Sexual Dysfunctions Among Male Psychiatric Out Patients- A Cross Sectional Study From Northern Western Rajasthan

*Dr. Harful Singh¹, Dr. Navratan Suthar², Dr. Shiv Gautam³, Dr. Nikhil Jain⁴

¹(Department of Psychiatry, S.P. Medical College, Bikaner, Rajasthan, India) ²(Department of Psychiatry, AIIMS Jodhpur, Rajasthan, India) ³(Gautam Hospital & Research Center, Jaipur, Rajasthan, India) ⁴(Department of Psychiatry, PGIMS, Rohtak, India) Corresponding author: Dr. Navratan Suthar

Abstract

Objective(s): To find out the prevalence and nature of sexual dysfunction among male out patients attending psychiatry OPD, also to find out the relationship of sexual dysfunction to specific psychiatric disorder and other predictors of sexual dysfunction.

Method(s): In this cross-sectional study, a total 500 patients were included. The sexual dysfunction was assessed with the help of Sexual Dysfunction Checklist.

Result(s): In this study sexual dysfunction was found in 180 patients (36%) out of 500 male outpatients. Prevalence of 12 different areas of sexual dysfunction shows that higher score were observed in dissatisfaction with sexual dysfunction (24.8%), and premature ejaculation (20.2%). There were higher prevalence of sexual dysfunction observed in alcohol dependence disorder (64%), anxiety spectrum disorder (mixed anxiety depression disorder (43%), generalized anxiety disorder (42.5%), OCD (57%), depressive disorder, MDP (36%), post psychotic depression (67%).

Conclusion(s): Sexual dysfunction should be assessed as a part of optimal psychiatric care, regardless of age, marital status, diagnosis, functional ability, or medication status. Open communication and trust needs to be established between clinician and patients.

Keywords: Sexual dysfunction, sexual dysfunction checklist, psychiatric disorder

..... Date of Submission: 08 -08-2017 Date of acceptance: 20-09-2017

I. Introduction

WHO and office of the Surgeon General of the United States have declared the sex is a basic human right and an integral part of life. Sexual functioning may be the barometer of a relationship and usually express the depth of love [1]. Sexual function is the physiological capacity to experience desire, arousal, and orgasm. The sexual response cycle four stage model of physiological responses to sexual stimulation, which, in order of their occurrence, are the excitement phase, plateau phase, orgasmic phase, and resolution phase. The cycle was first proposed by Masters and Johnson [2]. Sexual problems are extremely prevalent among the general population and even more so among persons with psychiatric illness [3]. They may be caused by the psychopathology of the psychiatric disorder but also by its pharmacotherapy. Impact of sexual problems for patients or partner can vary from unhappiness, frustration or a sense of sexual inadequacy to a more pervasive loss of self esteem, general happiness and even within social and occupational sphere. Diagnostic and Statistical Manual of Mental Disorders [4] defines sexual dysfunctions as clinical conditions characterized by abnormalities of sexual desire and psycho-physiological modifications of the sexual response cycle, causing considerable distress and interpersonal difficulties. These dysfunctions can be present throughout the entire life or be acquired (i.e., developed after a period of normal function); of a generalized or situational type (i.e., limited to a particular partner or to a specific situation). Despite the high rate, complaints about sexual dysfunction are largely unexplored or ignored by clinicians, or attracted only vague reassurances resulting in poor medication adherence and quality of life [5-6]. Psychiatric diseases may increase the risk of SD, and SD may further exacerbate psychiatric problems, suggesting a bi-directional relationship. Routine assessment of sexual functioning needs to be integrated into ongoing care to identify and address problems early. If sexual dysfunction is ignored it may maintain the psychiatric disorder, compromise treatment outcome and lead to nonadherence and compromise treatment outcome. Hence this study was undertaken with the aim to find out the prevalence and nature of sexual dysfunction among male out patients attending psychiatry OPD, and also to find out the relationship of sexual dysfunction to specific psychiatric disorder and to find out other predictors of sexual dysfunction.

