https://doi.org/10.37723/jumdc.v14i4.822

J. Univ. Med. Dent. Coll.2023;Vol.14(4):692-639
ISSN (Print) 2221-7827, ISSN (Online) 2310-5542
https://www.jumdc.com

Original Article

Open Access

Psychological wellbeing of patients with arthritis: impact of psychological distress on quality of life, and patient satisfaction

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ABSTRACT

BACKGROUND & OBJECTIVE: Arthritis is an autoimmune disease in which an individual's immune system attacks healthy cells in one's body and gives rise to inflammation. Recently, it has been found to be manifested in individuals with stress-related diagnosis. This study investigates how psychological distress, quality of life, patient satisfaction, and the role of pharmacists affect the psychological wellbeing of patients who have received medical diagnoses of different forms of arthritis.
METHODOLOGY: This cross-sectional study was conducted at the Department of Psychology at the University of Gujrat from 1st January to 30th August 2022. A sample of 380 patients already diagnosed with arthritis by the physicians was taken a Purposive sampling technique from various orthopedic hospitals. A demographic sheet and Urdu versions of Depression, Anxiety, Stress Scale DASS-21, WHO QOL-BREF, Patient Satisfaction with Pharmacist Services Questionnaire, and Flourishing Scale were used to assess psychological distress, quality of life, doctor-patient satisfaction, and psychological wellbeing in arthritis patients.
RESULTS: The study results showed that there is a significant negative correlation between quality of life and psychological distress (r= -.11, p<0.01). Wellbeing and quality of life are positively correlated (r=.68, p<0.01). 57% variance in wellbeing of the patients with arthritis is explainable due to the presence of psychological distress and perceived quality of life. CONCLUSION: The wellbeing of individuals diagnosed with arthritis can be strongly predicted by their levels of psychological distress and their perceived quality of life. This study delves into the implications of these findings.
KEYWORDS: Anxiety, Arthritis, Depression, Patient Satisfaction, Quality of Life.

INTRODUCTION

Arthritis springs from the Greek term meaning disease of the joints with acute or chronic inflammation that leads to damage of joints [1]. Rheumatoid arthritis (RA) has been found to be highly prevalent, 26.9% in Karachi [2]. Quality of life is impacted by factors such as fatigue, stiffness, discomfort, and reduced physical function in patients with rheumatoid arthritis (RA). Their quality of life is also impacted by several socioeconomic characteristics, including age, job, economic position, and lifestyle choices [3].

These factors, when combined with the experience of pain, exacerbate the decline in quality of life. It's evident that RA patients face considerable challenges in performing daily activities and maintaining employment, which further contributes to the deterioration of their quality of life. Studies [4,5] have highlighted the negative influence of pain and reduced muscle grip strength on the quality of life of RA patients.

Chronic stress is a major contributing factor that plays a significant role in the development of arthritis [6]. Psychological wellbeing refers to positive adjustment at the interpersonal level of connectedness and intrapersonal attitudes of self-actualization and personal development [7]. Despite the significant improvements in RA therapy, the enhanced illness remission rate falls short of fully meeting patient needs for support and care. It is important in medicine management to pay attention to the side effects, administration techniques, the length of long-term treatment, and commitment. Additionally, the effectiveness of the

How to cite this: *Sarwar MA, Khan F, Soomro N, Ahmed I, Aslam MM, Murtaza HB. Comparison of the efficiency of shock waves extracorporeal lithotripsies (ESWL) versus Ureterorenoscopy (URS) to remove proximate ureteric stones. Journal of University Medical & Dental College. 2023;14(4): 635-639.*

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therapy may not be perceived similarly by the patients and their doctors. The treatment regime with fewer adherences by the patient negatively affects patient's recovery outcomes. Decisions about the management of RA as well as commitment to medication, are greatly influenced by the patients' satisfaction with their care [8].

The significance of this study is to investigate the impact of the quality of life, psychological distress, and patient satisfaction on the his/her wellness with arthritis because previous research have not focused on the study of these psychological variables. The findings of the study would be helpful for psychologists and counselors to devise interventions that aimed at reducing levels of depression, stress, and anxiety in individuals suffering from arthritis. Further, the pharmacist-patient relationship could be promoted by awareness rising, and patients' satisfaction could be enhanced. The hypotheses of the study are given below:

1. There will be gender differences in the occurrence of type of arthritis in the patients.
2. The higher the levels of depression, anxiety, and stress, lower will be the levels of quality of life and wellbeing in patients with arthritis.
3. The higher the levels of interaction between pharmacist and patient, lower will be the levels of depression, anxiety, and stress.
4. Psychological distress, pharmacist-patient relationship, and quality of life will predict the wellbeing of the patients with arthritis.

