Relationship Between Female Sexual Difficulties and Mental Health in Patients Referred to Two Public and Private Settings in Tehran, Iran

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ABSTRACT

Introduction. Sexual difficulty has various effects on patients suffering from this condition that can impact on interpersonal and marital relationships. Sexual function may be adversely affected by stress of any kind and emotional disorders. There have been limited studies focusing on the mental health of those suffering from this problem.
Aim. To determine the relationship between sexual difficulties and mental health in female patients seeking help in psychiatric clinics.
Methods. The study was based on the case–control design methodology in which the case group consisted of 165 outpatients of two psychiatric clinics, who were diagnosed with different mental disorders such as depression, anxiety, phobia, aggression, and somatic complaints (33 subjects for each type of disorder). The 33 subjects in the control group were chosen among the patients' relatives and visitors who had no history of either seeking psychiatric help or taking psychiatric drugs. The subjects of both case and control groups were selected based on a convenience sampling method. Moreover, the data were collected based on two techniques of "interview" and "questionnaire;" the latter was of three different subcategories, each dealt with demographic characteristics, sexual difficulties, and a Symptom Check-List-90-Revised.
Main Outcome Measure. Assessing female sexual difficulties associated with mental health and differences between women with and without psychiatric problems.
Results. The obtained results indicated that there was a significant difference between the prevalence of sexual difficulties (e.g., sexual desire and orgasm disorders) in the case group and that of the control group. It was also revealed that there was a significant difference between the depressed, aggressive, as well as those with somatic complaints, and their control group counterparts.
Conclusions. In Iran, sexual difficulties seem to be more frequent in those seeking psychiatric help in clinics than in those within the normal population. **Azar M, Noohi S, and Shafiee Kandjani AR. Relationship between female sexual difficulties and mental health in patients referred to two public and private settings in Tehran, Iran. J Sex Med 2007;4:1262–1268.**

Key Words. Female Sexual Difficulties; Anxiety; Aggression; Depression; Somatic Complaints

Introduction

Sexual difficulty has various effects on patients suffering from this condition that can impact on interpersonal and marital relationships. Psycho-physiological changes associated with sexual difficulty may lead to overt mental distress and interpersonal problems [1–3]. This disorder involves dysfunction in sexual desire, sexual arousal, orgasm, and the issue of dyspareunia. Women's sexual response in health can be reconceptualized as a circular model of overlapping phases of variable order influenced by psychological, societal, and biological factors [4]. It is quite clear that sexual function may be adversely affected by stress of any kind, emotional disorders, and lack

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of sexual knowledge. Common risk factor categories associated with sexual difficulties exist, including individual general health status, diabetes mellitus, cardiovascular and genitourinary diseases, psychiatric/psychological disorders, other chronic diseases, and sociodemographic conditions [5].

About 40–45% of adult women and 20–30% of adult men have at least one manifest sexual difficulty [5]. Given this high prevalence, the important point, here, is the low number of studies focusing on the mental health of those suffering from this problem.

Sexual desire, sexual arousal, and orgasm disorders, as well as dyspareunia, have all been considered as sexual dysfunctions in the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV). In a study conducted by Trudel et al. [6], one of the most frequent sexual disorders was reported to be hypoactive sexual desire. Approximately 24–43% of women complain of low sexual desire in the preceding year. Hypoactive sexual desire disorder (HSDD) is a common problem that is often treatment refractory [7]. Dennerstein et al. [8] have recently studied the prevalence of HSDD in menopausal women, and have reported that surgically menopausal women are at increased risk for HSDD. HSDD is associated with diminished sexual and partner relationship satisfaction, and negative emotional states.

Depression is another variable under study that seems to contribute to sexual difficulties in general and sexual desire disorder in particular. Alexander [9] reported decreased libido to be the most commonly discussed issue between psychiatrists and their patients. Decreased libido calls for a thorough study of the history of this disorder and its main causes; although, they seem to be quite complicated and multidimensional. Regarding this, researchers are recommended to focus on the physical factor(s) besides mental variables; although in the depressed patients, their unsatisfied relationships/marriages seem to be the most common complaints.

