Original Article

Clinical and Socio-demographic Profile of Male Patients Attending Sexology Clinic in Central India

Sanjay Deshpande[1], Archana Deshpande[2], Suresh Ughade[3], Anjali Joshi[4]

ABSTRACT

Though sexual dysfunctions are common in India few come seeking treatment. As there is scarce data from India regarding the various sexual dysfunctions, this study was carried out to know the common sexual problems in the specialty clinical set up.

Study Setting : A private specialty sexology clinic.

Study Design : Observational, analytical study

Participants : The patients attending the sexology clinic.

Methods : The patients were assessed for the sexual dysfunctions like Erectile Dysfunction(ED), Premature Ejaculation (PE) and Dhat Syndrome (DS). The information regarding their age, occupation, marital status, personal habits like smoking, tobacco and alcohol consumption, area of residence, education, duration of marital life, associated comorbid conditions like hypertension, diabetes, ischemic heart diseases, thyroid disorders, psychiatric problems and other conditions was taken. Statistical analysis was done using STATA software.

Results : A total of 3128 male patients were included in the study. Most of the patients (88.23%) were in the age group of 20 to 49. More than 10% were in 50 to 69 years of age. Commonest sexual dysfunction in the patients was ED (53.90%) followed by PE (36.60%) and DS (10.80%). ED was strongly associated with diabetes (DM), hypertension (HT), coronary artery diseases (CAD), smoking, alcohol consumption and neuropsychiatric disorders. Smoking and alcohol consumption was significantly associated with ED after adjusting other risk factors in MLR. Only neuropsychiatric disorders were significantly associated with PE.

Conclusion : ED seems to be the most common and important sexual dysfunction for married men and is most commonly associated with comorbid conditions like DM, HT and CAD. Hence physicians treating men suffering from these diseases must include history of sexual dysfunction in history taking, so that appropriate measures can be taken to treat them.

Key-words : Erectile Dysfunction, Premature Ejaculation, Dhat Syndrome, Diabetes, Smoking, Alcohol

Introduction :

The sexual dysfunctions in males and females are major concerns for the society. However, the sensitiveness and secrecy about sexual behaviour prevents the person from seeking treatment. It can be a result of physical and psychological conditions. This hesitation further gets increased due to lack of trained clinicians treating sexual dysfunctions. In men, ED, PE and cultural syndrome like DS are more prevalent in India. In females, a very few women attend the specialty clinics. In India, the scientific literature on prevalence of sexual dysfunctions in males and females is scarce. Hence the current study was undertaken to know the various sexual dysfunctions common in males and females and their association with clinical and socio-demographic factors. Because of hesitation to reveal sexual problem, we lack the data on distribution of sexual problems in general population. In view of this, there was a need for knowing the common sexual dysfunctions prevalent in the society. Considering the limitations of undertaking the community wide study, the present study was carried out in a sexology clinic situated in Central India with the objective to know the common sexual dysfunctions in men and women attending the sexology clinic. It also aims to identify the other clinical and socio-demographic factors related to various sexual dysfunctions.

[1]Consultant Sexologist, Ramdaspeth, Nagpur
[2]Associate Professor, Dept. of Medicine,
[3]Biostatistician & Epidemologist
[4]Yoga Therapist

Address for Correspondence -
Dr. Archana Deshpande
E-mail : arcsandeshpande@rediffmail.com

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Materials and Methods :

The present study was carried out in a private sexology clinic at Nagpur, Maharashtra, India. This is a specialty clinic in central India where sex education, counselling and therapy is offered to the patients suffering from sexual dysfunction apart from sexual medicine. Usually, the patient from Vidarbha and other parts of Maharashtra and the neighbouring districts of Madhya Pradesh, Chhattisgarh and Andhra Pradesh come for the treatment. The patients coming to the clinic from July 2012 to June 2014 were included in the study. The patients' identity was kept confidential. After confirmation of presence of sexual dysfunctions, the subjects were enrolled in the study with their consent. During the course of treatment and counselling participant patients were interviewed about their socio-demographics and co-morbid conditions including age, occupation, marital status, personal habits, area of residence, education, duration of marital life, associated co-morbid conditions like hypertension, diabetes, ischaemic heart diseases, thyroid disorders, psychiatric problems and other conditions.