DOI: 10.9790/0853-1609052227 22 | Page www.iosrjournals.org

II. Methodology

2.1 Study design

It was a cross sectional study conducted at Dept. of Psychiatry SMS medical college (psychiatric centre and psychiatric OPD, SMS hospital), Jaipur.

2.2 Sampling

First 10 patients (married male patients who were staying with spouse) attending psychiatric OPD of unit 1st on three days per week for a period of consecutive 17 weeks were enrolled in study. A total 500 patients were included in study.

2.3 Inclusion and exclusion criteria's

Married Male patients living with spouse, age between 20-65 years, and literate enough to read and understand the questionnaires were included, while uncooperative patients and patients in whom sexual dysfunction was present before the onset of psychiatric illness were excluded from the study.

2.4 Materials and methods

Before starting the study, approval was obtained from Institutional Human Ethical Committee (IHEC). An informed consent was obtained from the each subject prior to participation in the study. Then each included person was subjected to follow a proforma for sociodemographic details, and clinical profile (includes h/o physical illness, general physical examination, laboratory investigations, medication, and substance abuse etc). The sexual dysfunction was assessed with the help of Sexual Dysfunction Checklist which contains items corresponding to 12 areas of sexual dysfunction and diagnosis of psychiatric illness was made as per ICD-10.

2.5 Statistical analysis

The data was analyzed statistically. Quantitative data was summarized in mean and standard deviation. Qualitative data was summarized in proportion and analyzed using Chi-square test. A p value of <0.05 was considered statistically significant. All the statistical analysis was done keeping power of study at 80% and 95% confidence level.

III. Results

In this study sexual dysfunction was found in 180 patients (36%) out of 500 male outpatients attending psychiatry OPD ("Table 1"). Prevalence of 12 different areas of sexual dysfunction shows that higher score were observed in dissatisfaction with sexual dysfunction (24.8%), and premature ejaculation (20.2%), followed by difficulty in achieving erection (17.2%) and low sexual desire (15.8%) ("Table 2"). Nature of 12 different areas of sexual dysfunction out of 180 sexual dysfunction patients shows that higher score were observed in dissatisfaction with own sexual function (68.88%), and premature ejaculation (56.11%), followed by difficulty in achieving erection (47.77%) and dissatisfaction of sexual relationship with partner (47.22%) ("Table 3").

Age wise prevalence of sexual dysfunction shows no statistical significant difference yet high prevalence found in 40-49 and 60+ age group. Educational status and sexual dysfunction shows statistical significant difference in different education status. Complaints of sexual dysfunction is more prevalent in middle to senior secondary and graduate/post graduate patients compare to patients who are less literate i.e. up to middle only. Relationship between occupation, monthly income, Religion, domicile, family type and sexual dysfunction shows no statistical significant difference yet high prevalence rate were reported among unemployed, businessman, retired pensioner, middle income patients, Muslims, nuclear extended and nuclear family patients. Relationship between married years and sexual dysfunction shows that there is no statistical significant difference yet high prevalence reported among patients with 6-25 years duration of married years.

Relationship between total duration of illness and sexual dysfunction shows that maximum sexual dysfunction is observed in patients from 1 to 10 year of duration of illness (40 %) while people having less than 1 year or >10 years showed only 26-32 %. Relationship between medication, co-morbidity and sexual dysfunction shows that there is no statistical significant difference yet high prevalence reported among antidepressant group and patients who were with co-morbid physical illnesses. Relationship between co morbid substance abuse and sexual dysfunction shows statistical significant difference. Substance abuse and sexual dysfunction with different substances shows that high prevalence found in patients who abuse both alcohol and tobacco (63%), followed by alcohol alone (61%). ("Table 4") There were higher prevalence of sexual dysfunction observed in following diagnosis-alcohol dependence disorder (64%), anxiety spectrum disorder (mixed anxiety depression disorder (43%), generalized anxiety disorder (42.5%), OCD (57%), depressive disorder, MDP (36%), post psychotic depression (67%). ("Table 5")

