0.001).

36% of the males and 24% of the females under study believed that there is a social stigma attached to adoption and there was no significant difference of opinion in this response. As per adoption issue, Majority of the husbands (54%) and wives (60%) desired that they would like to go for adoption in case their current treatment fails. However , there is a significant Association between the sex of respondents and their choice when it comes to surrogacy .While 34% of the men have kept surrogacy as an option only 10% of the women would choose it.

Table 3 Distribution of responses and its association between male and female with regards to Tuebingen quality of life scale

	Variables	Male (in %)	Female (in %)	Chi square
1.	Not having been able to have a child is distressing to me.	56	64	0.248
2.	I can't achieve happiness without a child.	56	52	0.570
3.	I feel hurt when others make remarks about our childlessness.	76	80	0.495
4.	I feel upset when I see a baby pusher / stroller.	50	64	0.046
5.	I consider infertility a personal shortcoming.	30	28	0.775
6.	I feel down.	42	40	0.774
7.	I am coping well with our difficulties conceiving.	84	76	0.157
8.	My life revolves around trying to have children.	64	66	0.767
9.	Planning of our future has been hindered by our difficulties conceiving.	60	30	0.000
10.	I avoid contact with people who have children.	10	18	0.103
11.	The psychological stress interferes with work, leisure activities.	36	26	0.126
12.	I feel like giving up.	20	22	0.728
13.	Certain aspects of my relationship with my partner have become less important since we have had problems conceiving.	4	4	1.00
14.	My partner and I have less sex when I am not ovulating.(only for females)	-	24	-
15.	The stress of trying to conceive decreases feelings of tenderness for my partner.	16	6	0.024
16.	The desire to have a child decreases my sexual desire for my partner.	12	22	0.060
17.	Sex is a chore.	10	8	0.621
18.	I feel under pressure when I am ovulating.(only for females)	-	36	-
19.	I feel less satisfied after sex than I used to before we were trying to conceive.	6	18	0.009
20.	I feel like a failure because of our problems conceiving.	16	32	0.008
21.	I feel guilty for having let my partner down.	12	52	0.000
22.	I have feelings of low self worth.	12	26	0.012
23.	I can better my life situation.	94	90	0.297
24.	I can enjoy the good things in life.	90	80	0.048
25.	I have a good sense of humour about life.	88	78	0.060
26.	I have lost interest in things I used to enjoy.	16	32	0.008
27.	I am able to relax.	80	66	0.026
28.	I am satisfied with my life.	94	72	0.000
29.	I have difficulties with planning and problem solving.	22	17	0.059

30% of the women would prefer to remain childless than go for adoption or surrogacy.

Table 4 shows the assessment of husbands and wives on the Quality of Life Scale.

Table 4 Association of overall scoring with various socio demographic factors

Variables		N	Mean ± SD	95%CI		P value
				L	U	
Sex	Male	100	59.26 ±6.89	57.82	60.59	0.923
	Female	100	59.35±6.62	57.99	60.63	(t test)
Marriage duration	5 yrs and below	34	58.81 ±5.92	57.30	60.16	0.458
	Above 5 yrs	66	59.56±7.13	58.25	60.74	(t test)
Treatment duration	2 yrs and below	94	58.88±6.49	57.18	60.19	0.399
	Above 2 yrs	106	59.68±6.97	58.4	61.26	(t test)
SES	Middle	196	59.34±6.79	57.94	60.74	0.648
	upper	4	57.78±3.42	54.81	60.74	(t test)
Age (in yrs)	22-27	50	59.54±6.46	57.78	61.56	0.222 (One way ANOVA)
	28-32	90	58.76±7.28	57.25	60.24	
	33-37	44	59.58±6.31	57.78	61.58	
	38-42	12	58.52±4.97	55.68	61.56	
	43-47	4	66.67±3.42	63.70	69.62	

DISCUSSION

In our study 81 % males and 77 % females were aware about options of adoption. Study done by Ezugwu F.O *et al* found that only 27.3% study subjects were aware about adoption, 21.6% were aware about adoption procedure, and only 30.7% were willing for adoption of a child. In our study 22 % males and 16% females gave a thought about adopting a child. Almost 100 % were willing for adopting a child in due course of time. Only 26 % males and 10 % females were aware about the source from where a child can be adopted. [13].

