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Sexual Dysfunctions among Male Schizophrenic Patients Attending Al- Rashad Sex Clinic

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Background: Sexual dysfunction in patients with schizophrenia was reported as one of the most distressing antipsychotics drug adverse effects and it is directly related to treatment compliance, but the subject seldom touched in the field of psychiatry in Iraq previously.
Objectives: To assess and find out the impact of schizophrenia on Sexuality of the patient, and illustrate effect of anti-schizophrenic on sexual activity
Methods: using DSM4-TR and ASEX scale questionnaires for 104 male participants from out 155schizophrenic patient were studied in sex clinic in Al-Rashad teaching hospital for psychiatric disease in Baghdad. The study extended for 22 months from 1st of July 2010 to the 1st of April 2012, t test and chi square test were used for statistical analysis. P ≤0.05 used as cutoff point of significance.
Results: fifty-five percent of schizophrenic male in this study got sexual dysfunction, their ages extended from (18-66 y) with mean 47year,there was significant association between age and sexual function (p- 0.018), although only 17%(18 out of 104) got secondary school education or higher ,but there is significant association between getting better educational level and better sexual function (p 0.001), results showed that low socioeconomic status got worse effect on sexual function(p 0.044) and so when being unemployed (p 0.001)combination of antipsychotic with antidepressants, may cause sexual dysfunction (P 0.036) ,and the more the duration of treatment the worse the effect on sexuality(P 0.001). When patients classified by type of sexual disorder:-desire disorder 19%, arousal disorder 28%, orgasm disorder 24%and sexual dissatisfaction with partner 29%.
Conclusions: sexual dysfunction in schizophrenics is rather common though shadowed in our community for cultural, religious reasons and stigma of schizophrenia itself, so that evaluating sexual dysfunction should be routinely inquired from patients with schizophrenia receiving antipsychotics medication during follow up and dosage adjustment.

Introduction:

Schizophrenia is a mental disorder that makes it difficult to tell the difference between real and unreal experiences, to think logically, to have normal emotional responses, and to behave normally in social situations. Schizophrenia is disorder of brain function.

Research suggests that schizophrenia may be a developmental disorder resulting from Alterations in the maturation of the nervous system. Schizophrenia constitutes a serious public health problem all over the world, Patients suffering from schizophrenia (about 1% of the population which similar to local study by ALSabagh (1993) are prone to experience sexual dysfunction as a part of the nature of the disease [(1)].

Sexual function is a complex human behavior that is affected by many physiological and psychological factors, sexual dysfunction is common in patients with schizophrenia, but this area has been relatively neglected to date [(2)]. Till the 1970's some psychiatrists believed that sexual activity could have an influence on schizophrenia development [(3)]. Reports from the 1970's additionally suggest that people with a diagnosed schizophrenia engage less in any form of sexual activities [(4)], and when such engagement occurs, their partners perceive and assess them as weakly communicating and playing their role in a primitive way [(5)].

Sexual dysfunction can also be observed in untreated schizophrenic patients [(6)]. other factors may play an important role as well : decrease libido through negative symptoms could be one of them, previous studies have focused primarily on chronically ill patients and thus little is known about sexual functioning among those with recent onset, acutely ill patients, antipsychotic medication are thought to cause various degree of sexual dysfunction [(7)], which is thought to be a major cause of non compliance and studies have shown an association between sexual dysfunction and antipsychotics. Schizophrenic taking neuroleptics have more sexual dysfunction compared to

unmedicated patients. A stronger focus on sexuality and preventing sexual dysfunction in schizophrenia would likely be a major benefit for improving treatment. This review will describe possible mechanisms for sexual dysfunction; describe sexual disturbances that have been documented in the literature of people who have schizophrenia [8,9].

The most important types of sexual dysfunctions are: erectile dysfunction including difficulty achieving and maintaining erection, decreased libido, disturbance in ejaculation (delayed inhibited, retrograde, spontaneous ejaculation), and priapism as sustained painful erection that can result in impotence. 5-Galatorreaha and gynecomatsia also known to occur and may be are prounced in younger patients [10,11].

Our aims in this study are: To demonstrate the side effects of psychotropic's on sexual function of the patients, and to identify the prevalence and types of sexual dysfunctions in the schizophrenics and relation to their demographic variable.

Methods:

This cross sectional study was carried on in Al-Rashad teaching hospital for psychiatric disease in Baghdad. The study extended for 22 months from 1st of July 2010 to the 1st of April 2012 where 155 male schizophrenic patients attending the outpatient clinic were examined to assess their sexual activity to see whether they got sexual dysfunction or not, 51 patients were excluded because they gave history of diseases other than schizophrenia that may affect sexual activity like renal failure, diabetes mellitus, alcoholics, hepatic failure, hypertension, heart failure. All patients were married with history of chronic schizophrenia (duration of illness more than 2 years), and after history and clinical interview 104 patients were involved.