IV. Discussion

In this study prevalence of sexual dysfunction was 36%, while in different studies there was marked variability in prevalence rate (15-80%) [7-9]. It may be due to the difficulty in assessing sexual functioning, because of sensitive nature of this issue, where strong therapeutic relationship is must [8]. Also it is not easy to diagnose sexual dysfunction because person with so called normal sexual functioning show enormous variability

in frequency of sexual activity and sexual desire. Occasional sexual dysfunctional moment may be there. It also varies in different cultures [10].

Prevalence of sexual dysfunction in 12 different areas is in accordance with Nicolosi A 2005 [11]; the dysfunction most frequently reported were early ejaculation (20%,18-21%) and erectile dysfunction(15%,14-17%) and a lack of sexual interest (27%,25-29%). Francesco montorsi 2005 [12] reported from the global study of sexual attitudes and behaviors and other sources suggest a global prevalence of premature ejaculation is 30% across all age groups. Unlike erectile dysfunction the incidence of which increasing with age, the prevalence of premature ejaculation is not associated with age.Perlman CM 2007 [8] reported that patients of age 35 to 64 years were 1.39 time more likely to have sexual dysfunction, as compare to those 18 to 34 years of age. However, those of age >65 year less likely to be assessed as having sexual dysfunction than those of age 18 to 34 year. This could be a reflection of their having investigated (e.g. used the internet or scientific journals), the medication they are taking, or the sexual dysfunction itself, realizing that it is a pertinent health condition that should be reported. Perlman CM 2007 also reported that patient who had more formal years of education and were married had greater odds of having sexual dysfunction than those with fewer years of education. Kendulkar A 2008 [13] reported that being more educated, married and from an urban background promote help seeking in tertiary care clinics. Economic success can boost a man's libido, while stress associated with economic hardship can interfere with his sexual functioning [1]. Perlman CM 2007 [8] reported that patients who had a significant loss of income within last 2 years were more likely to have sexual dysfunction than those with no loss, although we did not get inquiry about loss of income. Laumann EO 1999 [14] reported that different racial group demonstrate different pattern of sexual dysfunction.

It appears that after 10 years of illness as the duration increases patients get adjusted sexual dysfunction to their sexual behavior with the increasing age. Westheide J 2007 [15] reported that sexual dysfunction is not limited to the acute phase of psychiatric illness. Hence treatment and follow-up must be geared towards such aspect of the quality of life while focusing on coping strategies. More prevalence of premature ejaculation in patients taking antidepressant has been observed but at this stage it is not possible to comment whether it is illness related or treatment related, which require a comparison of depressed patients who are treatment naïve and on anti depressant treatment. Aizenberg D 1995 [16] reported that untreated schizophrenic patient's exhibit decreased sexual desire. Neuroleptic treatment is associated with restoration of sexual desire yet it may entail erectile, orgasmic and sexual satisfaction problems. Perlman CM 2007 [8] reported that patients with cardiopulmonary problems were 1.27 times more likely to reported sexual dysfunction than without such diagnosis. Kandeel FR 2007 [1] reported that sexual dysfunction is a common accompaniment of many systemic diseases and their medical treatment, particularly illness that affect the cardiovascular, prostatic, neurological, and psychiatric systems.

In substance user, this information can be used in motivational counseling of heavy drinker to provide impetus for change. Arackal BS 2007 [17] reported that 72% had one or more sexual dysfunction more commonly premature ejaculation, decrease sexual desire and erectile dysfunction. The amount of alcohol consumed appears to be the most significant predictor of developing sexual dysfunction. Hariri AG 2009 [18] reported that the patients with heroin addiction complained about more problems in their sexual life. These findings are similar to Corona G 2008 [19], reported that patients with bipolar disorders and schizophrenia had low prevalence rate, because they were unaware of effects of their illness and medication on their sexual life.