Chandraiah et al. [10] studied the different aspects of psychiatric disorders and social maladjustment in 43 women in a premenstrual syndrome clinic. The findings indicated that 50% of the subjects suffered from major affective disorders (depression); 53% had some anxiety disorder (panic or generalized anxiety disorder); and 40% of them had psychosexual disorder (inhibited sexual desire). The findings also showed that the level of depression, dysthymia, and other psychiatric disorders, as well as the degree of social maladjustment, were significantly higher in the case group (those with a psychiatric history) than those in the control group (with no such history). Others believe that anxiety can also lead to sexual difficulties in women [11].

Researchers have found that some other factors, like family dysfunction and childhood sexual abuse, are very influential in sexual disorders [3,12]. In a study conducted on 203 female college students, researchers found that 21.8% of these women had been sexually abused, and 32.6% of them had also reported a traumatic family background, while a higher percentage of them had problems in reaching orgasm and sexual desire compared to normal women [3].

Having the outlined issues in mind, the researchers associated with this article conducted the study to determine the relationship between sexual difficulties and the mental health of those women who seek professional psychiatric help in psychiatric clinics. To reach this objective, the researchers tried to determine the degree of general sexual difficulties in (i) the case group and the control group, and their comparison, and (ii) the patients suffering from depression and the control group, and their comparison. A similar framework was designed for other disorders such as anxiety, phobia, aggression, and somatic complaints. DSM-IV criteria for a sexual dysfunction require that both low sexual function and sexual distress are present for a diagnosis of a sexual dysfunction. We used the term sexual difficulties rather than sexual dysfunction throughout this article because we did not incorporate sexual distress into our results.

Materials and Methods

The present study was of a case–control design with a convenience sampling method in which the case group consisted of 165 outpatients at a psychiatric clinic in Imam Hossein Hospital and a private psychiatric clinic in Tehran, Iran. There were 33 subjects for each of the five disorders of depression, aggression, phobia, anxiety, and somatic complaints. The subjects were first clinically interviewed by a psychiatrist prior to the final selection. The purpose of this interview was to both determine psychiatric disorders and determine if the participant met the inclusion criteria of the study. Inclusion criteria were literacy of at least third grade of secondary school, being married, and suffering from the disorders discussed earlier.

Upon each individual's formal consent, she was given the questionnaires to fill in. The study design and the related questionnaires were approved by the Ethical Committee for Clinical Research affiliated to Shaheed Beheshti Medical University. The subjects for the control group were chosen from the relatives and visitors of the inpatients at Imam Hossein Hospital, who had no history of either seeking psychiatric help or taking psychiatric drugs, as well as the relatives of the outpatients of nonpsychiatric clinics at the same hospital. The controls were matched to the cases based on age, education, and marital status. Moreover, individuals who engaged in substance abuse or experienced sexual difficulties because of a general medical condition were excluded. A member of the research team was responsible for explaining the process to the participants and obtaining verbal informed consent. Anonymity was also considered. We did not keep records on how many women refused to participate or collect any information from the women who refused.

To collect the data, the following tools were used.

1. A demographic questionnaire, based on which the demographic data were collected.
2. The Symptom Check-List-90-Revised (SCL-90-R) consisting of 90 items regarding the symptoms of mental disorder, which was reported by subject quoted in Bagheri Yazdi et al. [13]. The responses given to each test item are shown on a 5-point scale (none, a little, so-so, much, very much) to indicate the severity of the disorder. The test evaluates nine aspects of these disorders, among which depression, anxiety, phobia, aggression, and somatic complaints were studied in the present research. The reported reliability index of this test varies from 0.78 to 0.90 in the United States (quoted in Bagheri Yazdi et al. [13]). A similar reliability index has been reported by Mirzaiee [14] in Iran. Except for phobia, paranoid ideation, and aggression, the reliability index of the rest of the scales exceeded 0.80. The reliability coefficient (based on a test–retest method) was reported to be 0.97 by Bagheri Yazdi et al. [13].
3. A questionnaire regarding sexual difficulties was constructed based broadly on the criteria of the DSM-IV, except that sexual distress was not taken into account. This questionnaire was used to assess sexual difficulties through multiple-choice items, which were scored on a Likert scale. Also, sexual difficulties due to general medical conditions and substance abuse were excluded. Test–retest reliability and construct validity were measured. Using the split-half method, the reliability and alpha values were 0.84 and 0.89, respectively (see the Appendix).