Arizona Sexual Experience Scale as a tool was used in this study translated to Arabic language and approved by 3 consultant psychiatrist , oral informed consent was taken from each patient, eligible subject recruited were stabilized out patients who met DSM4 criteria for schizophrenia and under antipsychotic therapy , patients consecutively attending the outpatient clinic were asked to fulfill questionnaires comprising information on social and demographic characteristics , and pharmacological treatment followed by the application of ASEX.

The ASEX was developed by McGahuey et al. in the university of Arizona in response to the need for evaluating psychotropic drug induced sexual dysfunction, the ASEX is a brief 5 item questionnaire designed to measure sexual functioning in the following domains : sexual drive, arousal, penile erection, ability to reach orgasm and satisfaction with orgasm over past week [12].

Items are rated on a six-point scale rating from 1(hyperfunction) to 6 (hypofunction) total score more than 18 (very difficult) or more than 5 on any single item, while total score more than 20 indicative of clinically significant sexual dysfunction, cut of point of the scale 14/15, easy and friendly to use for (homosexual and heterosexual) and consumed few minutes (about 5 minutes).

Statistical analysis: collected data were inserted into P.C. the MINITAB version 13 used for data analysis. Descriptive statistics used in the analysis of frequencies, mean, standard deviation, graphs and tables. T test was used to calculate difference between continuous related data and Chi square test for discrete data P value of 0.05 was considered as cutoff point for statistical significance.

Results:

This study showed that 57 out of 104 (55%) studied schizophrenic patients got one or more types of sexual dysfunction.

Table 1 displayed the distribution of patients according to their ages which showed that the mean age of those with sexual dysfunction was 47 years (SD=10.2) and ranging from 25-66 years, there is significant difference regarding age distribution of those patient with sexual dysfunction and those without (p-value=0.018) which means the older the age the more likely the sexual dysfunction.

Table1: distribution of schizophrenic patients according to their age.

Groups	Age in years (Mean± SD)	P-value
Sexual dysfunction	47±10.2	0.018
No sexual dysfunction	50.29 ±11.57	

Regarding educational level, although only 17% (18 out of 104) got secondary school education (look table 2), but there is significant association between getting better educational level and better sexual function (p-value=0.001).

Table 2: Distribution of schizophrenic patients according to the educational level and sexual dysfunction.

Level of education	Groups		Total
	Sexual dysfunction	No sexual dysfunction	
Illiterate	42	17	59
Primary	10	17	27
Secondary	5	13	18
Total	57	47	104
p-value	0.001		

Same conclusion is true regarding socioeconomic status. The researcher found that 59% of total schizophrenic patients in this study are of low socioeconomic status (table 3), and they found that the lower socioeconomic level patients are more prone to sexual dysfunction (p-value=0.044).

Table 3: Distribution of schizophrenic patients according to the socioeconomic status and sexual dysfunction.

Socioeconomic Status	Groups		Total
	Sexual dysfunction	No sexual dysfunction	
Low	39	23	62
Middle	18	24	42
Total	57	47	104
p-value	0.044		

Distribution of schizophrenic patients according to the employment status and sexual dysfunction (table 4) shows that employment of schizophrenic patient is better for their sexual function with significant difference than those who are without job (p-value=0.001).

Table 4: Distribution of schizophrenic patients according to the employment status and sexual dysfunction.

Employment Status	Sexual dysfunction	No sexual dysfunction	Total
employed	10	33	43
Unemployed	47	14	61
Total	57	47	104
p-value		0.001	

A rapid look on table 5 shows that combined treatment had worse effect on sexual function of schizophrenic patient than other types of treatment (p-value=0.036).

Table 5: Distribution of schizophrenic patients according to the type of treatment and sexual dysfunction.

Type of treatment	Sexual dysfunction	No sexual dysfunction	Total
1st generation	17	21	38
2nd generation	10	13	23
combined	30	13	43
Total	57	47	104
p-value		0.036	

By application of ASEX score one can notice that hypofunction (6-17) is the most frequent disorder followed by sexually dysfunction (20-30).

Table 6: Distribution of patients with sexual dysfunctions according to ASEX score.

ASEX score	No. (%)
Hyperfunction(1-5)	0(0)
Hypofunction(6-17)	25(44)
Very difficult(18-19)	8(14)
Sexually dysfunction(20-30)	24(42)
Total	57(100)

Most common types of sexual dysfunction in this study were erectile disorder and sexual dissatisfaction with orgasm as shown in table 7.

Table 7: Distribution of the patients according to type of sexual dysfunctions.

Types of sexual dysfunction	No. (%)
Desire disorders	11(19)
Erectile disorder	16(28)
Orgasmic disorder	14(25)
Sexual dissatisfaction with orgasm	16(28)
Total	57(100)

Results showed in table 8 proved that the longer the duration of treatment means the worse the effect on sexual function (p-value=0.001).

