

Prevalence of Sexual dysfunction in infertile men in comparison with normal fertile men: an institutional survey.

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I. Introduction:

Globally 8–12% of couples experience difficulty conceiving a child. ¹This study was conducted to check whether sexual dysfunction is more in infertile males in relation to normal healthy men through comparing sexual aspects & frequency of sexual problems in both groups. The secondary objective was: to determine factors affecting occurrence of male sexual dysfunction. Infertility has been described as a stressor and a life crisis for individuals or couples, which results in a lower quality of life and marital conflicts. ^{2,3} there are many factors which affect the sexual performance other than fertility status like erectile problems, premature ejaculation, lack of pleasurable activity or inability to complete activity to a point of orgasm. In our study we found that infertile men with younger age group or recent marriage have more prevalence of sexual dysfunction. Lack of communication, infrequency, premature ejaculation with or without erectile dysfunction was more common in infertile men ($p < 0.05$) only certain problems like avoidance or non-sensuality was equivocal. Mean values of Sexual health Index for Men (SHIM) Questionnaire was lower in infertile men than the fertile population. We conclude that infertility does influence sexual performance in infertile men and should be addressed to improve quality of life of men.

II. Methodology:

It was an Observational comparative study done at tertiary Hospital over the duration of one year in 2019-2020. 40 infertile males and 40 males with history of wife conceived in the past were evaluated for the study. Written & informed consent was obtained before entering participants into the study. The study design was explained to each participant separately in adequate privacy & those who agreed to participate then enrolled into the study. Males were evaluated by Sexual Health Inventory for Men (SHIM) questionnaire. Infertile males were those who are legally married and monogamously living with spouse with history of unprotected sexual activity for at least one year of period but not conceived during the course. While fertile male were those who were sexually active married male with couple conceived once in the past after sexual activity in monogamous relationship. Impotency, premature ejaculation, infrequency, non-communication, avoidance and non-sensuality were the parameters noted based on history from the patient.

III. Results:

The mean age of presentation was found in fertile men than infertile men. This can be due to more years of marriage in fertile men or increased concern in infertile men. Age since marriage is also a variable with difference in presentation of patients. Infertile men married more than a year and those with more than 4 years of marriage are more in number while fertile men with sexual dysfunction are more in number in the intermediate years of marriage.

Table 1:

	Fertile men	Infertile men
Mean age	33(25-35)	31(26-34)

More in fertile men as

Table 2: Age since marriage. compared to infertile men

years post marriage	Fertile men	Infertile men
1 to 2	15	22
2 to 4	32	21
>4 yrs	13	17
	60	60

Chart 1:

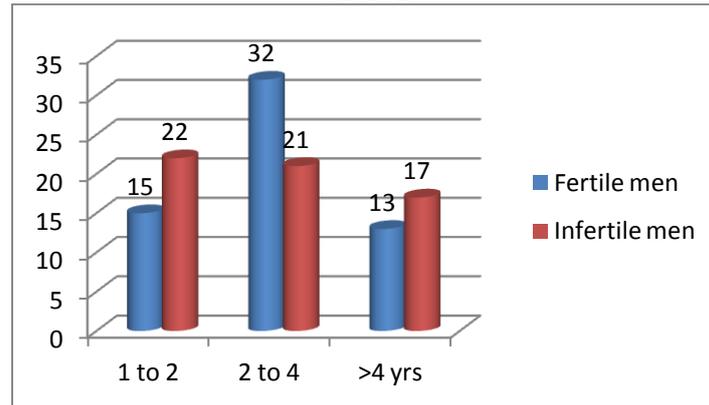


Table 3: One tailed test for testing difference of proportions.

Sexual problem aspect	Fertile men	Infertile men	SE_Pooled	P value
Non-communication	4	8	0.0586	0.0440
Infrequency	10	16	0.0772	0.0481
Avoidance	12	15	0.076	0.2560
Non-sensuality	11	13	0.0790	0.4458
Impotency	12	17	0.0807	0.0493
Premature ejaculation	11	18	0.0799	0.0373
Total	60	97		0.016

SE* standard error.

Chart 2:

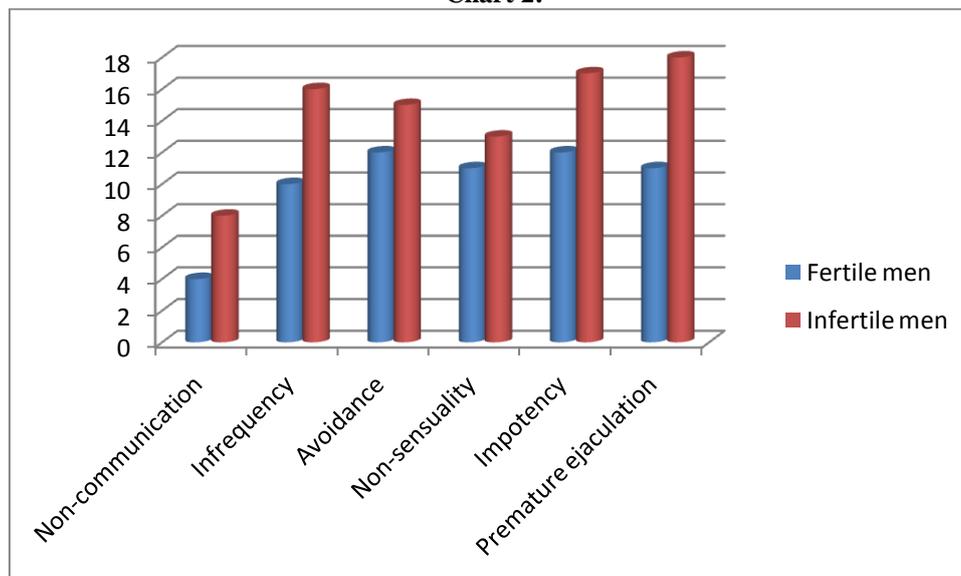


Table 4
Two tailed test for difference of mean.