The same measures were taken for the control group. The implementation of this study started in November 2002 and was finished in June 2003. The data collected were analyzed through the *t*- and Chi-square (χ^2) tests.

Results

From the demographic point of view, the mean age for the *case* group was 34.9, and for the *control* group it was 33.3 years old. Utilizing the Student *t*-test, there was no significant statistical difference between the *case* and *control* groups according to participants' ages ($P > 0.05$). The findings revealed that the majority of *cases* and *controls* had a diploma or an associate degree (83 cases [50.30%] and 20 controls [60.61%]). However, there was no significant statistical difference between the two groups.

The analysis of the data regarding the prevalence of sexual difficulties in the two groups (*case* and *control*) through the statistical test of χ^2 indicated a considerable difference at a 0.001 level of significance between the *case* and *control* groups. This in turn indicates that the frequency of sexual difficulties is higher in the *case* group in comparison with the *control* group. One hundred fifty-one (91.5%) out of 165 cases had a sexual difficulty, while 22 (66.7%) out of 33 individuals of the control group were suffering from a sexual difficulty.

The prevalence of sexual difficulties in the depressed subjects is reported in Table 1. As shown, there is a significant difference at a 0.05 level of significance in the prevalence between the depressed subjects and those of the *control* group concerning sexual difficulties, with a higher frequency in the depressed subjects.

Table 1 also shows that there is no significant difference in the prevalence between the subjects suffering from phobia and those of the *control* group. The χ^2 indicated a significant difference between the aggressive subjects and the subjects in the *control* group ($P < 0.05$).

The χ^2 index also highlighted a significant difference of prevalence of sexual difficulties between the patients with somatic complaints and the subjects in the *control* group ($P < 0.05$).

Table 1 Prevalence of sexual difficulties in the subgroups and the level of significance in the case and control groups

Subgroups	Sexual difficulties		Level of significance
Controls	N	22	
	%	66.7	
Depression	N	31	$P < 0.05$
	%	93.9	
Anxiety	N	29	$P > 0.05$
	%	87.9	
Phobia	N	29	$P > 0.05$
	%	87.9	
Aggression	N	30	$P < 0.05$
	%	90.9	
Somatic complaints	N	31	$P < 0.05$
	%	93.9	

Both the prevalence of sexual difficulties in the *case* and *control* groups, as well as the comparison between these groups through Fisher's exact test, indicate that the two groups have a significant difference of frequency in disorders related to sexual desire ($P < 0.01$) and orgasm ($P < 0.01$), while in the cases related to arousal disorder and dyspareunia, the difference is not statistically significant. In the *case* group, orgasm disorder is the most frequent condition (73.3%), and sexual desire disorder, sexual arousal disorder, and dyspareunia with 69.7, 27.9, and 17% were the less frequent disorders, respectively. It has also been shown that in the *control* group, orgasm disorder and sexual desire disorder were the most frequent disorders (45.5%), while arousal disorder and dyspareunia were seen in 39.4% and 24.2% of the *cases*, respectively.

Table 2 shows the prevalence of sexual difficulties based on SCL-90-R scales. As shown, the highest percentages of sexual desire disorders (81.8%), sexual arousal disorders (78.8%), orgasm disorders (78.8%), and dyspareunia (30.3%) are seen in patients with somatic complaints, depressed patients, subjects with phobia and/or somatic complaints, and subjects with somatic complaints, respectively.

