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INCIDENCE OF DEPRESSION AND ANXIETY IN PATIENTS WITH PAIN VISITING PAIN CLINIC

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Abstract:
Aim: *The study was aimed at checking the prevalence of anxiety and depression in patients with pain.*
Design: *A Cross-sectional study*
Place and duration: *This study was conducted at the Department of Psychiatry and Anesthesiology, Sir Ganga Ram Hospital Lahore for one-year duration from July 2019 to July 2020.*
Method: *The study included all severe and chronic pain patients who were referred for pain treatment at the pain clinic of the anesthesiology department. The sample included patients of all genders and ages, regardless of marital status and education. A total of 118 patients who met the inclusion criteria were enrolled in the study. Written informed consent was obtained from all of these patients and their demographics were obtained using the Performa specifically designed for this purpose. The DSM IV diagnostic criteria (Diagnostic and Statistical Manual) for depression and anxiety disorders were used for clinical evaluation, and then the selected sample was given the Urdu HADS (Hospital Anxiety Depression Scale) version to determine the presence of anxiety and depression. HADS is a widely used tool in clinical practice and is a 14-item self-completion questionnaire designed to assess the severity of anxiety and depression in a selected sample. All results were recorded, compiled and tabulated.*
Results: *The study was completed by a total of 118 patients, including 34 men and 84 women, aged 28-72 years, with an average age of 47.4 years. 84 of the examined patients were married and 34 were single. 38% of patients had chronic back pain and 32% had a medical diagnosis of disc prolapse. In the studied sample of 118 patients, 53% had depression and 44% had anxiety.*
Conclusion: *Anxiety and depression are common comorbidities in patients suffering from pain*
Keywords: *pain, anxiety, depression, HADS, DSM*

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INTRODUCTION:

Pain is an unpleasant sensory and emotional experience related to actual or potential tissue damage, or described in terms of such damage. Pain is one of the most common symptoms and a major problem for patients in clinical practice, and in many cases remains a difficult problem for both patients and therapists. Pain is a major symptom of many medical conditions, and severe and chronic pain, if left untreated, can significantly affect a person's quality of life and overall functioning. Pain interferes with falling asleep, hinders daily activities and reduces productivity, which can lead to poor quality of life. Pain also provokes an emotional response in sufferers, and someone is expected to be irritable and agitated, and if the pain is irritating and prolonged, the patient may experience constant tension and stress. Over time, this constant stress can cause a variety of emotional problems and mood changes, including anxiety and depression. A literature review suggests that psychological factors are strongly associated with persistent pain, as found by Danielle A W et al. In a study of patients with low back pain. Matt hew J Bair et al. Describing the strong relationship between depression and pain, found in a literature review that 52% of patients who came to pain clinics had depression, while 38% of psychiatric clinic patients and 56% of orthopedic clinic patients had pain because their main ailment was depressed. Adrienne J et al. Reported that in primary care, patients who suffer from various types of pain are approximately 2.5–10 times more likely to develop various types of anxiety disorders and major depression. Martha Castro found the same link between pain and anxiety and depression in her study of 400 patients. These findings were also supported by a work by Abdul Waheed and Nadia Azad, made from a local perspective. Abdul Waheed found 65.8% of patients suffering from anxiety and depression in his study at the rheumatic clinic of a third-degree hospital, while Nadia Azad and her co-authors in their study reported 42% of depression and 65% of anxiety in their sample from another rheumatology clinic. As in other parts of the world, pain is a frequently observed clinical problem in our culture and all aspects related to pain need to be investigated. Moreover, psychiatric morbidity is also present in our population to a high degree in both urban and rural populations, as reported by Niaz U and Mumford DB. The relationship of common diseases such as pain and mental disorders requires further research to identify early and effectively plan treatment for these comorbid conditions. Timely support and treatment can help improve the overall functioning and quality of life of these people. It seems appropriate that patients presenting to a pain clinic should be assessed for the presence of mental illnesses for which all types of pain are referred, and the relationship between psychological problems and pain caused by various physical diseases can be investigated. With this in mind, this study aimed to evaluate the prevalence of anxiety and depression in patients treated in a grade III hospital pain clinic.

MATERIAL AND METHODS:

This cross-sectional study was conducted at the Department of Psychiatry and Anesthesiology, Sir Ganga Ram Hospital Lahore for one-year duration from July 2019 to July 2020. All severe and chronic pain patients referred for pain management at the Anesthesiology Department Pain Clinic. The sample included patients of all genders and ages, regardless of marital status and education (literacy). Patients with diagnosed mental illnesses were excluded from the study. Written informed consent was obtained from all of these patients and their demographics were obtained using the Performa machine specifically designed for this purpose. After selecting the cases, the patients were interviewed and the criteria for depression and anxiety disorders in DSM IV were used for clinical evaluation. The trial group was then given the Hospital Anxiety Depression Scale (HADS) to determine the presence of anxiety and depression. HADS is an instrument widely used in clinical practice and was developed by Zigmond & Snaith. It is a 14-item questionnaire designed for self-assessment of the severity of anxiety and depression in a selected sample. The cut-off value for anxiety and depression is after 7. HADS has been translated into various languages and has been used extensively in over 25 countries since its inception. In an extended review, Herrmann reported that HADS has shown reliability and validity when used to evaluate medical patients. Bjelland came to similar conclusions in his review 5 years later this study used the Urdu version of HADS. Its Urdu version has been translated and reviewed by Mumford et al. and has since been used in several studies.

