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RESEARCH ARTICLE

Evaluation of Level of Anxiety among the Patients of Hip Osteoarthritis

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ABSTRACT

Objective: The objective of this study was to evaluate the level of anxiety among patients with hip osteoarthritis (HOA). **Materials and Methods:** A cross-sectional survey was conducted in multiple hospitals of Sindh and Balochistan provinces of Pakistan from June to October 2020. A self-developed questionnaire was distributed among 98 patients, who were already diagnosed with HOA. The questions mainly consisted of demographic and disease-related questions. The Statistical Package for the Social Sciences version 23 was used to interpret the data acquired from the questionnaires. **Results:** The majority (n = 56, 57.1%) of the respondents were female, (n = 41, 41.8%) aged 65 and above years. A substantial number of respondents (n = 67, 68.3%) were permanent residents of rural area. After examining the level of anxiety, we found that majority of the participants (n = 44, 44.8%) were moderately anxious followed by (n = 25, 25.5%) severely anxious due to the HOA. **Conclusion:** The study determined that the patients suffering from HOA were understood to have moderately anxious due to the disease (HOA). To further elaborate on this, patients become slightly physically disable in the later stages due to this disease which leads to anxiety and depression.

Keywords: Hip osteoarthritis, Level of anxiety, Pakistan

INTRODUCTION

Osteoarthritis (OA) is the most widely recognized age-related joint disease among all degenerative joint diseases in the world. OA is also identified as a significant cause of disability throughout the world. The primary OA is of idiopathic and hereditary etiology and is more common in females. It affects the fingers, spine, hips, and knees. The secondary OA affects the cartilage of joints due to an injury or another medical condition.^[1,2] After the knee, hip joint is quite possibly the most affected due to

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Dr. Aadil Ameer Ali, E-mail: aadilamirali@hotmail.com OA, which generally affects the weight-bearing joints. OA is portrayed by the reformist deficiency of bone and ligament of the joints. After the age of 40 the commonness of OA increases, and in individuals who are 65 years old, OA presents 75% of the time and it advances with age. In Pakistan, 28% of the population from metropolitan regions and 25% of the population from rural regions are influenced by hip OA (HOA).^[1,3] The occurrence of HOA is regular in old females. HOA presents with pain, uneasiness, morning stiffness, and irritation particularly with the incapacity of the lower limbs. Seriousness and disability increase as the individual ages. Risk factors for HOA are age, gender, weight, injury, hereditary qualities, life systems, and smoking.^[4,5]

Psychosocial factors have been demonstrated to be indicators of agony and incapacity in various musculoskeletal conditions including constant hip pain and low back pain. While two deliberate surveys of prognostic elements for hip pain have explicitly inspected a couple of psychosocial factors inside various segments (physical and patient-related components), no efficient audit has explicitly centered on looking at the connection between psychosocial variables and hip pain.^[6] Besides this, the proof from investigations of hip pain is clashing. While a few cross-sectional examinations have detailed that there is no relationship between anxiety and hip pain, others have proclaimed burdensome side effects to be identified with pain in the hip joint.^[7] While, understanding the connection between psychosocial factors and pain in the hips is significant on the off chance that we ideally oversee conditions involving the hips. The point of this audit was to efficiently survey the literature to decide if disability, tension, and poor emotional well-being are risk factors for hip pain.^[4,8]

MATERIALS AND METHODS

Study design, settings, and duration

A cross-sectional descriptive study was conducted from June to October 2020, and data were collected from various hospitals of Sindh (Jinnah Postgraduate Medical Centre Karachi and Jijal Mauu hospital Hyderabad) and Balochistan (Hope Physiotherapy Centre, Akram hospital Quetta, Shaikh Zaid hospital Quetta).

Sampling

Convenient non-probability sampling technique among the 98 already diagnosed patients with HOA was used. Participants of both genders (male and female), having age of 55 and above, suffering from unilateral or bilateral hip pain for the past 2 years and those willing to participate were included in this study, whereas participants of the age 54 and less and those people not willing to sign the consent form were excluded from this study.