The sexual dysfunctions were assessed by sexual history, clinical examination and investigations if needed. The patients were classified according to the sexual dysfunctions. The definitions of the 3 most prevalent sexual dysfunctions in our study are as follows.

- As per ISSM (International Society for Sexual Medicine), Erectile dysfunction (ED) is a man's inability to achieve or maintain an erection suitable for satisfactory sex.
- As per ISSM (International Society for Sexual Medicine),"Premature ejaculation is a male sexual dysfunction characterised by ejaculation which always or nearly always occurs prior to or within about one minute of vaginal penetration; and, inability to delay ejaculation on all or nearly all vaginal penetrations; and, negative personal consequences, such as distress, bother, frustration, and/or the avoidance of sexual intimacy."
- Dhat syndrome ("semen loss "related psychological distress) is a culture-bound syndrome with vague and multiple somatic and psychological complaints such as fatigue, listlessness, loss of appetite, lack of physical strength, poor concentration, forgetfulness and other vague somatic troubles. These symptoms are out of fear of losing vitality due to passing of semen through masturbation or nocturnal emission. They also suffer from sexual dysfunction and relate them to loss of semen.

Other sexual concerns included Balanitis, infertility, Pyronie's disease, Paraphimosis, phimosis, tight foreskin, pain in testicles, pain in genitals, injury to penis, fear of STDs and HIV and premarital counseling, etc.

Data was coded and analyzed in statistical software, STATA, version 10.1, 2011. Summary measures included frequency and percentages. Associations between sexual dysfunctions and patient characteristics were established with Odds Ratio (OR) and Chi-square test. Multiple logistic regression (MLR) analysis was performed to adjust associations for other covariates. P-vale <0.05 was considered statistically significant.

Results :

A total of 3160 patients attended the sexology clinic in the study period. Out of which, only 32 (1.01%) were females and hence were excluded from the study. 3128 males visiting sexology clinic for the treatment were included in the present study. A solitary patient was found below 10 years and above 80 years of age. Majority (88.23%) of the males were in the age group of 20 to 49 while 10% were between 50 to 69 years of age. Around two-thirds (70%) of the males were married and were from salaried class. Almost 16% patients were using tobacco while 11% were consuming alcohol. Almost one-fourth (25.35%) of these patients were having some or the other comorbidities like DM, HT, CAD, etc. ***(Table 1)*** Maximum number of patients of ED was reported in the age group of 30-39 years (39.80%). Only 4% of the patients were outside the range of 20-59 years. However, 99.21% patients of PE were from 20-59 years of age. While the younger

Table 1 : **Demographic Characteristics of Patients(n=3128)**

Age	**No.**	**Percent**
Less than 10 years	1	0.03%
11-19 years	34	1.09%
20-29 years	887	28.36%
30-39 years	1292	41.30%
40-49 years	581	18.57%
50-59 years	254	8.12%
60-69 years	71	2.27%
70-79 years	7	0.22%
More than 80 years	1	0.03%
Marital Status	**No.**	**Percent**
Unmarried	893	28.55%
Married	2179	69.66%
Staying Away	3	0.10%
Separated	0	0.00%
Divorced	34	1.09%
Widowed / Widow	5	0.16%
DNK	14	0.45%
Occupation	**No.**	**Percent**
Unemployed	44	1.41%
Unskilled	523	16.72%
skilled	52	1.66%
Office job	1151	36.80%
professional	1073	34.30%
student	207	6.62%
Retired	65	2.08%
DNK	13	0.42%
Personal Habits	**No.**	**Percent**
Tobacco	520	16.62%
Smoking	153	4.89%
Alcohol	369	11.80%
Other	4	0.13%
Tobacco & Smoking	19	0.61%
Tobacco & Alcohol	139	4.44%
Smoking & Alcohol	68	2.17%
Alcohol & Other	1	0.03%
Tobacco, Smoking & Alcohol	38	1.21%
Comorbidities	**No.**	**Percent**
DM	154	4.92%
HT	128	4.09%
CAD	16	0.51%
Thyroid disorders	21	0.67%
Others	345	11.03%
Sexual Dysfunctions		
ED	**1686**	53.90
PE	**1145**	36.60
Dhat Syndrome	**338**	10.80
Others	**361**	11.54
Total	**3128**	**100%**

