



Trauma, Helplessness, and Quality of Life among Arthritis Patients Moderated by Perceived Social Support

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Citation | Naz. I, Sehrish. M, “Trauma, Helplessness, and Quality of Life among Arthritis Patients Moderated by Perceived Social Support” Int. J. Innov. Sci. Technol., Special Issue, pp.105-109, 2022.

Received | July 17, 2022 ; Revised | Sep 09, 2022 ; Accepted | Sep 18, 2022 ; Published | Sep 20, 2022.

DOI:<https://doi.org/10.33411/IJIST/2022040512>

The study explores trauma and helplessness to explore quality of life among arthritis patients moderated by perceived social support. It was a cross-sectional study conducted at different hospital communities in district Gujrat. The purposive sampling technique was used to select 385 participants. The instruments used were demographic form, Post-Traumatic stress disorder scale, arthritis helplessness index, world Health 'sQuality of Life scale, and multidimensional Social support scale. For the Analysis of the data, multiple regression and structure equation modeling has used. The result has confirmed $[R^2=.676 F(1, 383) = 106.7, p<.01]$ that trauma, helplessness, and social support was the predictor of Quality of life with 45.7% variance. The .E.M.S.E.M. model has significantly established the relationship among variables. The CMIN/DF was 2.10, a value less than three indicate the best-fitted model. The value of G.F.I., A.G.F.I., and CFI, are 0.957, 0.932, and 0.945, respectively This shows that the Model is best fitted if this value is greater than 0.90. The regression estimates of trauma predicting social support were 0.083 (P=.043), and helplessness was 0.229 (P=0.000). It established the fact that a one-unit increase in trauma will lead to an increase in social support by 0.083 and helplessness by 0.229. The regression estimates of Quality of life predicting helplessness -0.003 (P= 0.765), which indicates a non-significant inverse relationship . The regression estimates of Quality of life predicting social support and trauma were 0.052 (P=0.000) and -0.01(P=0.780), respectively. It established the fact that Quality of life determines social support by 0.052, whereas trauma was inversely non-significant.

Keywords: trauma, helplessness, Quality of life, social support, arthritis

Acknowledgment.

I give my acknowledgment to all the doctors who help in conducting the research and the participants of the study.

Author's Contribution.

Conception, assembly, design, Analysis, and interpretation:

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Drafting and Critical revision
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Final approval and guarantor Dr. Iram Naz & Sehrish

Conflict of interest:

The article is part of my M. Phil thesis conducted in Department of Psychology, University of Gujrat.

Project details. Nil



Introduction

The prevalence of arthritis is increasing in Pakistan [1]. Other countries also show a variation in the arthritis statistics as in Britain Guatemala, Canada, and Paraguay, the number of people having the problem is increasing. It is noteworthy that such diseases display a high burden on countries [2]. Arthritis is defined as a disease related to the joints of people. The problem is severe or long-lasting, with swelling in joints. The disease also accompanies pain and damage to the body [3]. The main symptoms may include pain, body stiffness, less movement, and joint defects. In total, there are more than 100 types of arthritis that include Osteoarthritis, Rheumatoid Arthritis, Juvenile arthritis, Psoriatic arthritis, and Fibromyalgia. Ankylosing Spondylitis, Lupus arthritis, and Infectious arthritis. The types can be differentiated based on their symptoms and severity. The problem can be handled in a good manner if the body is physically examined and history of the disease is taken while identifying the type of arthritis. All the medical professionals involved must contribute at their end for improvement [4].

Among other professionals, the psychologist should contribute to identify the psychological issues encountered by arthritis patients. The Quality of life is compromised due to after the effects of arthritis [5]. According to the P.A.A.P.A. Dictionary of Psychology, the Quality of Life (QoL) is defined as a level of an individual's satisfaction. To maintain a good QoL, and the person must be in an upright state of well-being in terms of physical and emotional integrity, appropriate relationships with others, chances for personal progress, and social participation. A balanced Quality of life must be maintained, especially in terms of prolonged diseases and disabilities [6]. There exists a relationship between mental health and Quality of life in osteoarthritis patients based on the pain location. It was to observe if participants had pain in the joint of the hip due to disease, lower back, and knee joints. If they may be afraid or depressed. Many studies confirmed a relationship between different sites of pain, psychological health, and a person's Quality of life [7].

