Original Article

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PSYCHIATRIC CO-MORBIDITY IN CHRONIC PAIN DISORDER

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ABSTRACT

Objective: To determine the psychiatric co-morbidity in patients with chronic pain disorder in hospital setting.

Design: Cross sectional descriptive study.

Place and duration of study: This study was conducted at Combined Military Hospital (CMH) Okara from June 2011 to May 2012.

Patients and Methods: A purposive sample of 400 patients (males=117; females=283) gathered from pain clinic and other outpatient departments of the hospital and were interviewed in detail and Present State Examination was carried out. Demographic variables were scored using descriptive statistics and results were analyzed using correlation methods.

Results: It was revealed that psychiatric illness in overall sample prevailed among 266 participants (67%). Among which 164 participants (62%) were diagnosed with depression, 67 patients (25.2%) of chronic pain were diagnosed with anxiety disorders, 28 patients (11%) with adjustment disorder and 1.5% and 1.1% diagnosed with drug dependence and somatization disorder, respectively.

Conclusion: Psychiatric co-morbidity especially the incidence of depression, anxiety and adjustment disorders were high amongst patients suffering from chronic pain disorder.

Keywords: Anxiety, Chronic Pain, Depression Psychiatric Comorbidity.

INTRODUCTION

Chronic pain is recognized as an important problem in the community[1]. Pain characterizes both medical and psychological mechanisms[2]. Chronic pain is now extensively viewed as a biopsychosocial phenomenon, in which biological, psychological, and social factors dynamically interact with one another and the psychological symptoms are produced by the patient's perception of, and reaction to the disease process and its consequences[3]. Acute pain is the response to an injury, and lasts until the injury is healed whereas chronic pain persists for a long time, more than 3-6 months. Chronic pain interferes with the quality of life and can disrupt daily routine, prevent from working or cause feelings of hopelessness and anxiety[2]. International Association for the Study of Pain defines chronic pain as pain which has persisted beyond normal tissue healing time, in the absence of other criteria and persists more than 3 months[4]. It is estimated that 86 million Americans are affected by some form of chronic pain in which lower back pain is the most prevalent of all chronic pain problems[5]. Research has revealed that the cost accompanying the treatment of pain exceeds the costs to the treatment of other disorders as well, such as depression, heart disease or respiratory disease[6]. Chronic pain has a profound psychosocial impact and psychiatric disorders are common in such patients[7]. Prevalence rates for depression in patients with chronic pain vary widely, from 30% to 54% in studies using standardized diagnostic systems and 10% to 100% in those using self-report[5]. The patient with chronic pain may make some efforts to cope with the symptoms. Patient may exaggerate symptoms for seeking more response from family and to motivate clinicians if this does not lead to the ideal solution that is hoped for. The patient may experience a growing sense of depression and agitation mixed with severe insomnia, and feel that recovery is hopeless. The extreme emotional distress may act to aggravate any underlying medical condition, magnify the

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perception of symptoms, and interfere with compliance[6]. World Health Organization concluded from 25,916 medical patients from around the world that psychological factors were found to be a stronger contributor to disability and disease severity[8]. Fishbain stated that chronic pain precedes depression[9-11]. A study conducted by Von Korff showed that chronic back pain is also significantly associated with mood, anxiety, alcohol abuse and dependence disorders[12]. Tsang also found that chronic pain (headache, back or neck pain, arthritis or joint pain) are associated with depression-anxiety spectrum disorders both in urbanized and developing countries[13]. Asmundson and Katz conducted study on adults (n=85,088) from 17 countries and revealed that those with back or neck pain are two to three times more likely to have history of 12-month panic disorder, agoraphobia, or social anxiety disorder, and almost three times more likely to have generalized anxiety disorder or post traumatic stress disorder[4]. It is important to identify psychopathology in chronic pain patients because unrecognized and untreated psychopathology can significantly interfere with successful rehabilitation of these patients. Moreover, psychopathology may increase pain intensity and disability, for instance, anxiety has been found to decrease pain threshold and tolerance. Anxiety and depression have been associated with magnification of medical symptoms and emotional distress has been linked to physical symptoms through autonomic arousal, vigilance, and misinterpretation or somatic magnification[3]. Current study aims at determining the correlates of chronic pain and psychiatric disorders in our society and to provide awareness among clinicians to consider psychiatric morbidity in patients being managed for chronic pain syndromes.

