An Epidemiological Profile Of Coital Problem Among Infertile Women

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ABSTRACT

Background: Infertility is a very important issue for couples of childbearing age all over the world. It is different from the other diseases by it considered as a special reproductive health defect

Aim and Objective: The present research was aimed to study of an epidemiological profile of coital problem among infertile women

Methodology: It was a hospital-based prospective observational study that involved all couples visiting the Obstetrics and Gynecology department's out-patient clinic at Santosh Medical College and Hospital, Ghaziabad. The research was done over the course of 18 months, from January 2019 to June 2020. 193 couples were solicited, but only 172 couples who met the inclusion criteria were enrolled in the study. Of the 193 couples that were recruited and investigated, 11 were lost to follow-up and 10 patients were not thoroughly explored.

Result: Coital problems were present in 4.6% of males, were more common in 75% of males with primary infertility, were present in 83.33% of patients with primary infertility, were present in all patients with secondary infertility, and were not statistically significant for the distribution of coital problems.

Conclusion: Infertility is a generational issue rather than just a personal one. As a result, governments and health policymakers should prioritise the development of infertility clinics, as well as the control of reproductive tract infections and abortion.

Keywords: Epidemiology , coital problem , infertile , oral contraception, cultural factors , prolonged

INTRODUCTION

Reproduction is the gift of God to all living creations. God created this world for all his living creations to reproduce fill and flourish it. Infertility is a disease of reproductive health that exerts a profound impact on an estimated 80 million people worldwide [1]. The World Health Organization ranks infertility as the 5th highest generator of disability among the global population of all people under 60 years of age [2] . The clinical definition of infertility is an inability to conceive after 12 months or more of regular unprotected coitus (1) . From the demographer's point of view, infertility is defined as the absence of live birth in a woman of reproductive age (15–49 years) with regular unprotected sexual intercourse for more than two years [3] . Infertility is classified as primary or secondary. Primary infertility is denoted for those women who have not conceived previously. In secondary infertility, there is at least one conception but fails to repeat. The etiologic sources of infertility can be of either the man or the woman or both. In the developing nations, bilateral uterine tube blockage is the commonest cause of infertility (4) . The fallopian tubal occlusion is mainly due to pelvic inflammatory disease (PID) which is caused by post-abortal and post-partum infections. In addition, ovulatory disorder, contraception use, and sociocultural factors are the causes of female infertility. Prolonged use of oral contraception, cultural factors like prolonged breastfeeding habit, and heat exposure of the male partners are reported risk factors affecting fertility.[5-7] Genetic and environmental factors and infections can affect male fertility. These could lead to impaired sperm cell production, sperm transportation, and sexual habit which end up with infertility. Furthermore, the etiology of infertility shows a significant regional variation [8] .

It is impossible to estimate the exact incidence of infertility as majority of the couples in reproductive age particularly those living in rural areas fail to seek treatment for infertility due to lack of awareness of fertility treatment, visits to quacks, cost of treatment and social embarrassment. It is the right of the couple to decide between themselves and plan the family. The social consequences of infertility violate this essential human right, and therefore it necessitates addressing infertility. It affects both men and women and even with rising rates of male factor infertility, it is the women who is blamed of infertility. High level of infertility is associated with promiscuity, divorce, late marriage and planning the family at delayed ages.

In the world and particularly in Africa, infertility is more than a health problem but a psychosocial problem [9-11]. Prevalence is very high in sub-Saharan Africa, where one third of the couples would be affected [12] . Males' responsibility for the couple's infertility is in 40% - 50% of cases [13].Substantial progress has been made in the treatment of male infertility in terms of the rapeutic sinetiological research [14] . This contrasts the prevalence of the disease in steadily increasing [15].In our practice, very few studies have been devoted to male infertility. The aim of this study was to identify clinical, etiological and

epidemiological profile of male infertility at the urology department to improve its management.

Environmental toxins like glues, physical agents, chemical dusts, silicone are risk factors for infertility and other occupational environmental exposures such as chlorinated hydrocarbons associated with increased risk of spontaneous miscarriage . Direct or indirect exposure to these agents are linked with infertility.

MATERIALS AND METHODS

It was a hospital-based prospective observational study that involved all couples visiting the Obstetrics and Gynecology department's out-patient clinic at Santosh Medical College and Hospital, Ghaziabad. The research was done over the course of 18 months, from January 2019 to June 2020. 193 couples were solicited, but only 172 couples who met the inclusion criteria were enrolled in the study. Of the 193 couples that were recruited and investigated, 11 were lost to follow-up and 10 patients were not thoroughly explored. A written informed consent was obtained from all the couples after explaining the purpose of the study and assuring them of the confidentiality before recruitment in the study. Approval from the Ethical Committee of the University was taken.