SHIM questionnaire	Fertile men Mean±SD	Infertile men Mean±SD	P value
How do you rate your confidence that you could keep an erection?	3.8±1.1	3.±1.1	0.028
When you had erections with sexual stimulation, how often were your erections hard enough for penetration	4.2±0.5	3.6±1.2	0.015
how often were you able to maintain your erection after you had penetrated (entered) your partner	3.8±0.8	3.9±1.1	0.95
During sexual intercourse, how difficult was it to maintain your erection to completion of intercourse?	3.6±1	3.2±0.4	0.001
When you attempted sexual intercourse, how often was it satisfactory for you?	3.5±1.1	3.7±0.8	0.89

Various problems like non-communication, infrequency, premature ejaculation & erectile problems are significantly more common in infertile men ($p < 0.05$). While some dysfunctions like avoidance or non-sensuality are equivocal between the two groups.

SHIM score in fertile population was found to be higher as compared to that in infertile me. In the individual components of SHIM score, ability to maintain erection and sexual satisfaction was found to be equivocal. Difference in other parameters like confidence of having penetrable erection and maintaining penetration till completion of activity was statistically significant in both the categories. Total mean SHIM score was higher in fertile men as compared to infertile group suggesting more bothersome problems related to sexual differentiation exist in infertile men than fertile population.

IV. Discussion:

The results of this research showed that infertile men had more sexual problems compared to fertile men ($P=0.005$), which is consistent with the results of Shindel's study and Monga.^{2,4} Shindel in a study that evaluated the sexual function and quality of life in 121 infertile couples reported that sexual problems are common among infertile men.⁴ men were significantly different in terms of total score of sexual problems ($P=0.005$), no relation ($P=0.001$), impotency ($P=0.01$) and premature ejaculation ($P < 0.0001$), the most frequent sexual problems in fertile and infertile men was related to premature ejaculation and the lowest was lack of communication.⁴

Infertility has been described as a stressor and a life crisis for individuals or couples, which results in a lower quality of life and marital conflicts.^{2,3}

In infertile men, there is probably too much psychological stress and force to have sexual relation around ovulation and this has negative impact on their sexual function and causes more sexual problems than there are with fertile men.⁵ In addition, the diagnosis of infertility and contributing factors such as unsuccessful treatment, continuing lack of conception and childbearing, and the absence of the role as a parent may have a negative impact on marital relations.,^{1,2,6}

Also, infertility, rapidly and decisively and comprehensively, challenges the men and catches them in the crisis. a cohort observational study reported 11% of males experienced problems with erection or orgasm after the diagnosis of abnormal semen parameters, which might be psychologically related in the evaluation of infertility.⁷ Furthermore, there is an increasing use of medical services for the infertile.⁸

Infertile men are faced with two major lacks: being incapable of fertility and losing personal confidence. These two lacks lead to more vulnerability and sexual problems in men.

In this study, infertile men had higher rate of no relation ($P=0.001$), impotency (erectile dysfunction) ($P=0.01$) and premature ejaculation ($P < 0.0001$), compared to fertile men, and the most sexual problems in infertile men was premature ejaculation. Lotti in a study conducted on 244 infertile men reported that the most common sexual problem in infertile men was erectile dysfunction which was directly related to depression.⁹ This might be due to self-esteem being recognised as an important part of both a person's sexual confidence and adequacy.¹⁰ Infertility could influence sexual activity in infertile couples, and that fertility problem stress tended to decrease frequency of intercourse.^{11,12}

In our study premature ejaculation, erectile problems and lack of confidence of performing intercourse was found to be higher in infertile men. This concurs with the study by Shindel et al who also reported that 50% of infertile men have premature ejaculation, the severity of which was inversely associated with marital satisfaction.¹³ In infertile women also, the most frequent problem was related to no relation. The results of different studies reported different types of infertility with their own common sexual problems. Tayebi in a study on 300 infertile women in Yazd, showed that the most common sexual problems of infertile women was orgasm and then the sexual desire and dyspareunia.¹⁴ In addition, McCarthy et al¹⁵ suggest sexuality is more than the physical act of intercourse, as it influences self-identity, communication, sharing pleasure, deepening

intimacy and may lessen stress in one's life. Furthermore, diagnosed male factor and infertility duration of 3–6 years contributed to higher relationship instability and lower sexual satisfaction in both females and males from infertile couples.¹⁶ In the study of Khadem, the most common sexual problem was arousal and in the study of Oskay it was reported as a decreased sexual desire.^{17,18} The main reason for the infertile male's sexual dysfunction was related to a perception of losing his masculinity.¹⁹ This inconsistency of previous studies with the results of the present study can be due to using different tools for the evaluation of sexual problems.

Conflict of Interest: None.

Limitation of study: the study was conducted in an Institute with limited number of study population. More sample size & multicentric survey may provide more precise results.

V. Conclusion:

sexual dysfunction is more prevalent in infertile men. Infertility clinicians should be aware of this problem to assess and treat their patients to improve their quality of life not only in the aspect of infertility but also pleasurable sexual life.

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