PATIENTS AND METHODS

Cross sectional descriptive study to determine the co-morbidity of chronic pain with psychiatric disorders. The study was initiated after taking approval from the ethical committee of the hospital. A purposive sample of 400 patient (males=117; females=283) stationed at Okara garrison and its suburbs with history of chronic pain of at-least 6 months duration were taken on first come basis from June 2011 to June 2012. The age range of sample was 18 to 70 years. The participants for study were gathered from pain clinic run by department of Anaesthesiology, pain and intensive care as well as various other departments/wards of CMH Okara. Medical officers in charge of these departments were asked to refer those patients with chronic pain (for at least 6 months duration or more) to psychiatry department for psychiatric assessment. Those patients who had chronic pain for less than six month duration and having previous history of psychiatric illness were not included in this study. Female patients who were pregnant were also excluded from the study. Informed consent was taken from either the patient or their attendant. They were provided all information regarding research, its requirements and procedure. In case of any psychiatric diagnosis, they were given a choice to seek treatment. Psychiatric interview and mental state examination was carried out according to Present State Examination (PSE) and psychiatric disorder was diagnosed as per ICD10 nomenclature. Furthermore, information was gathered around age, education, marital status, occupation and family system.

Descriptive statistics was used to determine the co morbidity of chronic pain with psychiatric disorders. Moreover, frequencies and percentages of demographic variables were computed, data was analyzed using Statistical Package for Social Sciences (SPSS) 14 version.

RESULTS

The purpose of the present study was to determine the co-morbidity of chronic pain and psychiatric disorders. The mean age of the participants was 44.7 years. Among male patients 60 were serving soldiers (59.7%). Among female patients majority were housewives and only 17 were working women (6.0%). Majority (87%) of participants were married among overall sample.

Majority of the subjects (81%) both male and female belong to rural areas with extended family system. Only 13% of the population was living in the garrison in a nuclear family system for the last 1 year or more. Among all the patients 70% of them had educational standard matric and below, and only 13% were graduates. The overall results of the study indicated that incidence of depression, anxiety disorder; adjustment disorder was high among patients with chronic pain. Psychiatric illness in overall sample prevailed among 266 participants (66.5%). The frequencies of different psychiatric illnesses are given in table 1.

DISCUSSION

Present study found high rates of co-morbid psychiatric disorders in patients with chronic pain, similar research highlights that the prevalence of major depression among patients with chronic pain is about 2-3 times higher than among pain-free individuals[7]. Maruta conducted a study on an injured patient population and found a 55% incidence of depression[14] where even minimal levels of depression were associated with increased rates of social morbidity and service utilization[15]. Warren stated that patients with chronic back pain were 2-3 times more likely to report depressive symptoms compared to those who did not report back pain[4]. In our study chronic backache was significantly more in soldiers and hence more anxiety related symptoms were found. Another study stated that among 1595 injured patients 64% had one or more diagnosable psychiatric disorders, compared to an incidence of 15% in the overall population. Our sample also showed psychiatric co-morbidity of almost 67%. Consistent with this, one study found that in a large cohort of patients with pain-related disability, the frequency of major depression was 25 times higher than general population estimates[16]. Our study showed depression as the leading psychiatric disorder in patients suffering from chronic pain disorder. The reported prevalence rates of 70% for co-morbid Axis I diagnoses and 54% for co morbid Axis II disorders or traits resemble those previously published by Reich et al. who reported frequencies of 98% for Axis I and 37% for Axis II disorders[17]. Similar to other studies, major depression was the primary Axis I diagnosis and its 62% occurrence rate in this study was even higher than the 22% 6-month rate found by Atkinson et al[18,19]. The 1.5% drug dependence frequency in this study was nearby with the current frequency of about 2% to 8% in the general population with chronic pain[20].

Table-1: Frequency distribution of psychiatric illness.

Psychiatric illness	Frequencies (n= 266)	Percentages
Depression	164	62%
Anxiety disorders	67	25.2%
Adjustment disorder	28	11%
Drug dependence	4	1.5%
Somatization disorder	3	1.1%

CONCLUSION

Psychiatric disorders are common in chronic pain patients and that the presence of these disorders significantly reduces the efficacy of treatment for chronic pain. These findings suggest that psychiatric co-morbid disorders need to be screened for, diagnosed and treated accordingly to get the favourable response from standard treatment regimens/ modalities for chronic pain disorder.

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