Both the partners were interrogated together. Demographic characteristics of eligible couples like age, religion, socioeconomic status, occupation, literacy level, residence, type of family were recorded on case information sheet. Relevant information regarding marital life of the couple like duration of married life, duration of infertility, history of cohabitation, coital frequency, history of any coital problem and their knowledge of fertile period was recorded.

RESULTS

Table 1: Socio-demographic data distribution of IUCD.

Socio-demographic data distribution of Female		Number (%) n=172
Age	≤ 20 years	11 (06.39%)
	21-30 years	84 (48.83%)
	31-40 years	69 (40.11%)
	≥ 40 years	08 (04.65%)
	MEAN ± SD	27.88 ± 5.18
Religion	Hindu	104 (60.46%)
	Muslim	58 (33.72%)
	Sikh	7 (04.06%)
	Christian	3 (01.74%)
SES	Lower SES	54 (31.39%)
	Middle SES	55 (31.97%)
	Upper SES	63 (36.62%)
Education	Illiterate	67 (38.95%)

	School	43 (25.00%)
	College	62 (36.04%)
Occupation	Unemployed	74 (43.02%)
	Employed	98 (56.98%)
Type of Family	Nuclear	87 (50.58%)
	Joint	85 (49.41%)
Residence	Urban	99 (57.55%)
	Rural	73 (42.44%)

In Table 1, The majority of the subjects (n = 84) were between the ages of 21 and 30. The mean age was 27.88 5.18 years, with a range of 18 to 39. Of those with primary infertility, 54.20 percent were between the ages of 21 and 30, while 47.69 percent had secondary infertility. Age groups >40 years showed statistically significant findings between the two groups (p-Value=0.02). Hindus (70.09%) made up the bulk of the primary infertility group. The percentage of Hindu and Muslim patients in the secondary infertility category was nearly equal. Hindus and Muslims in the primary and secondary infertility groups showed a statistically significant association with p values of 0.001 and 0.002, respectively. The proportion of patients were almost equally distributed (in terms 1/3) in lower, middle and upper socioeconomic class in both the groups. The difference in the percentage of unskilled workers between the two groups was statistically significant, with a p-value of 0.03.71.02% of primary infertility couples lived in urban areas, as opposed to 64.61% of secondary infertility couples. Regarding residency in both groups, the p Value was very significant (p-Value= 0.0001).

Table 2: Types of infertility.

Types of infertility	Number (%)
Female Infertility	64 (37.21%)
Male Infertility	56 (32.56%)
Combined Infertility	24 (13.95%)
Unexplained Infertility	28 (16.28%)

In our investigation, infertility was shown to be 5.1% common. Among all cases of infertility, the prevalence of primary and secondary infertility was 62.21% and 37.79%, respectively. Infertility due to male or female causes accounted for 32.56% of all cases, mixed infertility 13.95%, and unexplained infertility 16.28% of all cases.

Unidentified causes of infertility are referred to as unexplained infertility, while male and female factors can both be responsible for mixed infertility.

Table 3: Coital Problems.

Coital Problems	Number (%)			p value
	Primary Infertility (n=06)	Secondary Infertility (n=02)	Total (n=08)	
Erectile Dysfunction	04 (66.66%)	01 (50%)	05 (62.5%)	0.12
Premature Ejaculation	02 (33.33%)	02 (100%)	04 (50%)	0.69
Orgasm Disorders	05 (83.33%)	02 (100%)	07 (87.5%)	0.56
Chronic Disorders	01 (16.66%)	01 (50%)	02 (20%)	0.37

In Table 3, Coital problems were present in 4.6% of males , coital problems were more prevalent in 75% males with primary infertility, 83.33% of patients with primary infertility had orgasmic disorders ,All patients with secondary infertility had orgasm disorders and the distribution by coital problems was not statistically significant.

DISCUSSION

The need to reproduce is innate in humans. Due to the social shame surrounding infertility, people may suffer horrible mental hardships all of their lives, including marital strife that results in divorce. Given the strong relationship between knowledge and education, the causes of infertility vary according to area, population, and level of education. Since changing healthy behaviour needs being aware of risk factors, a study was conducted to identify the sociodemographic trends and etiological causes of infertility that are common locally and to provide appropriate treatment.