V. Conclusion

Sexual dysfunction remains a complex issue in psychiatric outpatients. Most important, this study has shown that many factors, beyond what has typically been studied, play a role in affecting sexual dysfunction. As such, sexual dysfunction should be assessed as a part of optimal psychiatric care, regardless of age, marital status, diagnosis, functional ability, or medication status. Open communication and trust needs to be established between clinician and patients, so that sexual functioning can be addressed appropriately. Properly identifying and treating sexual dysfunction may have positive implications for the recovery of patients and treatment compliance to maintain this recovery.

VI. Limitation

This prevalence estimate also suggests the difficulty in assessing sexual functioning, because of the sensitive nature of the issue. In the absence of a strong therapeutic relationship, both patients and clinicians may feel uncomfortable discussing sexual dysfunction openly, particularly if patients do not fully understand how this issue might relate to their condition or their medication. The specific type of medications used were unknown (e.g., typical versus atypical antipsychotics, antidepressants versus treatment naïve). As discussed, atypical antipsychotics may produce different effect on sexual functioning as compare with typical antipsychotics. The crossectional nature of the data means it was not possible to establish a temporal order between the variables of interest. For example, it may be that depression is both a cause and a consequence of

sexual dysfunction. Therefore, conclusions can only be made about the association between independent variables and sexual dysfunction.

Table 1 Prevalence of sexual dysfunction among male out patients attending psychiatry OPD

| Total male outpatients studied (n) | Sexual dysfunction % (n) |
|------------------------------------|--------------------------|
| 500 | 36 (180) |

Table 2 Prevalence of 12 different areas of sexual dysfunction (based upon total 500 psychiatric outpatients studied)

| Types of Sexual dysfunction | Prevalence % (n) | | |
|---|------------------|--|--|
| Aversion to sex | 1.8 (9) | | |
| Low sexual desire | 15.8 (79) | | |
| Difficulty achieving erection | 17.2 (86) | | |
| Difficulty maintaining erection | 9.8 (49) | | |
| Premature ejaculation | 20.2 (101) | | |
| Inhibited/delayed ejaculation | 2.6 (13) | | |
| Orgasm with flaccid penis | 1 (5) | | |
| Anorgasmia | 2.4 (12) | | |
| Coital pain | 0.4 (2) | | |
| Frequency dissatisfaction | 5.4 (27) | | |
| Dissatisfaction of sexual relation with partner | 17 (85) | | |
| Dissatisfaction with own sexual function | 24.8 (124) | | |

(Patient has reported one or more than one areas of sexual dysfunctions)

Table 3 Nature wise prevalence of 12 different areas of sexual dysfunction (a total 180 psychiatric outpatient with sexual dysfunction out off 500 were studied)

| Nature of Sexual dysfunction | Nature wise prevalence % (n) | | | |
|---|------------------------------|--|--|--|
| Aversion to sex | 5 (9) | | | |
| Low sexual desire | 43.88 (79) | | | |
| Difficulty achieving erection | 47.77 (86) | | | |
| Difficulty maintaining erection | 27.22 (49) | | | |
| Premature ejaculation | 56.11 (101) | | | |
| Inhibited/delayed ejaculation | 7.22 (13) | | | |
| Orgasm with flaccid penis | 2.77 (5) | | | |
| Anorgasmia | 6.66 (12) | | | |
| Coital pain | 1.11 (2) | | | |
| Frequency dissatisfaction | 15 (27) | | | |
| Dissatisfaction of sexual relation with partner | 47.22 (85) | | | |
| Dissatisfaction with own sexual function | 68.88 (124) | | | |

(Patient has reported one or more than one areas of sexual dysfunctions)

