Frequency Of Sexual Dysfunction In Treated and Untreated Depressed Male Patients

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Abstract

Objective: Morbidity of depression is not restricted to affective changes, but touches many aspects of psycho-physiological function. One of the most important of these is sexual function. Sexual dysfunction is common among individuals with major depressive disorder.

Aim of the study: To compare the frequency and type of sexual dysfunction in depressed patients prior to medication and subsequent to the medication.

Method: The sample of the study included 300 consulting male patients attending psychiatric unit in Azdi general hospital ,150 patients of them were on antidepressant medication and 150 of them without medication. Another 150 patients attending general male outpatient department acted as normal controls. We used symptoms checklist of the Diagnostic and Statistical Manual of mental disorders, 4thedition (DSM-IV), criteria for major depression in order to ascertain the diagnosis. Depression severity was rated using the Hamilton Depression Rating Scale(HAM-DRS). Patients sexual function was assessed using Arizon Sexual Experience Scale(ASEX) for men.

Results: The levels of libido reported by the depressed patients (55%) differ significantly from normal controls (10%). Patients taking antidepressant medication reported Erectile Dysfunction (52%), Ejaculatory Dysfunction (48%) and Orgasmic Dysfunction (30%) significantly different from untreated depressed patients (20%),(18%),(13%)respectively.

Conclusion: Sexual dysfunction was prevalent in depressed male patients.

Key word: Depression, Sexual dysfunction.

Introduction

Morbidity of depression is not restricted to affective changes, but touches many aspects of psycho-physiological function. One of the most important of these is sexual function. Sexual dysfunction is common among individuals with major depressive disorder. For instance, a study by Kennedy and colleague(1) revealed that of 134 patients with major depression surveyed, 40% of men and 50% of women reported decreased sexual interest;40% to 50% of the sample reported reduced levels of arousal. In 1967, a loss of libido was described in 67% of depressed patients compared to only 27% of euthymic (2). The problems encountered are not restricted to libido, but cover all aspects of sexual functioning(3).More recently, a large population based study in Zurich showed that sexual problems could be observed in 50% of patients, three times as frequently as in non depressed subjects(4).The sexual response cycle consist of four phases :desire, arousal, orgasm, and resolution and as explained by Anita Clayton(5) the phases of the sexual response cycle are affected by reproductive hormones and neurotransmitters. For example, according to Clayton, estrogen, testosterone, and progesterone promote sexual desire; dopamine promotes desire and arousal, and norepinephrine promotes arousal. Prolactin inhibits arousal and oxytocin promotes orgasm. Serotonin, in contrast to most of these other molecules, appears to have a negative impact on the desire and arousal phases of the sexual response cycle, and this seems to occur through its inhibition of dopamine and norepinephrine,Serotonin also appears to exert peripheral affects
on sexual functioning by decreasing sensation and by inhibiting nitric oxide. The serotonergic system, therefore may contribute to various sexual problems across the sexual response cycle. In addition to problems of sexual function associated with morbidity, the use of antidepressant medication itself can also aggravate or provoke sexual problem(6-10).The use of tricyclic antidepressants is associated with loss of libido and erectile dysfunction(11).These effects can probably be explained by drugs, with perhaps a contribution from their dopamine receptor antagonist properties on libido. It has been estimated that up to three quarters of patients

taking SSRIS may suffer from sexual problems(12-14).A potential consequence of the impact of antidepressant therapy on sexual function may be poor compliance(14,15)which is already poor for this class of drugs, particularly for tricyclic antidepressants(16,17).This may be particularly problematic for patients needing maintaince treatment because interruption of treatment may trigger recurrence of depression(17).Studies of sexual dysfunction in depression can be complicated by difficulties in determining the relative contribution of depression itself, of treatment and of underlying pre-existing sexual dysfunction (18).

Aim of the study

To compare the frequency and type of sexual dysfunction in depressed patients prior to medication and subsequent to the medication.