METHODOLOGY

This cross-sectional study was conducted at the Department of Psychology at the University of Gujrat from 1st January to 30th August 2022. The study was proceeded after the approval from the ethical review committee board of the University of Gujrat References: PSY/UOG/23/4048 on 13-12-2021. The target population of this study was arthritis patients visiting orthopedic wards of the hospitals situated in Dinga, Gujrat. Since the sampling frame was not available, a nonprobability sampling technique was used to collect data. A total of 385 questionnaires were given to the patients diagnosed with arthritis, and only 380 returned filled questionnaires were returned. Five incomplete questionnaires were discarded and not included in the statistical analysis. However, in the case of uneducated patients, the questionnaire was filled by the researcher while conducting a structured interview with the patient according to their responses. They were contacted by purposive sampling technique in Tehsil Headquarters Hospital (THQ, Dinga) and Azeem Haddi General Hospital, Dinga. The inclusion criteria of the study included patients who were diagnosed with any type of arthritis visiting hospitals and who were willing to participate in the research. The exclusion criteria focused on patients with arthritis who had co-morbid diagnosed physical or psychiatric disorders. The questionnaire contained an informed consent form and demographic form with age, gender, occupation, education, physical activeness, monthly income, residence area, and type of arthritis diagnosed by the physician. The Urdu version of WHOQOL-BREF is a 26-item instrument comprising of physical health, psychological health, social relationships, and environment. WHOQOL-BREF is scored from 1 to 5 on a response scale, with a high score demonstrating high QOL [9]. The Urdu version of the Depression, Anxiety, and Stress Scale (DASS-21) is intended to quantify the levels of depression, anxiety, and stress [10]. The Urdu version of Patient Satisfaction with Pharmacist Clinical Services Questionnaire PSPSQ 2.0 comprised of 22-items utilizing a 4-point Likert-type scale [11]. The reason for the inclusion of PSPSQ instead of doctor-patient satisfaction is a socio-cultural scenario of Pakistan. Here, the doctor-to-patient ratio is less than the recommendation of WHO [12]. Therefore, a few doctors are bombarded with a large number of patients, reducing their time for interaction with the patients. Hence, pharmacists are in a better position to guide patients in the management of the disease [13]. The Flourishing Scale is a concise 8-items. The scale gives a solitary mental prosperity score of psychological wellbeing. Response choices incorporate 7-point Likert Scale. The conceivable score is from 8 (least conceivable) to 56 (most elevated wellbeing) [14].

RESULTS

Descriptive statistical analyses such as frequencies and percentages are used for the demographic characteristics of the patients with arthritis. Inferential statistical analyses such as the chi-square test, Pearson product-moment correlation, and multiple linear regression analysis are used for gender differences in types of arthritis, association among the variables, and predictors of wellbeing in arthritis patients, respectively. The results of the present study are shown below.

Table-I: Demographic characteristics of patients with arthritis (n=380).

Variables		n(%)
Gender	Male	183(48.2)
	Female	197(51.8)
Education	Uneducated	50(13.1)
	Primary-Matric	118 (31.1)
	Intermediate-Graduate	141(37.1)
	Masters-PhD	71(18.7)
Occupation	Housewives	97(25.5)
	Working ladies	100(26.3)
	Employed males	183(48.2)
Residential area	Urban	166 (43.7)
	Rural	214(56.3)
Physical activeness	Yes	307(80.3)
	No	73(19.2)

In Table-I demographic variables of the sample are given as the total number of the sample was 380. The mean age of patients diagnosed with arthritis was 45.12 years (±14.53) with a median of PKR. 40,000 income per month. Demographic variables were age, gender, education, occupation, residence area, monthly income, physical activeness and reason for arthritis. According to a category of gender 183 was male representing 48.2% and 197 was female, representing 51.8%. In the education category, the majority of the participant's education was intermediate to graduation, which is 141 (37.1%). The majority of the participants were from rural area 214 (56.8%). In the category of physical activeness majority were physically active i.e 307 (80.3%).

Table-II shows in the arthritis type categories, 138 belong to rheumatoid arthritis representing 36.3%, 24 were psoriatic arthritis patients representing 6.3%, gout patients were 32 representing a percentage of 8.4%, 133 belongs to the osteoarthritis category representing 35.0% and the spondyloarthritis patients were 53 representing 13.9%.

Table-II: Types of Arthritis Diagnosed with Respect to Gender Differences.

Types of Arthritis	Gender		χ^2
	Female n (%)	Male n(%)	
Rheumatoid Arthritis	87 (22.9%)	51 (13.4%)	4.32
Psoriatic Arthritis	9 (2.4%)	15 (3.9%)	
Gout	24 (6.3%)	8 (2.1%)	
Osteoarthritis	34 (8.9%)	99 (26.1%)	
Spondyloarthritis	43 (11.3%)	10 (2.6%)	

*p<0.05

Table-III: Summary of Correlation Analysis (N=380).