There are several psychological factors that trigger the Quality of life of arthritis patients. The present study foresees the role of trauma, helplessness, and social support in predicting the Quality of life of arthritis patients.

The Diagnostic and Statistical Manual of Mental Disorders-DSM-V described Post-Traumatic Stress Disorder (P.T.S.D.) as triggered by any traumatic events. For example, the individual may have directly experienced the trauma, witnessed it, or witnessed traumatic events close to home [8]. Post-Traumatic Arthritis (P.T.A.) occurs after experiencing severe trauma to the joints directly. The etiology of P.T.A. includes approximately all osteoarthritic cases, as well as physical trauma, which can also be experienced by patients with inflammatory arthritis. The symptoms of pain, swelling, synovial effusion, and very often intra-articular bleeding are presented by patients. Post-traumatic arthritis cures immediately, but the symptoms can still be lasted for six months and become chronic. The occurrence of the inflammatory mechanism during the phase of acute P.T.A. presents to play a crucial role in the onset of chronic disease. It was proven by various human studies and experimental models that a series of inflammatory mediators are declared in synovial fluid instantly after joint trauma. Such molecules have been introduced as pointers disease and a possible target for the occurrence of particular and preventative interventions. A large number of agents have been examined in medical studies, but at the present time, chronic P.T.A. is not preventable [9].

Due to the prolonged nature of arthritis, the patients may experience helplessness. Research has confirmed the relation of helplessness with the arthritic problem [10]. Learned helplessness (L.H.) is a more frequent term used to explain the concept. It describes humans' failure to follow, employ, or acquire adaptive instrumental responses. It is observed in a depressed person who appears to have given up hope of instructional material's voluntary control over major environmental events [11].

Social support is a broad concept that includes both the communal construction of a person's life and the specific goals aided by numerous relational associations. Social support can be witnessed in many forms as informational support in which person recommends, give advice, and provide helpful information to others. Further, instrumental social support includes economic and physical support for an individual. In emotional support, care and love are being displayed. Finally, in companionship, the partner is available to give support [12].

The researchers concluded that people with the problem of arthritis require a good quality of life to integrate into society. The arthritis problem is chronic, and those suffering from it are at risk of experiencing trauma and helplessness. Their physical activity and mobility become reduced, so they become dependent on others not only for mobility but also for emotional support. In this situation, if others, especially their family, leave them alone, they develop symptoms of trauma and helplessness, and then their Quality of life is disturbed directly. Even if others are providing them physical or materialistic help but not psychological support, they still are at risk. So, it is important to explore the psychological problems faced by the vulnerable population.

The objective of the current study was to explore trauma and helplessness as predictor of Quality of life among arthritis patients moderated by their social support.

Material and Methods.

The study was conducted to explore trauma and helplessness as predictor of Quality of life among arthritis patients moderated by social support. It was a cross-sectional study conducted on a sample of 385 diagnosed arthritis patients that were taken by using purposive sampling from communities and hospitals of Kharian, Sarai Alamgir, Lala MMusa nd Jhelum. The sample was calculated using a prevalence survey sample size [13]. The target audience were adults with diagnosed arthritis. The data was collected using the demographic form in the form of questionnaire. The abbreviated Post-Traumatic Stress Disorder .T.S.D.P.T.S.D. Checklist Civilian Version [14] measured .T.S.D.P.T.S.D. symptom in the respondents. It has six items on a 5-point Likert with sensitivity of 0.92 and a specificity of 0.72. with Cronbach's alpha of 0.78. The Arthritis Helplessness Index was designed to evaluate patients' perceptions of helplessness in the treatment of arthritis. The Cronbach alpha was 0.63 [15]. QoL depends upon 26 checkpoints of 4 areas of an individual's physical mental health, social relations, and environmental issues. The internal consistency of the scale was 0.86. [16]. Finally, the multidimensional Social support scale is a 12-item on, 7-point Likert scale with test-retest reliability of 0.85. [17]. All the scales were administered in Urdu.

