Review Article

Co-morbidity of Psychiatric Disorders and Sexually Transmitted Diseases: *A 43 years review*

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Summary

Sexually transmitted diseases are common in the world and have far-reaching physical, psychological, social and economic consequences. Available information on the subjects from the period 1963 to 2006 has been collected from different sources. The prevalence rate of psychiatric disorder in sexually transmitted diseases varies widely and has found 5 to 45%. The disorders are anxiety disorder, major depression, reactive depression, dysthymia, phobic disorders, obsessional state, sexual dysfunction, substance abuse, psychopathic personality or antisocial personality disorder ,manic depressive psychosis and hypomania. Proper evaluation of psychiatric morbidity of sexually transmitted diseases patients can be taken care of by the liaison psychiatry department in the tertiary hospitals. Concerned physicians should be trained up so that they have adequate psychiatric orientation for early detection, management and appropriate referral. Psychiatric orientation is necessary specifically for the care givers of those organization who are directly involved with the patients of sexually transmitted diseases.

Introduction

Sexually transmitted disease (STDs) are one of the microbial diseases producing more burdens in medical services.[1,2] Besides physical there are psychological complications, as stress, emotional distress including anxiety, depression, obsessionality, somatization, guilt feelings, personality trait, alteration in behavior. Psychological factors are significantly associated with STD recurrence rates.[3,4] Psychiatric disorders have epidemiological, economic and quality of life consequences. The complex interrelationship between sexually transmitted diseases and psychiatric disorders depict the crux of consequences as a menace. The contributions of psychiatric disorders such as personality disorders, abnormal

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personality traits, promiscuity and abnormal sexual attitudes for the epidemiology of STD.[5,6] So far there is no study in Bangladesh regarding the prevalence, socio-demographic factors and types of psychiatric disorders among STD patients. Therefore, these study mass acts as a useful guide to find out the actual situation of psychiatric morbidity among STD patients in this country; this investigation would hopefully stimulate further research. Furthermore, accurate identification would reduce psychological distress and many influence both compliance and satisfaction with treatment and thus create awareness among the relevant professionals.

Methodology

Literatures on STD and psychiatric problems related with it have been reviewed. Available information on the subjects from the period 1963 to 2006 has collected from Medline/Internet search, Bangladesh National Scientific and Technical Documentation Center (BANSDOC), Bangladesh National Library (BNL), International Center for Diarrheal Diseases and Research, Bangladesh (ICDDRB) Library, Library of Bangladesh Institute for Research and Rehabilitation of Diabetic, Endocrine and Metabolic Diseases (BIRDEM), Bangladesh Bureau of Statistics (BBS) and Library of Bangabandhu Sheikh Mujib Medical University (BSMMU).

Findings and Discussion

Prevalence of STD: The true incidence STDs will never be known not only because of inadequate reporting but also owing to the secrecy that surrounds them. All available data however, indicate a very high prevalence of STD (from 1% to 14%) in the vulnerable groups.[7] The trend of STD is increasing globally and is also common in Bangladesh. Khan and Arefeen reported an estimate of 30,000 to 45,000 commercial sex worker (CSWs) in Dhaka and Narayangonj city in a study of prostitution in Bangladesh, Dhaka. But recently without rehabilitation of them the prostitution has been broken. So high prevalence of STD is risk as well as psychological disturbances. Low educational levels and low condom use among CSWs are of great important. [8]
STDs are more common in poor countries than in wealthy countries. WHO reports that worldwide 1 in 20 teenager contracts a STD each year. WHO estimates 333 million new cases of STD occur per year worldwide with increasing trend in developing countries. [9]