Infertility was prevalent in our study at a rate of 5.1%. It is easy to understand why there are more infertile couples visiting the infertility clinic, as improved health seeking behaviour and greater awareness that infertility is a treatable gynaecological condition. Primary infertility is the most prevalent pattern of infertility seen in our study. Additional research was conducted by Taimoora Al Subhi, Kalpana Singh, Seyedeh Zahra Masoumi, Ifeanyi E. Menuba, and Priyanka Sanjay Deshpande, among others. The majority (62.21%, or 107 couples) of the 172 infertile couples who took part in the study had primary infertility, while the remaining 37.79%, or 65 couples, experienced secondary infertility. The study included 172 infertile couples, of which 107% (62.21%) had original infertility and 65 (30.79%) had secondary infertility. Because the population we studied had greater literacy rates, and because the majority of instances of primary infertility occurred in metropolitan areas, there was a higher prevalence of primary infertility in our study.

Our study depicts similar rates of knowledge of ovulatory period in a menstrual cycle among infertile couples as shown by a recent study by Shilpa Pankaj Kshrisagar et al [50]. Though another recent study by Reeta Mahey et al [51] shows further lower rates of only 15% of infertile couples having accurate knowledge about the fertile window. The reason behind the higher rates of fertility window unawareness could be because of lack of fertility education during school and college education.

Present study states the existence of coital problems amongst infertile couples to be13.95%. In a study by Andrej Starc et al(41) negative effect is exerted by infertility on the sexuality of the couples which is supported by high percentage of sexual dysfunction among infertile couples i.e., 43-90% among women and 48-58% among men.

In the present study from a cohort of 172 infertile couples 15.6% of patients had clinical features suggestive of PID i.e., our study supports the notion that the incidence of acute PID is decreasing but rising evidence of tubal infertility indicates high prevalence of subclinical PID. In a study by Harold C. Wiesenfeld et al [52] women with subclinical PID had a 40% reduced evidence of pregnancy compared with women without subclinical PID. In another study by A. J. Pavletic et al [21] it was observed that 40% of women were infertile after an acute episode of PID.

Present study reports a very low incidence of 1.74% of female genital tuberculosis in patients presenting with infertility when compared with other studies by Asha Baxi et al [34], Savita S. Nadgouda et al [25] and Sughra Shahzad et al [53].Such low incidence has been reported because genital tuberculosis is a paucibacillary disease and difficult to diagnose. Also we have not included cultures of the tissue, laparoscopy and PCR for mycobacterium tuberculosis for diagnosing genital tuberculosis in the work-up for genital tuberculosis.

In the study by Asha Baxi et al [34] 56% of males had a positive PCR which suggests the possibility that tubercle bacilli resides in the genital tract. An important aspect of genital infections in male may be that male accessory sex glands act as reservoirs for mycobacterium tuberculosis and other sexually transmitted organisms, increasing the possibility of transmission to the females.

Our study found that primary infertility is more common than secondary infertility, which is a conclusion. The majority of infertility cases are caused by female infertility, but there is an increase in the prevalence of male factors, which is a reflection of shifting aetiological trends and shifting attitudes, as well as better understanding and increased awareness among society's members, which encourages investigation of both partners. The most frequent causes for women are PCOS and tubal factors, whereas the most prevalent abnormality of the sperm in men is oligospermia.

CONCLUSION

Reproductive health is a global health issue which has a high prevalence. The inability to have children affects couples worldwide and causes emotional and psychosocial distress in both men and women. Many factors like physiological, genetic, environmental and social contribute to infertility. Global, regional and national estimates of prevalence of and trends in infertility are needed to target prevention and treatment efforts. According to WHO, infertility resulting from sexually transmitted diseases or reproductive tract infections are predominant cause in developing nations.

In our study the most frequent cases of women infertility were from women with negative family history (56%) but according to type of infertility cases the primary infertility cases came from women with positive family history and the reverse of secondary infertility cases. This result can be attributed to effect of genetic factors in causing primary women infertility.

When compared to secondary infertility, the proportion of primary infertility was higher in our study. Abortion, tubal factors, pelvic inflammatory illnesses, and ovulatory dysfunction were the most prevalent causes of female infertility. The majority of their causes can all be avoided. The management of infections affecting the reproductive organs and abortion demand attention as a result of this. The most frequent reasons for male-related infertility were oligospermia.

Overall, infertility is not only a personal issue rather a matter of generation. Therefore, health policymakers and the governments should focus on the provision and advancement of infertility clinics and prevention and management of reproductive tract infection and abortion. Unexplained causes of infertility were also reported, this signals to advance our diagnostic modalities. Infertility perplexes the life of especially women, this could be at least vanquished via psychological support.

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