"CO-MORBIDITY OF SEXUALLY TRANSMITTED DISEASE AND PSYCHIATRIC DISORDERS: A STUDY ON 250 CASES"

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Abstract

Objective: The present study aims to explore the co-morbidity of psychiatric illness and sexually transmitted disease in two teaching hospitals in Dhaka. Design: A cross-sectional descriptive study conducted on 250 cases of sexually transmitted disease patients were carried out in two teaching institutes and their tertiary hospitals over a period from January 1998 to January 1999. These subjects constitute a special group of population for psychiatric diagnosis by using Structured Clinical Interview for Diagnostic and Statistical Manual of Mental disorders - III-R that is SCID for DSM-III-R. Settings: Outpatient Department of Dermatology; Dhaka Medical College Hospital and Bangabandhu Sheikh Mujib Medical University, Dhaka. Subjects: The study was done on 250 patients with sexually transmitted disease attending skin and venereal disease department. Results: Point prevalence of psychiatric disorder was found 34%. Co-morbidity and psychiatric disorder among sexually transmitted disease was found 27.1% cases. Sexual dysfunction with anxiety disorder and sexual dysfunction with depressive disorder as co-morbidity were found in 5.9% and 3.5% cases respectively. Similarly, psychoactive substance use disorder with depressive disorder, psychoactive substance use disorder with anxiety disorder and psychoactive substance use disorder with sexual dysfunction as co-morbidity were found in 7.1%, 5.9% and 4.7% cases respectively. Conclusions: Co-morbidity of psychiatric disorder is common for opioids. Findings suggest that sexually transmitted disease was co-associated with a number of psychiatric ailments. This underscores the essential exploration of aforementioned co-morbidity in order to design astute management.

Key words: *Psychiatric ailments; Sexually transmitted disease (STD).*

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Introduction:

Co-morbidity is the diagnosis of two or more psychiatric disorder in a single patient. Psychiatric co-morbidity is usually common for opioids, cannabinoids and cocaine use.[1] Sexual dysfunction is usually associated with substance use disorder in the form of diminished desire, decrease or absence of penile erection and premature or retarded ejaculation in men.[2] Empirical research findings has revealed that amongst patients attending the clinics for sexually transmitted diseases, 20-30% have psychiatric disorders.[2, 3, 4, 5, 6] A survey by Alam MN et al. focused on psychiatric morbidity in medical general practice in Dhaka and found correlation of co-morbidities.[7] A study on general outpatients in the IPGMR, Dhaka showed that 31% had purely psychogenic condition.[8] The present study aimed to explore the presence of co-morbidity of psychiatric disorder and sexually transmitted diseases.

Materials and Methods:

This cross sectional descriptive study was done in the skin and VD department of BSMMU and DMCH from January 1998 to January 1999. Two hundred and fifty diagnosed cases of STD were selected from skin and VD department of the BSMMU and DMCH in a consecutive manner. The semi-structured questionnaire containing socio-demographic data and STD related questionnaire was applied initially by the interviewer. Then the subject was

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interviewed for psychiatric assessment by using Structured Clinical Interview for Diagnostic and Statistical Manual of Mental disorders (SCID for DSM-IIIR) which was followed by physical and mental state examination. The diagnosis was assigned according to DSM-III-R criteria. The sample size was determined by the formula z^2pq/d^2 [z = 1.96 (for confidence 95%), p = prevalence of psychiatric morbidity (20%), [1, 3, 4] d = desired accuracy (0.05)] and it comes to a figure of 246.

Results

The point prevalence of psychiatric morbidity among the STD patient was 34%. Anxiety disorder was commonest among the STD patients, being present in 15.2% of all cases studied. This was followed by depressive disorder in 12% cases, psychoactive substance use disorder 6.8% cases, sexual dysfunction 8.4%, bipolar disorder (currently hypomanic) 0.4% and Schizophrenia 0.4%.

Table 1 shows that among total (250) STD patients, 85 cases had psychiatric disorder. Among them prevalence of anxiety and depressive disorder were 63%. Other psychiatric disorders were 37%. Among anxiety and depressive disorder 23 cases had as additional diagnosis with sexual dysfunction and psychoactive substance use disorder. The results of difference of prevalence of psychiatric morbidity were statistically significant ($p<0.001$).