Discussion

The results of the present study indicated a higher frequency of sexual difficulties in the *case* group in comparison with the *control* group. This is congruent with the results obtained from the studies conducted by others [9,11–13,15]. It may reveal the relationship between female sexual difficulties and mental health.

The present study also indicated that sexual difficulties are more prevalent in the depressed subjects/patients than those in the *control* group. A similar level of concordance was found between the results obtained from the present study and those found in the studies conducted by Alexander [9], Ackerman [2], Kinzl and Traweger [12], and Chandraiah et al. [10]. Among the different types of sexual difficulties, sexual desire disorder was found more frequently in the depressed subjects/patients [16]. Female sexual dysfunctions and low desire, in particular, cannot be conceptualized as discrete phase disorders, but rather as a global inhibition of sexual response together with a history of mood disorder, specific personality factors, and an elevated level of psychological stress [17]. Impaired sexual desire has been found in the majority of patients with depressed mood, with studies suggesting half of the samples of women with major depression experienced desire and arousal problems [18].

In this study, the prevalence of sexual difficulties in patients suffering from anxiety was not concordant with those reported in Kinzl and Traweger [12], Sanchez and Liorca [15], and Palace and Gorzalka [11]. This contradiction could be due to the cultural factors of the Iranian society in which the mere admission that people suffer from an acute case of sexual difficulties would make them more anxious. It seems to be highly probable that the discordance is because of some factors such as limited number of subjects under study, limitation of the employed tools/methodologies, and vagueness of the type of phobia under study. Empirical

Table 2 Prevalence of sexual difficulties based on Symptom Check-List-90-Revised (SCL-90-R) Scales

Psychiatric Scale	Depression		Anxiety		Phobia		Aggression		Somatic complaints	
sexual disorder	f	%	f	%	f	%	f	%	f	%
Desire	26	78.8	23	69.7	21	63.6	23	69.7	27	81.8
Arousal	26	78.8	13	39.4	20	60.6	23	69.7	20	60.6
Orgasm	25	75.8	21	63.6	26	78.8	23	69.7	26	78.8
Dyspareunia	4	12.1	3	9.1	5	15.2	5	15.2	10	30.3
None	2	6.1	3	9.1	3	9.1	2	6.1	4	12.1

studies have shown a high correlation of desire complaints with measures of low self-image, mood instability, and tendency toward worry and anxiety (without meeting the clinical definition of a mood disorder) [19].

The findings showed a higher frequency of sexual difficulties in aggressive people in comparison with the subjects in the *control* group. These findings were also concordant with those of Kinzl and Traweger [12], and Kinzl et al. [3]. Because a level of aggression is probably recognized in most psychiatric disorders, the result reported previously is consistent with the findings of most studies performed on this topic.

Prevalence of sexual difficulties in those with somatic complaints was also in agreement with the results reported by Kinzl et al. [3] and Ackerman [2], and was indicative of a higher frequency of sexual difficulties in this group of patients/subjects.

The present study showed that the comparison between the *case* group and the *control* group concerning different types of sexual difficulties is concordant with the findings reported in Trudel et al. [6], Alexander [9], and Hallvorsen and Metz [1]. In other words, desire and orgasm disorders are greatly seen in those suffering from psychiatric disorders; while dyspareunia is less reported in the case of patients with the disorders discussed earlier. It is important to note that the clinical experiences of the researchers also confirm a higher frequency of desire and orgasm disorders in those seeking professional psychiatric help (at a psychiatric clinic).

Interestingly, the researchers who have studied the frequency of sexual difficulties in different types of psychiatric disorders also found the highest degree of desire disorder in those suffering from somatic complaints and depression, and the lowest in phobic patients. In fact, the findings of the research are similar to those reported in Alexander [9], Kinzl and Traweger [12], Kinzl et al. [3], Ackerman [2], and Chandraiah et al. [10].

In this study, arousal disorder was the most frequently observed sexual problem in the depressed patients and the least frequently observed issue in those suffering from anxiety. Similar results were also reported by Kinzl and Traweger [12], Alexander [9], and Ackerman [2].

