

## Study of sexual dysfunction in newly diagnosed depressed males at tertiary care centre

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### Abstract

**Background:** Aim of the study was to assess the sexual dysfunction in newly diagnosed depressed males at tertiary care centre.

**Material and Method:** Total of 43 cases of newly diagnosed depression as per ICD-10, were analysed. Detailed history and physical examination was carried out. Hamilton depression rating scale (HDRS) was applied to assess the severity of depression. The International index of erectile function (IIEF) was applied to assess sexual dysfunction.

**Result:** Out of 43 cases, 79% patients had sexual dysfunction. Maximum i.e.79% had intercourse satisfaction dysfunction and overall satisfaction dysfunction followed by 76.74% had erectile dysfunction, 55.81% had sexual desire dysfunction and 53.48% had orgasmic dysfunction.

**Conclusion:** Our study showed high prevalence of sexual dysfunction in depressed males. All the domains of sexual functioning were affected. We did not found any association between severity of depression and sexual dysfunction.

**Keywords:** Depression, Sexual dysfunction, Desire dysfunction, Erectile dysfunction, Orgasmic dysfunction, Intercourse satisfaction

### Introduction

In terms of public health significance, depression is the third leading cause of global disease burden, accounting for 4.3% of total disability-adjusted life years. If current trends continue, it will become the leading cause of disease burden by the year 2030.<sup>(1-2)</sup> A large sample survey in India with rigorous methodology reported an overall prevalence of depression is 15.9%.<sup>(3)</sup> Depression has a large effect on sexual function and the expression of sexuality. Symptoms of sexual dysfunction reduce quality of life, self-esteem, mood, and negatively affect the relationship with your partner. Many studies have illustrated that sexual dysfunction is significantly associated with depression.<sup>(4-6)</sup> In the Massachusetts Male Aging Study it was found that men with depression had a nearly 2-times higher likelihood of having moderate or complete erectile dysfunction compared with men with no depressive illness.<sup>(7)</sup> Few Indian studies have also shown this association. Sexual dysfunction may be cause or effect of depression. High rates of comorbidity, coupled with the lack of a clear causal link between sexual dysfunction and depression suggest that each might be a symptom of the other, with depressive symptoms one of the main problems found in those with sexual dysfunction, and sexual dysfunction found in those who are depressed.<sup>(8)</sup> Sexual dysfunctions are very common among people, but most of these cases remain undetected due to lack of awareness. The prevalence of sexual dysfunction in the general population varies markedly among different countries. This could reflect different sample population, different assessment methods, cultural differences in the willingness of individual to discuss

such issues and accept the social stigma and ethnic differences.

Sexual dysfunction is a common side effect associated with virtually all of the antidepressants. Significant percentage of patients ranging from 25-73% reported sexual side effect while taking antidepressant.<sup>(9)</sup>

### Materials and Method

This study was conducted in department of psychiatry at tertiary care centre. 43 Male patients who were newly diagnosed as suffering from depression were included in study. Diagnosis of depression was made as per ICD-10. After approval of study protocol by institutional ethic committee, the study was conducted. Detailed history and physical examination was carried out to exclude other psychiatric disorders, structural defects and other organic or debilitating diseases like cardiovascular disorder, neurological disorder which can lead to sexual dysfunction. Those who had past history of depression or any other psychiatric illness, who had any substance use disorder, who were on any psychotropic medications were excluded from study. A semi structured proforma was prepared to record socio-demographic details of patient. Hamilton depression rating scale (HDRS) was applied to assess the severity of depression. The International index of erectile function (IIEF) was applied to assess sexual dysfunction. Details of the socio-economic status were noted by applying Kuppuswamy's socio-economic scale. Strict confidentiality was maintained during the whole study. The data was collected in Microsoft excel sheet. Data analysis done by using SPSS (Statistical package for social sciences) Version

20:0. Qualitative data variables expressed by using frequency and percentage (%).