Prevalence of psychiatric disorder in the community: In general population several epidemiological studies have been performed to assess the prevalence of psychiatric disorders. A small-scale community survey in Bangladesh on psychiatric morbidity by Chowdhury et al. (1981) in 1978 showed that 6.5% of the populations were suffering from psychiatric disorders. Most common diagnoses were depressive disorder (2.87%), and anxiety neurosis (1.6%).[10] Recently WHO supported study was conducted by Firoz et al. (2006) in all six divisions of Bangladesh in randomly

selected clusters and found 16.05% mental disorders suffered. The prevalence of neurotic disorders, major depressive disorders and psychotic disorders were 8.4%, 4.6% and 1.1% respectively. Generalized anxiety disorder was fairly common (2.9%) among neurotic disorders.[11]

A survey by Alam MN et al. (1978) focused on psychiatric morbidity in medical general practice in Dhaka. He found 29% of all cases seen in medical general practice during the course of one year to be suffering from purely functional disorders, which are psychological and emotional disorder. Another 6% had both physical and psychological symptoms present together. Among the purely functional disorder, he found anxiety neurosis in 13% cases and 6% free floating anxiety. [12]

A study in former IPGMR, Dhaka found that 31% had purely psychogenic condition. Among them neurotic disorder was detected in 16.3% and anxiety state in 15%. Additional 15% had both organic and psychogenic features. [13] An expert committee on mental health of the World Health Organization (WHO) recently reported a global statement that in any society at least 1% of population is in need of psychiatric treatment at any given time and about 10% of population will require treatment sometime in their lives. Jenkins et al., (1997) reported neurotic disorder 16%, depressive disorder 2%, generalized anxiety disorder 3%, schizophrenia 0.4% and drug related disorder 7% by adopting ICD-10 criteria in large survey on the population in Great Britain. [14]

Prevalence of psychiatric disorder in STD: General prevalence- In fact, Altered sex behavior, poverty, promiscuity, overcrowding, progression of industrialization, high rates of natural increases, recognized brothel, floating and residential commercial sex workers and amateur society girls are responsible for rising trends of STD.[15] Lack of education, social customs and lack of trained personnel are also important. [8]

Although social and demographic factors were of etiological importance, there are some possible contributions of psychiatric disorders act as risk factor for STDs. [6] Several studies have shown that psychiatric disorder is common among patients attending in genitourinary medicine clinics. Empirical research findings has revealed that amongst patients attending the clinics for sexually transmitted diseases, 20-30% have psychiatric disorders. [16,17,18,24]

Prevalence of specific type of psychiatric disorder- From the literature attending in genitourinary medicine clinic it is plausible to suggest that this wide distribution of psychiatric disorders were expressed through a predominance of anxiety disorder, depressive disorder, sexual dysfunction, hypomania, psychopathic personality and drug related disorder. Kite and Grimble (1963) using special interviews for patients' attending a venereal disease clinic in Guy's Hospital, London, who were suspected for psychiatric disorder, found that 5% of 887 consecutive new patients could be classed as psychiatric cases. The principal diagnostic categories were

reactive anxiety state, endogenous depression, anxiety neurosis, reactive depression, obsessional state, hysteria, hypomania and psychopathic personality.[19] Pedder and Goldberg (1970) reported 30% of 219 patients were psychiatric cases by using a standardized questionnaire in a series of new patients attending consecutively a venereal disease clinic in London. A similar figure was found in general practice and in a medical out patient department.[20] In a study Mayou (1975) interviewed one hundred first attendees at venereal disease clinic in London, using a semi–structured questionnaire schedule and by a standardized mental state assessment and interview schedule devised by Goldberg. He found a considerable amount of psychological morbidity and rated 20% of patients could be regarded as psychiatric cases although as many as 45% showed overt psychological disturbances. There was mixed neurotic symptoms. The majority reported anxiety about their possible illness. In a quarter the anxiety appeared to be long standing and related to chronic social and psychological difficulties. [21] Another study was carried out in STD clinic by Catalan et al.,(1981) reported 40% cases the general health questionnaire (GHQ). He examined the part that sexual dysfunction with might play in psychological disturbance.