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Data collection tool

A self-constructed questionnaire was used to collect the data provided by the participants. The questionnaire included questions related to demographic characteristics; age, gender, education, and locality. Furthermore, there were six different questions which included to check the level of anxiety among the participants, and every question had four options ("Not sure," "Last few months," "Last few weeks," and "Nearly every day") to select from. The "Not sure" option was appointed 0 marks, "Last few months" was appointed 1 mark, the "Last few weeks" option was appointed 2 marks, and "Nearly every day" was allotted with a score of four marks. There was a total score of 24, and each patient was marked according to the answer options, they selected. The patient who ranged between 0 and 8 score was placed under "Minimal Anxiety," a patient scoring between 9 and 13 was assigned with "Mild Anxiety," a score of 14 to 18 was allotted "Moderate Anxiety," and the patients who scored more than 18 were designated "Severe Anxiety".

Data collection procedure

The participants were asked to fill the questionnaire on the spot, and only minor help was given on request, to understand the questionnaire.

Data analysis procedure

Descriptive statistics: Categorical variables were measured as a frequency and percentage. The data were analyzed using the Statistical Package for the Social Sciences version 23.

Ethical concern

Ethical approval was taken from the Review Committee of Faculty of Pharmacy and Health Sciences, University of Balochistan, Quetta, Pakistan. For data collection, prior permission was taken from participants and an informed consent form was requested to be signed by the participants before data collection. The informed consent form stated that their participation is voluntary, the information of their responses will be kept confidential and that they can withdraw from the study at any time they wished to do so.

RESULTS

Demographic characteristics

Demographic characteristics are described in Table 1, which shows that the majority (n = 41, 41.8%) belong to the age group between 65 and above, and n = 56, 57.1% of the participants were female. In locality, the majority (n = 67, 68.3%) were the permanent residents of rural areas of Sindh and Balochistan.

Anxiety assessment response

In Table 2, the six anxiety-related questions were answered by the respondents, which show that majority of the participants (n = 42) were not sure whether or not they were feeling nervous, n = 46were not able to control their apprehension due to the disease, and n = 17 were worried from last few months due to a different episodic event occurring in their life after their diagnosis of HOA. Moreover, the majority (n = 32) of participants were not able to relax nearly every day and n = 39 were not able to rest nearly every day even after they were fatigued, and n = 58 of participants remained anxious nearly every day after they were diagnosed with HOA.

Level of anxiety

The level of anxiety is described in Figure 1, which states that the majority (n = 44, 44.8%) of the

Table 1: Demographic characteristics

Characteristics	Frequency (n=98)	Percentage (100%)	
Age			
55-60	20	20.4	
60-65	37	37.7	
65 and above	41	41.8	
Gender			
Male	42	42.8	
Female	56	57.1	
Locality			
Urban	31	31.6	
Rural	67	68.3	

participants were found moderate anxious followed by (n = 25, 25.5%) severely anxious.

DISCUSSION

This study revealed that 44.8% of patients of HOA were experiencing a moderate level of anxiety. The studies were conducted by Haq *et al.*, Mäkelä *et al.* and concluded that the patients with HOA suffer from anxiety due to painful movement of limbs.^[3,9,10] As patients grow older, their hips become weak as they support most of the weight of the body, and due to wear and tear as they help in walking, bending, sitting down, and standing up. Individuals have to perform daily routine work, but they may not be able to perform all their activities due to the pain, and this perception of disability will result in a psychological impact on the patients' psyches that will push the individual toward anxiety and depression, causing mental disability.^[11,12]

Furthermore, it is also noted that HOA brings a negative impact on a patient's socioeconomic status as they cannot perform at their jobs more efficiently which may affect their income, and an increase in medical expenses to treat the disease.^[3,13,14] However, the acknowledgement of the irreversible nature of HOA puts a negative impact on the patient's mental health that also paves the way toward anxiety and depression.^[15-17] It has also been noted that anxiety may occur due to the prolonged use of non-steroidal anti-inflammatory drugs (NSAIDs) which are being used by the

Characteristics	Not sure	Last few months	Last few weeks	Nearly every day
Are you feeling nervous or anxious?	42	23	19	14
I am not able to control my worriedness due to the disease.	46	29	15	08
I am worrying too much about the different events happening in my life after the disease?	16	17	22	43
I am not able to relax myself	21	16	29	32
After tiredness, it's still difficult to get relax.	11	16	32	39
I usually remain afraid.	00	18	22	58



Figure 1: Level of anxiety

patients to subside the pain; however, the anxiety is a common side effect of NSAIDs.^[4,9,18]

CONCLUSION

The level of anxiety among the patients with HOA should be assessed across all the hospitals of Pakistan.

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CONFLICTS OF INTEREST

The authors, hereby, declare that there is no conflicts of interest with this submission.

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