## Result

In our study out of 43 patients, maximum i.e. 18 (41.9%) patients were from age group 21-30 years and the mean age was 33.58 years. 37 (86%) patients were from Hindu religion and maximum 35 (81.4%) patients were married. In our study maximum 12 (27.9%) patients were educated up to graduation and 18 (41.9%) patients were skilled workers. 22 (51.1%) patients were from lower socio economic status, 19 (44.2%) patients were from upper lower socio-economic status and 2 (4.7%) patients were from lower middle socio-economic status. All 43 patients were assessed for severity of depression as per Hamilton depression rating scale (HDRS) and found that maximum i.e. 28 (65.1%) had mild depression followed by 14 (32.6%) had moderate depression and one (2.3%) had severe depression. When assessed as per IIEF scale then 79% patients had sexual dysfunction.

**Table 1: Domains of sexual function affected in depression**

Domain of sexual function	Number of patients (n=43)	Percentage (%)
Sexual desire	24	55.81
Erectile function	33	76.74
Orgasmic function	23	53.48
Intercourse satisfaction	34	79
Overall satisfaction	34	79

Out of 43 patients, maximum i.e. 34 (79%) had intercourse satisfaction dysfunction and overall satisfaction dysfunction followed by 33 (76.74%) had erectile dysfunction, 24 (55.81%) had sexual desire dysfunction and 23 (53.48%) had orgasmic dysfunction. There was no statistically significant association observed between severity of depression and domains of sexual function.

## Discussion

In our study as per IIEF scale, 79% of patients had sexual dysfunction. Our study finding matches with similar studies.<sup>(10-13)</sup> The complicated symptomatology of major depressive disorder is one of several confounding factors when evaluating sexual dysfunction in depressed patients. Major depressive disorder comprises a constellation of symptoms that leads to decreased interest and pleasure in potentially all aspects of daily living including sexual activity. Due to depression there are disturbances of interpersonal relationship among couple which further leads to sexual dysfunction.

In our study maximum i.e. 34 (79%) had intercourse satisfaction dysfunction and overall satisfaction dysfunction followed by 33 (76.74%) had erectile dysfunction, 24 (55.81%) had sexual desire dysfunction and 23 (53.48%) had orgasmic dysfunction. Our study findings are comparable with the study where loss of libido was described in 67% of depressed patients.<sup>(14-16)</sup> Our findings matches with study where decreased desire and arousal was seen in 50% of men diagnosed with depression.<sup>(17)</sup> In other studies it has shown that, the rate of erectile dysfunction was 90%<sup>(18)</sup> and 47%<sup>(10)</sup> in cases of depressed males. Our findings are comparable with study where orgasmic dysfunction seen in 84%<sup>(10)</sup> and other studies shown that depressed men were significantly less satisfied with sex than an age-matched sample of control men.<sup>(19)</sup>

In our study we found high prevalence of sexual dysfunction compared to other studies because in our study the assessment of sexual function was done by clinician whereas in most of the other studies it was found that assessment was self reported by patient. Some studies found that reliance on spontaneous reporting of sexual difficulties leads to substantial underestimate of the prevalence of sexual problems.<sup>(12,20)</sup> A review of antidepressant and sexual dysfunction in randomized controlled clinical trials revealed that among 79 randomized controlled trials, 75% relied on spontaneous reports of sexual adverse effects whereas only 8% used specific instruments.<sup>(21)</sup> The relationships between sexual dysfunction and mood are "complex and multidirectional".<sup>(22)</sup> Rates of satisfaction and enjoyment are, in almost all cases, lower in depressed populations than in control populations. Rather than one causing the other, it seems likely that there are reciprocal and bidirectional effects of each type of dysfunction upon the other, or that they often appear together and are not easily separable. High rates of comorbidity, coupled with the lack of a clear causal link between sexual dysfunction and depression,<sup>(8)</sup> suggest that each might be a symptom of the other, with depressive symptoms one of the main problems found in those with sexual dysfunction, and sexual dysfunction found in those who are depressed.

In our study we did not found statistically significant association between severity of depression and sexual dysfunction. Our findings were matches with other studies.<sup>(23-25,19)</sup> Our findings does not match with other studies,<sup>(7,10,12,26)</sup> which have found association between severity of depression and sexual dysfunction. This can be explained on the basis of small sample size, socio-cultural differences and difference in methodology.

## Conclusion

Our study showed high prevalence of sexual dysfunction in depressed males. All the domains of sexual functioning were affected. This shows the need to ask about sexual dysfunction in depressed patients.

This becomes even more important in treatment as antidepressants are known to produce sexual dysfunction. We did not find any association between severity of depression and sexual dysfunction.

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