Table 8: Distribution of schizophrenic patients according to the duration of treatment and sexual dysfunction.

Groups	Duration of Treatment in years (Mean± SD)	P-value
Sexual dysfunction	6.93 ±4.65	0.001
No sexual dysfunction	3.68 ±1.95	

Discussion:

It is clear that schizophrenic patients got high rate of sexual dysfunction (55%) and this results goes with other studies [5,6], the higher rate of sexual dysfunction in schizophrenic patients specifically due adverse sexual side effect of psychotropic medication used in treatment of those patients and natural consequences of the disease (sever personality deterioration and self neglection).

Regarding age distribution this study showed significant association between age and sexual dysfunction which goes with what had been found by Liu Seifert [13], when he found mean age was 50.8 years. This may be attributed to the effect of ageing in addition to long effect of antipsychotic medication.

Most of our patients were of lower educational level and this is expected, but the interesting thing that patients with higher educational achievement got less sexual dysfunction and this may be attributed to the less severity of the disease in those patients which goes with the results found by Nunes [18]. Lower socioeconomic status was dominating in this study and unfortunately it was proved that it got bad effect on sexual capability of patients, and the same was true when they were unemployed, this could be due to that most of the patients referred to Al -Rashad mental hospital are from low social class, Our results goes generally with the body of the literature in hand in which deterioration in economic position including falling in household income is generally associated with a modest increase in the risk of all categories of sexual dysfunction specially erectile disorder in males (Laumann E.O.) [15], the patients with high socioeconomic status experienced fewer problems in their desire functioning (20%) than those with low income [17],and the studies done by Nunes refer to similar explanation [18].Other explanation that most of employee schizophrenic patient with educational achievement and with good financial status made them easier to sexual consultation and management because all sexual energizer expensive which of benefit for management of most sexual dysfunction not available in governmental hospital.

In the present study, most of the patients (41%) used combined therapy (antidepressant and antipsychotics) and it was proved that 70% of them got sexual dysfunction, which is significantly higher than sexual dysfunction rate caused by first generation (45%), and second generation (43%) type of which goes with other studies [19], which was 13.6% with first generation, 28.1% with second generation and 50% for antidepressant with antipsychotic medications [20], other studies have not confirmed these findings [21].

The probable differences is larger sample size (137) and different instrument used (DGSFI: Dickson and Glazer Scale for assessment of sexual Functioning Inventory 2000) [22]. Small sample size in this study and absence of sex hormone evaluation leads to difficult to draw generalizable conclusion.

In our study sexual dysfunction was 55%, which was disaccord with results of other studies by Nunes [18], which was 28(33.3%) these different might due to his smaller sample size (84 patients) and poor willingness of our patients to questionnaires like embarrassment and poor sexual education .

Desire disorder was found to be 11(19%), erectile disorder 16 (28%), orgasmic disorder 14 (24%), and sexual dissatisfaction 16 (29%). These results were similar to the other studies in other countries [18], which were sexual desire disorder 22 (26.2%), arousal disorder 22 (26.2%), erectile disorder 20 (23.3%), orgasm disorder 20 (23.8%), except sexual satisfaction with orgasm 16 (19%) may be due to cultural and social etiology, in our society important of satisfaction in orgasm and with partner even if not found actually this reflect scene of maleness and dominancy of male partner which gave false results due to Iraqi sexual myth.

The results of this study differ from other study like Kokoszka [23], although small sample size patient (only 31 males) used in this study the result higher: desire disorder 71%, erectile disorder 45.2%, orgasm disorder 43.3% the reason for that different sexological questionnaire used which based on ICD10 criteria [24]. In comparison with other study [7], the most prominent form of sexual dysfunction was erectile 48% followed by orgasm disorder 45%, again larger sample size (124 patients) might explain the difference of the results.

Results of this study showed that the longer duration of treatment associated with more dysfunction in their sexuality, which explain by natural consequences of schizophrenic psychopathology (more negative symptom like poor personal care ,lack of will ,poor insight toward their sexual complain) and drug side effects accord to other studies [20,21].

Conclusions:

1- Sexual dysfunction should be routinely inquired from patients with schizophrenia receiving antipsychotics medication during follow up and dosage adjustment.
2- Majority of schizophrenic patient had at least one sexual dysfunction and sexual dissatisfaction most prominent followed by erectile, orgasm and lastly arousal and desire disorder.
3- Verification of obtained result on larger and representative group of patients with schizophrenia.
4- It is also important to bear in mind that many people have problems discussing their sexuality openly, this is likely to apply to patient suffering from schizophrenia as well, and therefore, evaluating sexual dysfunction by interviewer as opposed to patients completing a presented scale will influence the outcome of such studies.
5- Sexual functioning and its consequences should be a clinically important concern for psychiatrists, practitioner and programs serving the needs of persons with schizophrenia.

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