Table 4 Bivariate characteristics of patients with and without sexual dysfunction

| Characteristics | Patients with Sexual dysfunction (n=180) % (n) | Patients with No sexual dysfunction (n=320) % (n) | Total patients (n=500) | x2 (df) | p- value |
|-------------------------|--|--|------------------------|-----------|-------------|
| A.Sociodemographic vari | | | · · | | |
| a. Age (year's) | | | | | |
| 20-29 | 35 (36) | 65 (67) | 103 | 4.877 (4) | 0.300 |
| 30-39 | 34 (61) | 66 (116) | 177 | | |
| 40-49 | 42 (64) | 58 (89) | 153 | | |
| 50-59 | 26 (15) | 74 (42) | 57 | | |
| 60+ | 40 (4) | 60 (6) | 10 | | |
| b. Education | | • | | | • |
| Up to middle | 30 (58) | 70 (134) | 192 | 6.213 (2) | 0.045 |
| Middle to sr. Sec. | 43 (68) | 57 (90) | 158 | | |
| Graduate/post graduate | 35.5 (54) | 64.5 (98) | 152 | | |
| c. Occupation | | • | | | • |
| Unemployment | 50 (26) | 50 (26) | 52 | 7.528 (5) | 0.200 |
| Retired pensioners | 40 (4) | 60 (6) | 10 | | |
| Professional | 35 (27) | 65 (49) | 76 | | |
| Businessmen | 42 (25) | 58 (34) | 59 | | |
| Farmer/worker | 33 (83) | 67 (169) | 252 | | |
| Clerical | 29 (15) | 71 (36) | 51 | | |
| d. Monthly income | | | | | |
| Nil-6000 | 34 (105) | 66 (199) | 304 | 0.763 (2) | 0.683 |

DOI: 10.9790/0853-1609052227 www.iosrjournals.org 25 | Page

| 6001-15000 | 38 (58) | 62 (92) | 150 | | |
|------------------------------|-----------|------------|-------|-----------|-------|
| >15000 | 37 (17) | 63 (29) | 46 | | |
| e. Religion | | | | | |
| Hindu | 35 (159) | 65 (293) | 452 | 1.420(2) | 0.491 |
| Muslim | 43 (20) | 57 (26) | 46 | | |
| Others | 50 (1) | 50 (1) | 2 | | |
| f. Domicile | | | | | |
| Urban | 37.5 (81) | 62.5 (135) | 216 | 0.266(1) | 0.606 |
| Rural | 35 (99) | 65 (185) | 184 | | |
| g. Family type | | | | | |
| Nuclear | 38 (40) | 62 (65) | 105 | 2.170 (2) | 0.338 |
| Nuclear extended | 42 (31) | 58 (42) | 73 | | |
| Joint | 34 (109) | 66 (213) | 322 | | |
| B.Clinical variables | . , | 1 , , | | | |
| a. Total duration of illness | (vears) | | | | |
| <1 | 32 (19) | 68 (40) | 59 | 6.788 (5) | 0.261 |
| 1-5 | 37 (68) | 63 (113) | 181 | 0.700 (3) | 0.201 |
| 6-10 | 44 (51) | 56 (65) | 116 | | |
| 11-15 | 29.7 (25) | 70.3 (59) | 84 | | |
| 16-20 | 29.7 (11) | 70.3 (26) | 37 | | |
| >20 | 26 (6) | 74 (17) | 23 | | |
| b. Married years (duration | | 71(17) | 23 | | l |
| Up to 5 | 33 (27) | 67 (54) | 81 | 3.052 (3) | 0.520 |
| 6-15 | 40 (72) | 60 (104) | 176 | | |
| 16-25 | 34 (52) | 66 (99) | 151 | | |
| >25 | 31 (29) | 69 (63) | 92 | | |
| c. Type of Medication | D1 (2) | 0 (00) | , , , | <u> </u> | l |
| Treatment Naïve | 37 (57) | 63 (97) | 154 | 0.046(1) | 0.831 |
| Antipsychotics | 34.5 (69) | 65.5 (131) | 200 | 0.226 (1) | 0.634 |
| Mood stabilizers | 33 (33) | 67 (68) | 101 | 0.440 (1) | 0.507 |
| Antidepressants | 41 (74) | 59 (106) | 180 | 2.852 (1) | 0.091 |
| Benzodiazepines | 37 (116) | 63 (197) | 313 | 0.295 (1) | 0.587 |
| Others (Anti cholinergic, | 37 (95) | 63 (261) | 356 | 45.155 | 0.000 |
| Beta- blockers) | 2, (52) | 05 (201) | 550 | (1) | 0.000 |
| d. Medical illness | 42 (18) | 58 (25) | 43 | 0.451 (1) | 0.502 |
| Co morbidity | (-) | | | | |
| e. Substance abuse | 40 (118) | 60 (174) | 292 | 5.476 (1) | 0.019 |
| Comorbidity | | | | | |
| Alcohol abuse | 61(14) | 39 (9) | 23 | 0.004(1) | 0.949 |
| Tobacco abuse | 36 (85) | 64 (150) | 235 | 33.234 | 0.000 |
| | ` ′ | ` ′ | | (1) | |
| Alcohol +Tobacco abuse | 71 (17) | 29 (7) | 24 | 0.349 (1) | 0.555 |
| Cannabis + Opium | 20 (2) | 80 (8) | 10 | 1.228 (1) | 0.268 |
| | | | • | | |