patients (95% in the age group of 11-40 years) consulting the sexologist was mostly concerned about Dhat syndrome which included fear of nocturnal emission, masturbation, worries about size of penis. ***(Table 2)*** Except thyroid disorders, all the comorbidities like DM, HT, CAD and neuropsychiatric disorders were significantly associated with ED ***(Table 3)***. However, in multivariate analysis, age, marital status and presence of chronic diseases were significantly associated with ED. ***(Table 3)*** Smoking and alcohol consumption was found significantly associated with ED. ***(Table 4)*** Smoking and alcohol consumption was significantly associated with ED after adjusting for other risk factors in MLR. ***(Table 5)*** Increased Age (Adjusted OR =1.67), Presence of Chronic diseases i. e. HT, DM, IHD (Adjusted OR=1.48) and marital status (Adjusted OR=1.22) were significantly associated with ED. ***(Table 6)*** Presence of neuropsychiatric disorders was significantly associated with PE. ***(Table 7)***

Discussion :

The present observational study attempted to establish evidence about association between sexual dysfunctions and characteristics of patients reporting to a specialty sexuality clinic in a typical urban setting. It was found that only 1 % females came for seeking treatment of sexual problems and that too for seeking help for sexual dysfunction in their husbands. The probable explanation for this gender disparity in seeking sex counselling may be either women are not comfortable discussing their sexuality issues with a male sexologist or they are still unaware about their own sexuality and pleasure. Also, women are socially more inhibited in talking about sexuality issues, though the prevalence of sexual dysfunction amongst women is more prevalent than men[1]. This unawareness amongst women in seeking treatment for sexual dysfunction may further be explained on the fact that the doctors attending the female patients are unaware about the various sexuality issues in females. Therefore, sensitization and training of Obstetricians, gynecologists and women physicians about women sexual dysfunctions is urgently warranted. Pal et al also found only two women in their study sample[2].

Table 2 : **Association between age and sexual dysfunction (ED/PE/DS) in males**

Variables	**ED**		**PE**		**DS**	
Age	No.	Percent	No.	Percent	No.	Percent
<10 years	0	0.00	0	0.00	1	0.30
11-19 years	3	0.18	1	0.09	14	4.14
20-29 years	357	21.17	296	25.85	217	64.20
30-39 years	671	39.80	519	45.33	90	26.63
40-49 years	386	22.89	246	21.48	10	2.96
50-59 years	206	12.22	75	6.55	4	1.18
60-69 years	57	3.38	7	0.61	2	0.59
70-79 years	5	0.30	1	0.09	0	0.00
>80 years	1	0.06	0	0.00	0	0.00
Total	**1686**	**100.00**	**1145**	**100.00**	**338**	**100.00**
P value	**0.0001 (HS)**		**0.0001 (HS)**		**0.0001 (HS)**	

Table 3 : **Association between ED and comorbidities**

History of Past illnesses	**ED = Yes**		**ED= No**		**Comparison**
	No.	%	N0.	%	P value
DM	111	72.08	43	27.92	0.0001
HT	92	71.88	36	28.12	0.0001
CAD	15	93.75	1	6.25	0.0001
Thyroid disorders	14	66.67	7	33.33	0.112
Neuropsychiatric disorders	199	57.68	146	42.32	0.003
Non diseased	1149	49.23	1185	59.77	Reference