Table II reflects 65.2% psychiatric co-morbidity (dual diagnosis) was found with substance use disorder. Similarly 34.8% were found as co-morbidity with sexual dysfunction. Statistically significant difference was observed between with co-morbidity and without co-morbidity among two groups of psychiatric disorders ($P<0.01$).

Table III depicts that among the 85 cases of psychiatric disorder, co-morbidity was found in 27.1% cases. The type of co-morbidity as anxiety disorder 5.9%, as depressive disorder 7.1% and as sexual dysfunction 4.7% were associated with psychoactive substance use disorder respectively. Similarly 5.9% anxiety disorder and 3.5% depressive disorder were found as co-morbidity with sexual dysfunction.

Table -I

Prevalence of anxiety and depressive disorder versus other psychiatric disorders among STD patients

Psychiatric disorder	Yes		No		Total
	n= 108	%	n= 108	%	n= 216
Anxiety and depressive disorder	68	63	40	37	108
Other psychiatric disorders*	40	37	68	63	108

$x^2 = 14.5$, $P<0.001$

• Psychoactive substances use disorder, sexual dysfunction, bipolar mood disorder currently hypomanic and schizophrenia.

Table - II

Distribution of psychiatric disorders with co-morbidity among STD patients

Psychiatric disorder	With psychiatric disorder		Without psychiatric disorder		Total	
	n= 23	%	n= 15	%	n= 38	%
PSUD	15	65.2	2	13	17	44.7
Sexual dysfunction	8	34.8	13	86.7	21	55.3

$X^2=9.9$ $P<0.01$

Table - III

Type of co-morbidity with psychiatric disorder among STD cases

Type of co-morbidity	n = 85	%
Psychoactive substance use disorder +Anxiety disorder	5	5.9
Psychoactive substance use disorder +Depressive disorder	6	7.1
Psychoactive substance use disorder +Sexual dysfunction	4	4.7
Sexual dysfunction +Anxiety disorder	5	5.9
Sexual dysfunction + Depressive disorder	3	3.5

Table -IV

Distribution of type of STD in relation to their psychiatric illness

Types of STD	With psychiatric morbidity		Without psychiatric morbidity		Total	
	n = 85	%	n=165	%	n = 250	%
Gonorrhea (G)	43	50.59	73	44.2	116	46.4
Syphilis (S)	18	21.2	33	20.0	51	20.4
Both (G + S)	2	2.4	10	6.1	12	4.8
NGU	17	20.0	40	24.2	57	22.8
Chancroid	3	3.5	8	4.8	11	4.4
Herpes progenitalis	2	2.4	1	0.6	3	1.2

$x^2 = 3.87$ P>0.05

Table - V

Distribution of psychiatric disorder with the type of STD

Psychiatric disorders	Gonorrhea (G)		Syphilis (S)		NGU		Chancroid		Herpes progenitalis		Both (G+S)	
n = 85	n = 43	%	n=18	%	n=17	%	n = 3	%	n= 2	%	n=2	%
AD	15	34.9	4	2.2	4	23.5	3	100	2	100	2	100
DD	11	25.6	5	27.8	5	29.4	0	0	0	0	0	0
PSUD	9	20.9	3	16.8	3	17.6	0	0	0	0	0	0
SD	8	18.6	4	22.2	5	29.4	0	0	0	0	0	0
BMD	0	0	1	5.6	0	0	0	0	0	0	0	0
Schizophrenia	0	0	1	5.6	0	0	0	0	0	0	0	0

$x^2 = 7.8$ P>0.05

Table IV illustrates that among the psychiatric illness of STD patients ,majority had gonorrhoea 50.59% . This was followed by syphilis 21.2% ,NGU 20% ,chancroid 3.5% ,herpes progenitalis 2.4% and both gonorrhoea and syphilis were 2.4%.

Table V shows in gonorrhea, out of 43 psychiatric cases, anxiety disorder was 34.9%, depressive disorder 25.6%, psychoactive substance use disorder 20.9% and sexual dysfunction 18.6%. Similarly out of 18 cases of syphilis, anxiety disorder was 22.2% ,depressive disorder 27.8%, and psychoactive substance use disorder 16.8%, sexual dysfunction 22.2%, bipolar mood disorder 5.6% and schizophrenia 5.6%. Among 17 NGU patients anxiety disorder was 23.5%, depressive disorder 29.4%, psychoactive substance use disorder 17.6% and sexual dysfunction 29.4%.