The findings revealed that lack of orgasm was the most frequent sexual disorder in phobic patients (similar to the results reported by Sanchez and Liorca [15], and Chandraiah et al. [10]), while it was the least frequent disorder in anxious patients (similar to the results reported by Sanchez and Liorca [15]).

Contrary to the reported results of many other studies, in this study, dyspareunia was the most frequent disorder in the patients with somatic complaints (reported too by Hallvorsen and Metz [1], Kinzl et al. [3], and Ackerman [2]), but it was the least frequently observed disorder in anxious patients. In a population-based study in India, dyspareunia with overall prevalence of 12.5% was significantly more common among individuals who had urinary sensory symptoms when compared with their counterparts [20].

Generally speaking, the obtained results indicated that sexual difficulties were more frequently seen in those seeking professional psychiatric help. This difference was proved to be statistically significant. It was also revealed that among psychiatric patients, depressed and aggressive patients, as well as those with somatic complaints, suffer from a significantly higher degree of sexual difficulties.

Limitations

Because of the cultural factors of the society under study, the researchers believe that the subjects were not as cooperative as the study design required. This issue was more prominent in the *case* group. However, we did not keep records on the number of women who refused to participate in the study or collect any information from women who refused. Potential differences between the women who participated and those who refused may have introduced some bias into the study results. Other research limitations include limited number of subjects, no primary complaints of sexual difficulty in patients, and potential sociocultural and economic differences of participants to two different psychiatric settings. Also, the characteristics of the patients who attend the particular hospital and private psychiatric clinics might make their results less generalizable to the community at large. These limitations have the potential to introduce bias into the study and reduce the generalizability of the results.

Conclusions

Sexual difficulties were more frequently seen in those seeking professional psychiatric help than in those within the normal population, according to the present study. In addition, among the psychiatric patients, depressed and aggressive individuals, as well as those with somatic complaints, suffer from a significantly higher degree of sexual diffi-

culties. However, the results need confirmation by other controlled trials.

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Statement of Authorship

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Appendix

[Translated from Persian]
Record No.:
Age:
Number of Children:
Education:
Physical Disease and operations:
Psychiatric Disorder:
Medications:

Dear Client
Thank you for your participation in our study. Please choose your appropriate answer among the choices of any question.

1. How much do you imagine about sexual activities?
   Not at all | Slight | Moderate | High
2. How much is your desire to sexual activities?
   Not at all | Slight | Moderate | High
3. How many sexual contacts do you have in a week?
   Not at all | Once | 2 or 3 times | 4 or More
4. Do you hate sexual contact?
   Not at all | Slight | Moderate | High
5. Do you fear from sexual contact?
   Not at all | Slight | Moderate | High
6. Do you have vaginal lubrication or discharges at the beginning of sexual contact?
   Not at all | Slight | Moderate | High
7. Do you feel pain during sexual contact?
   Not at all | Slight | Moderate | High
8. Does imagination of having a painful sexual contact inhibit you from having a sex?
   Not at all | Slight | Moderate | High
9. Do you have homosexuality orientations?
   Yes | No
10. How much are you sexually excited after menstruation?
    Not at all | Slight | Moderate | High
11. Do you reach orgasm while the sexual contact?
    Not at all | Slight | Moderate | High
12. Is there any alternative way to reach orgasm except sexual contact? (if YES, please declare).
    Yes | No
13. Does fear of pregnancy inhibit you from having an orgasm?
    Yes | No
14. Do you feel guilty to have a sexual contact?
    Not at all | Slight | Moderate | High
15. Does your husband have unusual expectations in your sexual contact?
    Yes | No
16. If YES, how much does it have negative effects on your sexual function?
    Not at all | Slight | Moderate | High
17. Do you reach orgasm before your husband ejaculates?
    Not at all | Slight | Moderate | High
18. Does your husband suffer from premature ejaculation?
    Yes | No
19. Have you experienced a gynecological examination?
    Yes | No