Table 4 : **Association of Smoking & Alcohol with ED**

	ED			
Smoking		Yes	No	Total
Yes	Number	131	79	210
	%	7.77	5.48	6.71
No	Number	1555	1363	2,918
	%	92.23	94.52	93.29
Total	Number	1686	1442	3,128
Alcohol		Yes	No	Total
Yes	Number	379	236	615
	%	22.48	16.37	19.66
No	Number	1307	1206	2,513
	%	77.52	83.63	80.34
Total	Number	1686	1442	3,128
	%	100	100	100

OR for smoking = 1.45, 95% CI 1 (1.08 -1.97), P = 0.0107
OR for alcohol = 1.48, 95% CI 1 (1.23 -1.78), P = 0.0001

Table 5 : **Association between ED and smoking, alcohol adjusted for other risk factors in multiple logistic regression analysis**

ED	Odds Ratio	95% Confidence Interval		P
Age group	1.87	1.66	2.11	0.01
Smoking	1.34	0.97	1.85	0.08
Alcohol	1.52	1.21	1.92	0.00
Occupation	1.08	0.99	1.16	0.09
DM	1.10	1.06	1.14	0.01
Chronic diseases	1.51	1.11	2.06	0.01

Table 6 : **Results from multivariate analysis for assessing association between ED and other factors**

ED	**Odds Ratio**	**[95% Conf. Interval]**		**z**	**p value**
Age	1.67	1.52	1.82	11.16	0.01
Marital status	1.22	1.07	1.41	2.85	0.004
Chronic Diseases	1.48	1.13	2.12	2.67	0.008

Multiple Logistic Regression (MLR) model
(LR chi2 (7)= 339.10, P= 0.0001)

Table 7 : **Showing association between PE and comorbidities**

History of Disease	PE = Yes		PE= No		Comparison
	No.	%	N0.	%	P value
DM	63	40.91	91	59.09	0.742
HT	49	38.28	79	61.72	0.771
CAD	6	37.5	10	62.5	0.866
Thyroid disorders	7	33.33	14	66.67	0.56
Neuropsychiatric disorders	70	20.29	275	79.71	0.001
Non diseased	1149	49.23	1185	59.77	Reference

Similar trend was seen in a recent study[1]. Most of the patients attending the clinic were married (69.66%) and in the age group of 30 to 59 (67.99%) reinforced the contention that marital status of males in society usually force them to go for treatment promptly than the unmarried males. The significant association of marital status with ED may be explained on the fact that married men are compelled to go for treatment at the earliest than the unmarried men. More than 10% patients were in the age group of 50 to 69 years, which signify that the elderly males also give importance to the sexual pleasure as much as the younger ones. This is substantiated by attendance of nearly 3% patients more than 60 years of age ***(Table 1)***. Feldman et al[2] found that the combined prevalence of minimal, moderate and complete impotence was 52%. The prevalence of complete impotence increased three-fold from 5 to 15% among the subjects aged 40 to 70 years. Age of the subject was the variable found most strongly associated with impotence. According to Dunn et al[3], the most common problems were ED and PE found in aged men. In another study by Inman et al[4], the prevalence of ED was higher as per the advancement in age of men.

However, comparatively younger males were more involved in treatment seeking for sexual dysfunction in a study carried out by Pal et al. in psychiatry OPD. This shift of age from younger to elderly population may be due to availability of referral or tertiary level of health care facility regarding sexual dysfunction in the present study.

The spectrum of age distribution in the current study proves that the elderly population from 50 to 70 years is also sexually active and their sexual concerns need to be addressed by the treating physicians.

About 30% of the patients were unmarried and in the age group of 20 to 29. The Dhat syndrome (10.80%) is still a major sexual myth prevalent in the Indian society. This indicates the need of sexuality education in the younger population.