Material and Methods

The study was conducted between December2006 and September 2007.Inclusion criteria: included patients giving informed consent, age range between 18-60 years and being married. Exclusion criteria included, psychosis,diabities mellitus,hypertension,cardiovascular disease,gondal injury, endocrine disorder/medication, substance abuse, inability to give informed consent or answer questions, used medications other than antidepressants (antipsychotics,anticonvulsant,lithium) and betablokers,and patients who report history of sexual dysfunction prior to the current depressive episode. Female patients were excluded because of cultural reasons. The sample of the study included 300 consultive male patients attending psychiatric unit in Azdi general hospital ,150 patients of them were on antidepressant medication and 150 of them without medication. Another 150 patients attending general outpatient department of the same hospital for minor elements acted as normal controls. We used symptoms checklist of the Diagnostic and Statistical Manual of mental disorders,4thedition(DSM-IV)(19) criteria for major depression in order to ascertain the diagnosis. Patients fulfilling these criteria were included in the study. Depression severity was rated using the Hamilton Depression Rating Scale(HAM-DRS)(20) and classified as mild (HAM-DRS score between 10 and 13),

moderate(HAM-DRA score between 14 and 17) and sever(HAM-DRS score>17).Patients sexual function was assessed using Arizon Sexual Experience Scale(ASEX) for men developed by McGahucy etal(21).Subjects were recorded to have sexual dysfunction as measured by a total score of 19 or higher on ASEX or any individual item score greater than 5 or any 3 individual item score equal to 4. Demographic information for all patients interviewed regardless of whether or not they described sexual dysfunction. These related age, place of residence, employment status, and profession. Statistical analysis was done by chi square.

Results

The severity of the depression at the time of the interview was shown in the table1The subjects were divided between mild(12%),moderate(50%),and sever(35%).The percentage of sexual dysfunction of depressed patients and controls is shown in table 2.The levels of reduced libido reported by the depressed patients(55%) differs significantly from normal controls (10%) .Erectile Dysfunction(20%),Ejaculatory Dysfunction(18%) reported by the patient did not differ significantly from normal controls(17%),(15%).Orgasmic Dysfunction(lack of enjoyment) was slightly less than twice as common in the patients group(13%) than normal controls(7%).The doses of different antidepressant medications used are given in table 3. Table 4 shows the frequency of sexual dysfunctions in patients using medications. The most frequent sexual dysfunction was Erectile Dysfunction(52%) followed by Ejaculatory Dysfunction(48%),Reduced Libido(464) and Orgasmic Dysfunction (30%). Table 5 shows comparison of sexual dysfunction between patients using medication and depressed .The levels of reduced libido reported by patients using medication(46%) less than in untreated depressed patients(55%),but did not differ significantly.However,patients taking antidepressant medication reported Erectile Dysfunction(52%),Ejaculatory Dysfunction (48%) and Orgasmic Dysfunction (30%) significantly different from untreated depressed patients (20%),(18%) ,(13%)respectively.

Table 1: Classification of depression according to severity

Types of Depression	Percentage (%)
1- Mild Depression	12%
2- Moderate Depression	50%
3- Sever Depression	38%

Table 2:Sexual dysfunction in Depressed Patients and Normal Controls

Sexual dysfunction	Patients (%)	Controls (%)	p-value
Reduced Libido	55%	10%	P<.01*
Erectile Dysfunction	20%	17%	N.S**
Ejaculatory Dysfunction	18%	15%	N.S**
Orgasmic Dysfunction	13%	7%	N.S**

*:Highly Significant, **:Not Significant

Table 3: Medications and dosage Causing Sexual Dysfunction

Drugs Used	Dosage(mg)
Amitriptyline	50-75
Imipramine	50-75
Clomipramine	75-100
Paroxetin	40
Fluoxetine	40
Sertraline	100
Citalopram	40

Table 4: Frequency of Sexual Dysfunction in patients using medication

Sexual Dysfunction	Patients using Medication(%)
Erectile Dysfunction	52%
Ejaculatory Dysfunction	48%
Reduced Libido	46%
Orgasmic Dysfunction	30%