Table 5 Psychiatric diagnosis wise prevalence of sexual dysfunction

| Characteristics | Patients with Sexual dysfunction (n=180) | Patients with No sexual dysfunction (n=320) | Total patients (n=500) | x2 (df) | p-value |
|----------------------------------|--|---|------------------------|------------|---------|
| Substance related | % (n) 48 (16) | % (n) 52 (17) | 33 | 1.845 (1) | 0.174 |
| Disorders | 40 (10) | 32 (17) | 33 | 1.043 (1) | 0.174 |
| Alcohol dep. | 64 (9) | 36 (5) | 14 | 3.818 (1) | 0.051 |
| Tobacco dep. | 100 (2) | 0 (0) | 2 | 1.326 (1) | 0.250 |
| Benzodiazepine dep | 67 (2) | 33 (1) | 3 | 0.257(1) | 0.612 |
| Opium dep. | 12.5 (1) | 87.5 (7) | 8 | 1.050(1) | 0.306 |
| Cannabis dep. | 33 (2) | 67 (4) | 6 | 0.085 (1) | 0.771 |
| Schizophrenia/other Psychosis | 28 (35) | 72 (88) | 123 | 3.608 (1) | 0.058 |
| Schizophrenia | 20 (18) | 80 (72) | 90 | 11.363 (1) | 0.000 |
| Post psychotic depression | 67 (10) | 33 (5) | 15 | 5.014 (1) | 0.025 |
| Psychosis NOS | 46 (6) | 54 (7) | 13 | 0.230(1) | 0.631 |
| ATPD | 20 (1) | 80 (4) | 5 | 0.079 (1) | 0.779 |
| Mood disorders | 34 (77) | 66 (146) | 223 | 0.272 (1) | 0.602 |
| MDP (Bipolar disorders) | 36 (35) | 64 (62) | 97 | 0.010 (1) | 0.921 |

| Depression | 33 (42) | 67 (84) | 126 | 0.377 (1) | 0.539 |
|--------------------|-----------|-----------|-----|-----------|-------|
| | | | | | |
| Anxiety disorders | 42 (48) | 58 (65) | 113 | 2.308 (1) | 0.129 |
| Mixed AD disorders | 43 (15) | 57 (20) | 35 | 0.481(1) | 0.488 |
| GAD | 42.5 (17) | 57.5 (23) | 40 | 0.520(1) | 0.471 |
| OCD | 57 (8) | 43 (6) | 14 | 1.930(1) | 0.165 |
| Panic disorder | 0 (0) | 100 (10) | 10 | 4.256 (1) | 0.039 |
| Somatoform | 57 (8) | 43 (6) | 14 | 1.930(1) | 0.165 |
| disorders | | | | | |
| | | | | | |
| Other disorders | 50 (4) | 50 (4) | 8 | 0.212(1) | 0.645 |
| Sleep disorders | 0 (0) | 100 (2) | 2 | 0.105(1) | 0.745 |
| Epilepsy | 67 (4) | 33 (2) | 6 | 1.315 (1) | 0.252 |