Finding of our study can be compared with Sudha G *et al*, 2011. They found that sexual relationship was unaffected in 27.8% of couple whereas in our study 12 % males and 22 % females felt that their sexual performances decreased due infertility problem. 6% males and 18% female also felt that they don't feel satisfied after sex. They also found that 27.2% males and 29% females were depressed in their study where as in the same was 56% & 64% among males and females respectively in our study. This finding was quite high in our study, this might be due to different life style and difference social environment pertaining to infertility in our society. 11.4% males and 10.2% females felt guilty for infertility which was 12 % among males and 52% among female. (18)

Findings are also comparable with Ried and Alfred, 2013. They found that 76 % women were distress for not having a child where as it was 56 % for male and 64 % among females in our study. In their study 76% women felt guilty for letting their partner down for infertility whereas in our study it was 12% among males partner and 56 % among female partner and this was statistically significant (p value <0.05). In their study 48 % women felt hurt by comments by others about their childlessness, where as it was 76% and 80 % respectively among males and females in our study. This remarkable difference may be explained by cultural difference between places of study. They found that 48% women felt like failure because of infertility whereas it was low (16% for males and 32 % for females). This difference between male and female was statistically significant (p value <0.05).44%

women in their study use to have sex while not ovulating while same was more pronounced in our study as it was just 24%. In their study 40 % felt sex as less satisfying, in our study it was 6% among males and 16 % among females and this difference was statistically significant (p value <0.05). 44% women in their study use to be under pressure at the time of ovulation while it was 36% in our study which was almost similar.[19]

48 % women use to feel down in the mentioned study while it was 42% among males and 40% among females in our study which is almost similar.

In their study 36 % women felt that it's their personal shortcoming and their life is revolving around infertility whereas in our study 28 % felt that it's their personal shortcoming and 66 % told that their life is revolving around children. In their study 36% women use to get upset after seeing baby pusher whereas it was 50 % for males and 64% among female in our study and this difference between males and females was statistically significant (p value <0.05). 28 % women were unable to plan about their future due to infertility whereas it was 22% males and 17% females felt same in our study.

CONCLUSION

This study concludes that there is a major discontinuity between the psychological effects of infertility treatment on husbands and wives. This study shows that majority of men wanted a child to continue the family lineage whereas women wanted it to enjoy the joys of parenthood. More number of men thought their children would take care of them in old age. A majority of wives thought a biological progeny was superior to adopted ones, which was not seen in case of men. This difference in expectations has an impact on their psychology too when they fail to have a child. Men were more proactive in trying to find and willing to try other avenues like surrogacy, adoption agencies and non-medical quacks. On the other hand, women were more positive for future than men, even though women felt more guilty and at fault then men. Though the couples did not feel that their relationship with each other had become less important but the husbands did report decreased feeling of tenderness towards their wives as she could not him a child whereas women felt under pressure and less satisfied after sex. No significant statistical association was found in the present study between variables such as age, sex, duration of marriage, duration of treatment and the psychological distress and choices made by patients, it does not mean that such an association does not exist. Further and more in depth studies are required to enhance our understanding of depression in infertility and the factors influencing it.

We conclude that depression can be one of the main psychological problems among infertile couples (especially women), which may affect all aspects of life of infertile couples and even the treatment processes of infertility, while infertility treatment centers pay less attention to such matters. Therefore, it may be desirable to establish psychological and psychiatric services in infertility treatment clinics and centers, which undoubtedly would facilitate the treatment and follow-up procedures in order to reduce the psychological problems of infertile couples.

Only covering one aspect will not totally cover the blues suffered by these patients. These couples also need support from other family members and friends. However they should be instructed not to be too intrusive into this very sensitive aspect of marriage.

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