Table 5:Comparsion of Sexual Dysfunction between Depressed Patients and Patients using Antidepressant Medication

Sexual Dysfunction	patients using medication(%)	Depressed patients(%)	p-value
Reduced Libido	46%	55%	N.S**
Erectile Dysfunction	52%	20%	P<.01*
Ejaculatory Dysfunction	48%	18%	P<.01*
Orgasmic Dysfunction	30%	13%	P<.01*

**:Not Significant, *:Highly Significant

Discussion

This study has evaluated the presence of disorders of sexual function in untreated depressed patients and treated depressed patients using antidepressant medications.

The most frequently encountered sexual dysfunction in untreated depressed patients was a problem of libido(55%) and this is similar to the result of Kennedy(40%-50%)(1),(Angst)(4),Casper etal(22) and (Laumann etal)(23).This is commonly attributed to the pervasive anhedonia that often accompanies depressive illness (Nofzinger etal) (24). The prevalence of erectile dysfunction, ejaculatory problem and orgasmic dysfunction did not differ from controls and this is similar to the study of (Mathew and Weiman)(3), but it differs from the study of (Ernst etal)(25) which showed that the overall prevalence of sexual problems in subjects with depression was about twice that in controls.

Antidepressant medications induced sexual dysfunction(table4) is similar to other studied (Monteiro etal)(26) ,(Patterson)(27) and (Zajeka etal)(28). Sexual Dysfunction in treated depressed patients (Erectile Dysfunction 52%,Ejeculatory Dysfunction 48%, Orgasmic Dysfunction 30%) is higher than in untreated depressed patients (20%,18%,13%)respectively, and this is consistent with Bonierbate etal(29). Only male patients were included in the study because in our society females usually show reluctance to answer questions about sexual problems or give informed consent and lack of trained female interviewer.Arizon Sexual Experience Scale (ASEX) is

brief, contains questions about all aspects of sexual cycle that is libido,erection,orgasmic and ejaculatory functions. However, it does not address aspects of relationship between partners. Therefore only married patients were included in the study. Although questionnaires does not include questions about relationship, patients were asked about the levels of relationship between spouses and patients with strained relationship with spouses were not included in the study.

Conclusion

The problems of sexual function were prevalent in male patients with major depression and it should be routinely inquired from patients with depression receiving antidepressant medications during follow-up and dosage adjusted accordingly.

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Appendix

Arizona Sexual Experience Scale(ASEX)

Ref: McGhuey etal.(2000)J Sex Marital Ther26:25-40

The Arizona Sexual Experience Scale(ASEX) is a user-friendly 5-item rating scale that quantifies sex drive, arousal,vaginal lubrication/penile erection,ability to reach orgasm, and satisfaction from orgasm. Possible total scores range from 5 to 30,with the higher scores indicating more sexual dysfunction.

1. How strong is your sex drive? Score

(1) Extremely strong
(2) Very strong
(3) Somewhat strong
(4) Somewhat weak .....
(5) Very weak
(6) Absent

2. How easily are you sexually aroused?

(1) Extremely easily
(2) Very easily
(3) Somewhat easily
(4) Somewhat difficult
(5) Very difficult ……..
(6) Never

3a. Can you easily get and keep an erection?

(1)Extremely easily
(2)Very easily
(3)Somewhat easily
(4)Somewhat difficult
(5)Very difficult ……..
(6)Never

3b.How easily does your vagina become moist?

(1) Extremely easily
(2) Very easily
(3) Somewhat easy
(4) Somewhat difficult
(5) Very difficult ……...
(6) Never

4.How easily can you reach orgasm?
(1)Extremely easily
(2)Very easily
(3)Somewhat easily
(4)Somewhat difficult
(5)Very difficult ……
(6)Never

5.Are your orgasms satisfying?
(1)Extremely satisfying
(2)Very satisfying
(3)Somewhat satisfying
(4)Somewhat unsatisfying
(5)Extremely unsatisfying ……..
(6)Never achieve orgasm Total score