Variables	Mean±SD	A	2	3	4	5	6
1. Stress	**8.63±4.45**	**0.87**	**.82****	**.83****	**.40****	-.11*	-.25**
2. Anxiety	7.67±4.96	0.89	-	.90**	.47**	-.10	-.36**
3.Depression	7.63±5.01	0.89	-	-	.53**	-.17**	-.40**
4. PSPSQ	35.29±11.13	0.97	-	-	-	.005	-.18**
5. QOL	78.75±12.59	0.91	-	-	-	-	.68**
6.Wellbeing	40.75±10.55	0.93	-	-	-	-	-

Table-IV: Multiple linear regression analysis for psychological distress, pharmacist-patient relationship, quality of life on wellbeing of patients with arthritis (n=380).

Model	Beta β	Std. Error	t	Sig.
(Constant)	2.649	2.582	1.02	0.306
Stress	0.268	0.152	4.17	0.000
Anxiety	-.260	0.176	-3.14	0.002
Depression	-.272	0.189	-3.02	0.003
PSPSQ	-.023	0.038	-.57	0.566
QOL	0.637	0.029	18.34	0.000

DISCUSSION

The first hypothesis of the study stated, "There will be gender differences in the occurrence of type of arthritis in the patients". The results of table-II showed that rheumatic arthritis 87 (22.9%), gout 24 (6.3%), and spondyloarthritis 43 (11.3%) are more prevalent in females as compared to males. Conversely, psoriatic arthritis 15 (3.9%) and osteoarthritis 99 (26.1%) are more prevalent in males as compared to females. These findings are consistent with the results of the previous studies. In a research study, a ratio of 5.2 women per man rheumatoid arthritis [15] was found to be prevalent. Analysis of gender distribution in another study showed that female predominated men with 28.2% men and 71.8% women diagnosed with gout [16]. However, 14.4% of females and 8.3% males were diagnosed with severe level of osteoarthritis [17]. Similarly, psoriatic arthritis is more frequent in men than women (42.9% vs 31%, p=0.003) [18]. Spondyloarthritis is three times more likely to occur in women than in men [19].

The second hypothesis of the present study stated, "Higher the levels of depression, anxiety, and stress, lower will the levels of quality of life and wellbeing in patients with arthritis". The findings of the present study confirmed the hypothesis as previous studies [20-21] showed an inverse relationship among the study variables.

The third hypothesis of the present study stated, "Higher the levels of interaction between pharmacist and patient, the lower will be the levels of depression, anxiety, and stress". The findings of the present study showed significant positive relationship between patients seeking medicinal information from the pharmacist and experiencing aroused depression, anxiety, and stress. This finding is contrary to a study that revealed that keen patients who seek information about medications from physicians and pharmacists tend to show a reduction in the symptoms of their distress [22]. The reason might be attributable to cultural differences. Patient satisfaction is a performance indicator used in assessments of the quality of medical care and a particular kind of client satisfaction measurement. Unfortunately, health psychologists and clinical psychologists are not employed in the majority of hospitals to provide satisfactory counseling for use and adherence to medications. In Pakistan, low education levels and stigmatization might have buffered the positive effects of the medication, and patients hold only

selective information about the negative side effects of the medication, thus, hindering their healing progress. Therefore, they might inquire about side effects and working of the prescribed medicines with the pharmacist and get positive responses for the efficiency of the medicines; they stick to faulty beliefs about side effects and medicine usefulness.

The fourth hypothesis of the study stated, "Psychological distress, pharmacist-patient relationship, and quality of life will predict the wellbeing of the patients with arthritis". The findings of the present study revealed that depression and anxiety have significantly negatively predicted the wellbeing of patients with arthritis. These findings are consistent with the results of the previous studies [23-24], as they showed inverse predictability of wellbeing in the presence of depression and anxiety. Another study found a positive prediction of wellbeing in perceived positive quality of life and hence highlighted the reinforced role played by the quality of life in enhancing the wellness of the patient [25].

CONCLUSION

Various types of arthritis are prevalent in men and women, effecting their wellbeing. High levels of depression, anxiety, and stress in patients with arthritis impacted their quality of life and wellbeing negatively. The wellbeing of these patients is predictable by 57% variance of psychological distress and perceived quality of life. The findings implied that clinical psychologists/health psychologists/psychologists might be employed in hospitals for the provision of counseling services to patients with arthritis for reduction of their symptoms of distress, enhancement of their wellbeing, and adherence to treatment regime. Moreover, pharmacists could be trained in guidance and counseling patients with firsthand information about the medications.

ACKNOWLEDGEMENT: None.
CONFLICT OF INTEREST: This article is part of the BS thesis by Zunaira Sajid under the supervision of Ms. Sameera Shafiq (PhD Scholar), Lecturer, Department of Psychology, UOG.
GRANT SUPPORT AND FINANCIAL DISCLOSURE: None.

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Author's Contribution:

Sameera Shafiq: Substantial contributions to the conception and design of the work.
Quratulain Muhammad: Analysis, and interpretation of data for the work.
Zunaira Sajid: Final approval of the version to be published.

Submitted for publication: 14-02-2023
Accepted after revision: 12-10-2023