RESULTS:

A total of 118 patients meeting the inclusion criteria participated in the study. They were 84 women (71%) and 34 men (29%), the minimum age of the study group was 28 years, and the maximum was 72 years, and the average age was 47.4 years. The maximum number of patients (46) was 46-55 years old (38.9%). Of the enrolled patients, 83 were married (70%) and 35 were single (30%). In the entire sample, 54 (46%) were educated, and 64 (54%) were uneducated. Table 1 shows the demographics of participants.

Table 1: *Demographic information of participants (n = 118)*

Gender	N	%
Male	34	29%
Female	84	71%
Age (Range28-72yrs.Mean- 47.4)		
26-35yrs	05	04%
36-45yrs	27	23%
46-55yrs	46	39%
56-65yrs	33	28%
66-75yrs	07	06%
Educational Status		
Educated	54	46%
Uneducated	64	54%
Marital Status		
Married	83	70%
Unmarried	35	30%

After screening for psychiatric morbidity using the Urdu version of HADS, depression was found to be a more frequently observed psychiatric morbidity than anxiety disorder. 63 patients (53%) out of 118 had depression, while 52 patients (44%) out of 118 had anxiety. (Table 2)

Table 2: *Frequency of anxiety and depression - HADS sub scales scores (n = 118)*

HADS Sub Scales	Present	Not Present	Total
Depression	63 (53 %)	55 (47 %)	118 (100%)
Anxiety	52 (44 %)	66 (56 %)	118 (100%)

27 patients (23%) in the study group suffered from both anxiety and depression, and 30 patients (25%) had neither anxiety nor depression. Depression was more common in patients with pain lasting more than a year, while anxiety was significant in patients with pain lasting less than a year (Table 3).

Table 3: *Duration of pain and Psychiatric Morbidity (n = 118)*

Duration of pain	Psychiatric morbidity	No of patients	Percentage
More than one year	Only Depressed	26	22%
	Depressed & Anxious	16	13.5%
	Only Anxious	10	08.5%
	Neither depressed nor Anxious	13	11%
Less than one year	Only Depressed	10	08.5%
	Depressed & Anxious	11	09.3%
	Only Anxious	15	12.7%
	Neither depressed nor Anxious	17	14.5%
Total		118	100 %

Chronic back pain was the most common cause of pain treatment as 45 patients (38%) had back pain, followed by 38 patients (32%) with disc prolapse. Table 4 shows the medical diagnoses of the trial group.

Table 4: *Medical Diagnosis (Reasons for taking pain treatment) (n = 118)*

Medical Conditions	Prolapsed Inter Vertebral Disc	Chronic Backache	Frozen Shoulder	Malignant conditions	Knee Arthritis / Arthalgia	Miscellaneous	Total
No. of patients	38	45	09	12	07	07	118
Percentages	32 %	38 %	8 %	10 %	6 %	6 %	100%

DISCUSSION:

The evaluation of the data from this study is important because it was conducted in a pain clinic, which appears to be a better place to study psychiatric morbidity in patients with pain. The demographic characteristics of the sample population in our study are comparable to the data from the studies by Martha Castro et al. And Teixeira MJ, where women predominated (almost 70%). This observation was supported by studies by Abdul

Waheed6 and Nadia Azad, who also had a female-dominated sample in their work. In addition, herniated intervertebral disc was the primary medical cause of pain in the Martha and Teixeria studies, while in our study it was the second most common medical diagnosis after chronic back pain. The predominance of women in the study group can be explained by the observation that back pain is more common in women than in men. Most of the patients in our sample were middle-aged, which was also an observation in Abdul Waheed's study. Middle age is considered a period requiring active social and professional functioning, but due to persistent and severe pain, these people had limited mobility and poor functioning, which affected their quality of life. However, most of the patients in our study, while married, received physical, social, moral and economic support from their spouses. The results of the HADS application showed that a significant proportion of the study group suffered from anxiety and depression, which is confirmed by the results of the Juang, Martha and Banks study, showing a strong relationship between chronic pain and mental disorders. There seems to be a logical explanation for this relationship as constant unbearable pain can make a person disabled and dependent on others for their physical, social, and financial needs. This stressful situation, if not addressed, could easily provide a psychiatric assessment of this population, which would be useful in screening those patients who plan to use more invasive techniques such as anesthesia block and acupuncture to relieve pain. Timely and effective psychosocial interventions can reduce the severity of mental disorders as well as associated pain, and the need for invasive pain relief techniques can be reduced. Worryingly, a fairly large number of patients reporting to the pain clinic were restless and depressed. This observation supports the idea that all patients in a pain clinic should be routinely assessed for mental illness. This can be achieved by imparting clinical psychiatric assessment skills to physicians working in pain clinics. Another way to solve this problem is to refer these patients to a psychiatric clinic for the prompt diagnosis of mental illness. Another area of concern is the assessment of the risk of suicide in this population, which may be likely the result of the persistent helplessness, hopelessness and worthlessness associated with depression and pain.

CONCLUSIONS:

From this study, it can be concluded that pain probably has a significant relationship with anxiety and depression, but the magnitude of this relationship may be affected by the intensity, cause, and duration of pain. To some extent, this relationship may also be influenced by various demographic variables, such as age, gender, level of education and marital status. Given the limitations of this study, such that the sample size was not too large and the study reflected a problem in one Grade III hospital in the city, similar studies in other centers with a larger sample size would give a better idea of the extent of the problem.

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