The officials of the hospital were approached to get permission for data collection, and the respondents were traced out. They were briefed about the study objective, written informed consent, and scales. The researcher, explained the instruction to fill out the questionnaires. The patients were asked to read the scale items carefully and select the best response that suited their mind. Moreover, the participants were ensured about the ethics of privacy, anonymity, and confidentiality to get the original responses. The .T.S.D.P.T.S.D. Checklist Civilian Version [14] was used in an unpublished .D.Ph.D. thesis in Urdu version. The researcher, used this scale by getting permission from the author of this study [18] the scale was used in the study on arthritis patients. Further, the researcher gave the details of her email and contact to the study participants to ask about the findings of the research after its completion the researcher appreciated.

Multiple regression and Structure Equation Modeling (S.E.M.) used to analyze the data. The software used for the Analysis was Statistical Package for the Social Sciences (S.P.S.S., V 21.0) and Analysis of a Moment Structures (.M.O.S.A.M.O.S. version 21). The Model fit indices of .E.M.S.E.M. were used to confirm the findings.

Result and discussion.

Table 1. Summary of Linear Regression Analysis of Trauma, Helplessness and Social Support as a Predictor of Quality of Life among Arthritis Patients.

Predictor	R	R ²	AdjR	F	P
Trauma	.676	.457	.452	106.7	.000
Helplessness					
Social support					
Quality of life					

The hypothesis stated that trauma and helplessness would be the predictor of QoL among arthritis patients'. The result in table 3.1 has confirmed [$R^2=.676$ F (1, 383) = 106.7, $p<.01$] that trauma, helplessness, and social support are significant predictor of Quality of life. The result of regression analysis [$R^2=.457$ F (1, 383) = 106.7, $p<.01$] has further confirmed that trauma, helplessness, and social support are the significant predictor of Quality of life among arthritis patients, with 45.7 % explained variance.

Table 2. Model Fit Summary (N=385)

P Value	Chi-Square/Degree of Freedom (CMIN/DF)	The goodness of Fit Index (G.F.I.)	Adjusted Goodness of Fit Index (A.G.F.I.)	Comparative Fit Index (CFI)	Root Mean Square Error of Approximation (R.M.S.E.A.)
.000	2.10	.957	.932	.945	.054

Table 2 indicate the model summary of the fit indices for the .E.M.S.E.M. model. The Model has significantly established the relationship between the variables. The CMIN/DF ratio was 2.10, as its value is less than three ,indicating the best-fitted model. The value of G.F.I., A.G.F.I., and CFI, are 0.957, 0.932, and 0.945, respectively. The Model has confirmed if these values are greater than 0.90. In the case of CFI and .F.I.G.F.I. ' it's greater than 0.90; however, the .G.F.I.A.G.F.I. value was also greater than 0.90, so it can be concluded that the Model was appropriate. If looking at the .M.S.E.A.R.M.S.E.A. value, which was 0.054, a value below 0.05 is considered the best-fitted Model. A value less than 0.08 may be reflected as the best-fitted model.

Table 3 Regression estimates of factors of all the scales (N=385).

Factors	Estimates	P Value
Social Support< --- Trauma	0.083	0.043
Helplessness< --- Trauma	0.229	0.000
Quality of Life< ---Helplessness	-0.003	0.765
Quality of Life< ---Social Support	0.052	0.000
Quality of Life < ---Trauma	-0.001	0.780

Table 3 shows that the regression estimate of trauma predicting social support was .083 (P=0.043). It established the fact that the increase in social support due to trauma was .083. ne-unit increase in trauma will lead to an increase in social support by .083. The regression estimate of trauma predicting helplessness was 0.229 (P=0.000). The regression estimate of the Quality of life predicting helplessness was 0.003 (P= 0.765). As the Quality of life and helplessness has an inverse relationship which is a very less value (-0.003), and their relationship is non-significant, but it is a fact that an increase in Quality of life causes a decrease in helplessness. The regression estimate of the Quality of life predicting social support is 0.052 (P=0.000), which means that the Quality of life was a significant predictor of social support (0.052). The regression estimate of the Quality of life predicting trauma was -0.01(P=0.780). shows that the QoL associated with trauma was inversely non-significant, which means as the QoL standard increases, trauma decreases.

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