References

- [1]. Kandeel FR (2007) Male Sexual dysfunction Pathophysiology and Treatment textbook.
- [2]. Masters WH, Johnson VE. (1970). Human Sexual Inadequacy. Toronto; New York: Bantam Books.
- [3]. Ronald WD. Stevenson Sexual Medicine. Can J Psychiatry 2004;49:673-677
- [4]. American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (4th ed., text rev.)
- [5]. Cutler AJ. Sexual dysfunction and antipsychotic treatment. Psychoneuroendocrinology. 2003;28(Suppl 1):69–82.
- [6]. Gopalakrishnan R, Jacob KS, Kuruvilla A, Vasantharaj B, John JK. Sildenafil in the treatment of antipsychotic induced erectile dysfunction: a randomized, double-blind, placebo-controlled, flexible-dose, two-way crossover trial. Am J Psychiatry. 2006;163(3):494–499.
- [7]. Heiman JR. Sexual dysfunction: overview of prevalence, etiological factors, and treatments. J Sex Res. 2002 Feb; 39 (1):73-8.
- [8]. Perlman CM, Martin L et al. Prevalence and predictors of sexual dysfunction in psychiatric inpatients. Psychosomatics 2007; 48:309-318
- [9]. Moreira ED Jr. Sexual activity, prevalence of sexual problems, and associated help-seeking patterns in men and women aged 40-80 years in Korea: data from the Global Study of Sexual Attitudes and Behaviors (GSSAB). J Sex Med. 2006 Mar; 3(2):201-11.
- [10]. Baldwin D S. Depression and Sexual dysfunction. British Medical Bulletin 2001;57:81-99
- [11]. Nicolosi, A., Glasser, D. B., Kim, S. C., Marumo, K., Laumann, E. O. and GSSAB Investigators' Group (2005), Sexual behaviour and dysfunction and help-seeking patterns in adults aged 40–80 years in the urban population of Asian countries. BJU International, 95: 609–614.
- [12]. Montorsi F. Prevalence of Premature ejaculation: A Global and Regional Perspective. J Sex Med 2005; Supplement 2
- [13]. Kendurkar A, Kaur B. Major Depressive Disorder, Obsessive-compulsive disorder, and Generalized anxiety disorder: do to the Sexual dysfunction differ? Prim Care Companion J Clin Psychiatry.2008;10 (4):299-305.
- [14]. Laumann EO, Paik A, Raymond C, Rosen. Sexual dysfunction in the United states Prevalence and Predictors. JAMA.1999;281:537-544
- [15]. Wastheide J. Sexuality in male psychiatric inpatients-a descriptive comparison of psychiatric patients, patient with epilepsy and healthy volunteers. Pharmacopsychiatry 2007 Sep;40(5):183-90.
- [16]. Aizenberg D. Sexual dysfunction in male schizophrenic patients. J Clin Psychiatry. 1995 APR; 56(4):137-41.
- [17]. Arackal BS, Benegal V. Prevalence of sexual dysfunction In male subjects with alcohol dependence. Indian J Psychiatry 2007; 49:109-12
- [18]. Hariri AG. Sexual problems in a sample of the Turkish psychiatric population. Compr Psychiatry 2009;50(4)353-60.
- [19]. Corona G, Ricca V. Association between psychiatric symptoms and erectile dysfunction. j Sex Med 2008;5(2):458-68.

*Dr. Harful Singh. "Sexual Dysfunctions Among Male Psychiatric Out Patients- A Cross Sectional Study From Northern Western Rajasthan." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS) 16.9 (2017): 22-27