Commonest sexual dysfunction in our study was ED (53.90%) followed by PE (36.60%) and Dhat Syndrome (10.80%). However, considered to be the first study on sexual dysfunctions in India, Bagadia et al[5] found anxiety over nocturnal emission (65%) and passing semen in urine (47%) main problems in the unmarried group; while impotence (48%), premature ejaculation (34%) and passing semen in urine (47%) were common in married group. Anxiety state (57%), schizophrenia (16%) and reactive depression (16%) were common psychiatric diagnosable conditions. As the documented evidence was based on data 46 years older than our study, the symptoms included in Dhat syndrome were more prevalent that time than the frank sexual dysfunction.

Mc Cabe et al[6] also reported that premature ejaculation and erectile dysfunction were the most common sexual dysfunctions in men. Male sexual disorders were found to be highly prevalent among 41-50 and 51-60 years age groups[7]. In the recently carried out study, in a Psychiatry OPD, patients suffering from PE were more than those suffering from ED[1]. In our sexology clinic, most of the patients come by referrals from various specialties including psychiatry and family physicians. Hence, the more number of ED patients can be explained. Most of the patients of PE are able to have sexual

intercourse as against those with ED. This inability to consummate or initiate sex may be the reason for more patients suffering from ED in our study.

The association of smoking was found significantly associated with ED. This can be explained by effect of smoking on endothelial function which is of paramount importance for erection of penis. Verze et al[8] also explained smoking as an associated factor to ED due to its effect on endothelial function and increased oxidative stress.

The effect of alcohol consumption on erection of penis may be due to the age and comorbidities. However, this association cannot be substantiated by dose response relationship as smoking and alcohol consumption were not quantified in the present study. Further evaluation of effect of smoking and alcoholism with dose response relationship will confirm its association with ED. These results were consistently significant in MLR after adjusting for other factors. Modifiable risk factors for ED include smoking, lack of physical activity, obesity, excessive alcohol consumption, recreational drug use[9]. Evidence from epidemiological studies suggests that smoking, especially current smoking may be implicated as an independent factor that significantly increase the risk of ED[10]. The association of diabetes, hypertension and CAD was highly significant for ED ***(Table 3)***. The link between these conditions might be explained by the interaction between androgens, chronic inflammation, and cardiovascular risk factors that determines endothelial dysfunction and atherosclerosis, resulting in disorders of penile and coronary circulation[11].

The neuropsychiatric disorders were also significantly associated with ED. Singh et al[12] also reported that sexual health problems were significantly associated with the presence of diabetes, hypertension, or any chronic illness. In the final MLR analysis, ED was found to be strongly associated with age, marital status and presence of chronic diseases ***(Table 5)***.

In contrast to ED, PE was only associated significantly with neuro-psychiatric disorders. This confirms the fact that PE is mostly related to psychological factors.

Strength of this study :

This clinic based observational study with such a large sample size might be a first of its kind which has been exclusively performed in a specialty sexology clinic to the best of our knowledge. Earlier studies mostly included sample of patients from the psychiatry OPD. The large sample size of this study is the strongest factor and could help us in analysing association of ED with many associated factors and co-morbidities. Multiple Logistic Regression analysis had been handy in explaining role of many hypothesised factors (life style variables) and their independent and joint contribution in sexual dysfunctions in general and ED in particular.

Limitation of this Study :

This is a clinic based study and hence true prevalence of sexual dysfunctions cannot be estimated. The negligible number of female respondents was a limiting factor in exploring the female sexuality and sexual dysfunction in our society.

Conclusion :

ED seems to be the most serious and important sexual dysfunction amongst married men forcing them to seek treatment. More number of ageing men seeking treatment for ED is due to chronic diseases like DM, HT andz CAD hence physicians treating men suffering from these diseases must include sexual dysfunction in their history taking and either treatment or prompt referral for sexual dysfunction can prevent the sufferings in these patients.

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