Discussion

This study was carried out at the out patient department of the skin and venereal disease consultation centre of BSMMU and DMCH. All patients attended from different geographic area of the country and 250 cases were included in this study. Findings of point prevalence of psychiatric disorder was found 34% and it was found that this figure was consistent to other similar studies.[5,6,9] Analyses of the psychiatric categories revealed that anxiety disorders were found most common disorder. This anxiety might be due to worries, apprehension, sexual dysfunction, substance use, secondary to pain from STD infection or from fear of infection, re-infection or of infecting others. Depressive disorder was the next having more in female than male cases. Sexual dysfunction was found considerable proportion of cases, which need professional help. Drug addition service should be extensive and comprehensive to combat the increasing of the problem in our country. In some cases, two or more psychiatric diagnoses were found. For example, depressive disorder, sexual dysfunction was present in a single patient. In this study, according of the provision of DSM-III-R diagnostic criteria two diagnoses were taken into account when both disorder fulfilled the diseases simultaneously. In the present study, co-morbidity and psychiatric disorder among STD found 27.1% cases which was significant at 1% level. Five point nine percent. of anxiety disorder and 3.5 % of depressive were found with sexual dysfunction disorder. Similarly, 7.1% depressive disorder, 5.9 % anxiety disorder and 4.7 % sexual dysfunction were found as co-morbidity with psychoactive substance use disorder. The findings of psychiatric co-morbidity might be due to direct effect of the using drug itself or the drug might have caused precipitation of the illness or to alleviate anxiety and to achieve heightened sexual arousal.[10]

Among the categories of STD different type of psychiatric disorders had been sufferings. In the current study psychiatric cases were found more among patients with gonorrhea, non-gonococcal urethritis and syphilis then patients of other types of STD. In a similar study done by Pedder Goldberg's survey[5] found that more psychiatric cases were among gonorrhoea, and non-gonococcal urethritis. The reasons of the specificity of psychiatric disorders among some types of STD patient i.e., gonorrhea, NGU and syphilis need further exploration.

Therefore, after considering the whole study, it can be said that prevalence of psychiatric morbidity was significant among STD patients. Of this study, generalized anxiety disorder, phobic anxiety disorder, major depression, dysthymia, substance use disorder and sexual dysfunction were common. The majority of cases of psychoactive substance use disorder had the co-morbidity of anxiety disorder, depressive disorder and sexual dysfunction. Similarly anxiety disorder and depressive disorder were found as co-morbidity with sexual dysfunction.

The above findings suggest the following recommendations: There are meager facilities for the diagnosis and treatment of psychiatric co-morbidity with STD among patients attending in skin and VD out patients department of the tertiary hospitals. Proper evaluation of psychiatric co-morbidity of these STD patients should be done by trained personals consulting with the liaison psychiatry department in the tertiary hospitals. Concerned physicians managing STD patients should be trained up so that they have adequate psychiatric orientation for early detection, management and appropriate referral of the STD patients who had been suffering co-morbid psychiatric problems. Awareness about the co-existence of the psychiatric problem among the STD patients, their relatives and service providers is necessary so that early intervention for such co-morbid conditions can be taken. Large-scale multi-centered study should be carried out which is supposed to be adequately representative and inferential.

Conclusion

Significant number of STD population was suffering from psychiatric disorder, majority of which were undetected and therefore untreated who were attending in the tertiary hospitals in Bangladesh. Special attention should be focused for those psychiatric disorders.

Abbreviations: IPGMR-Institute of Post Graduate Medicine and Research, VD-Venereal disease, STD- Sexually transmitted disease, BSMMU – Bangabandhu Sheikh Mujib Medical University; DMCH – Dhaka Medical College Hospital; AD - Anxiety Disorder; DD - Depressive Disorder; PSUD - Psychoactive substance use disorder; SD - Sexual dysfunction; BMD - Bipolar mood disorder; SZP – Schizophrenia; NGU = Non-gonococcal Urethritis; Both (S+G) = Gonorrhea+Syphilis.

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