He found 29% of women and 21% of men attending in genitourinary medicine clinic. The abnormalities were erectile impotence, premature ejaculatory incompetence, coital orgasmic dysfunction, vaginismus dyspareunia and loss of libido.[22] A survey of psychological disturbance was conducted in a STD clinic in London, using GHQ the crown-crisp experimental index and the illness concern questionnaire. Among them 43% were psychiatric cases and found anxiety, phobia, obsession, somatic symptoms, depression and hysteria.[23] Barczak et al., (1988) found the total prevalence of psychiatric disorder in a population 30% by using DSM-III criteria (Diagnostic and statistical manual of mental disorders 3rd edn.). The psychiatric disorders were anxiety disorder (20%) and depressive disorder (11%). The disorder was more common in women than men.[24] In a recent study the prevalence of psychiatric morbidity inpatients attending genitourinary medicine clinics had been assessed using standardized questionnaire and found psychiatric problems up to 20% of patients and psychological disturbances in 30-40%.[18] In regarding psychosocial aspect of STD, genital herpes virus infection was the most distressing and perhaps the most emotionally difficult of the STD because it often causes intense discomfort and threatens the danger of transmission in pregnancy. These express the current empirical and clinical understanding of psychosocial aspect of the diseases. In a study, psychosocial factors were found more predictive in pain and itching than were somatic indices.[25,26] Several authors have reported marked psychiatric morbidity and psychosocial distress among patients attending clinic for STD.[27]

Banerjee S et. al., (1994) conducted a another study on 117 cases of all consecutive prospective STD patients attending skin and venereal diseases (SVD) clinic was assessed using DSM-III R and found 44.4% psychiatric disorders. The type of disorders were anxiety (14%), depression (12.8%), dysthymia (14.8%), MDP (2.6%) and substance abuse (2.6%). The psychiatric morbidity was significantly higher in STD patients. The severity of the psychiatric disorders was based on the psychological, social and occupational impairment in functioning.[28]

A study conducted in 1998 on 250 STD patients for psychiatric diagnosis by using Structured Clinical Interview for DSM-III-R (SCID) was carried out in out patient department of dermatology and venereology consultation center in the teaching institute and their tertiary hospital in Dhaka, Bangladesh and found point prevalence of psychiatric disorder 34% cases. Analyses of the psychiatric categories revealed that anxiety disorders were found most common disorder. Depressive disorder was the next having more in female than in male cases. A significant number of psychiatric co-morbidity found which was mainly with sexual dysfunction and substance use disorders.[29] Drug addiction service should be extensive and comprehensive to combat the increasing of the problem in our country.

Erbelding, E. J. et. al., (2004) recently administered a structured clinical interview to evaluate the prevalence of psychiatric disorders in 201 men and women presenting to a public STD clinic in Baltimore City Health Department, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA. By *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.) criteria, 45% of participants had current mood or substance use disorders and 29.4% had personality disorders (most often, antisocial personality disorder (ASPD) - rates far exceeding those found in community-based samples. ASPD, but not substance abuse, was significantly associated with a diagnosis of any STD on a previous or current clinic visit. These findings show a high prevalence of psychiatric disorders, particularly ASPD, among patients at this STD clinic. Behavior change the cornerstone of usual STD preventive interventions -- might be particularly difficult to effect in persons with such conditions. Addressing the mental health needs of these patients will require innovative behavioral approaches. Such strategies, however, could decrease the spread of AIDS and other STDs.[30]

The prevalence rate of psychiatric disorder among STDs varies widely. But most researchers found prevalence in between 5-45%. This wide variation of prevalence rate regarding psychiatric morbidity in different study was probably due to the fact that different researcher adopted different diagnostic tools and research criteria in different study. From the review of the work on psychiatric morbidity attending in STDs clinics, it became evident that a large number of attendees were suffering from psychiatric disorders and as well as psychological disturbances.

Conclusion

The review shows that factors responsible for these disorders like psychological, social or biological are yet to be discovered through large-scale prospective and longitudinal studies.

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