



## STUDY OF PSYCHOLOGICAL QUALITY OF LIFE IN PATIENTS WITH RHEUMATOID ARTHRITIS : A PROSPECTIVE OBSERVATIONAL STUDY IN A TERTIARY CARE HOSPITAL.

Dr Shahbaz Khan

Senior Resident Deptt. Of Medicine GMC Jammu.

### ABSTRACT

Rheumatoid arthritis (RA) is a chronic systemic inflammatory disease the principal hallmark of which is symmetric polyarthritis with main involvement of the small joints in hands and feet. In this prospective study a total of 110 patients were taken and various parameters were correlated with psychological quality of life in patients with rheumatoid arthritis. Major advances have been made in drug treatments. However, RA is still a poorly predictable disease and treatment responses tend to be variable. From the patients' perspective, even from the early phases of disease, RA is a potentially debilitating disease causing persistent pain, depression or other psychosocial distress, poor physical function, reduced quality of life (QoL) and increased medical and social costs.

**KEYWORDS :** Rheumatoid Arthritis, depression, quality Of Life, psychological QoL.

### INTRODUCTION

Rheumatic diseases have a major impact on both the individuals with the disease and the society in terms of economic, social, and psychological burden. Most rheumatic diseases are associated with high levels of pain and reduced physical function. Compared with other major disease groups, rheumatic diseases are the most common cause of chronic health problems and pain, the leading cause of long-term disability, and accountable for a considerable part of the total health care costs in western countries.

From the patients' perspective, even from the early phases of disease, RA is a potentially debilitating disease causing persistent pain, depression or other psychosocial distress, poor physical function, reduced quality of life (QoL) and increased medical and social costs **Scott et al, 2005(1)**.

### METHODS AND MATERIALS

The present prospective observational and cross-sectional one point analysis study entitled "Study of PSYCHOLOGICAL Quality of Life in Patients of Rheumatoid Arthritis" was conducted from Nov. 2014 to Oct. 2015. The study group comprised of patients attending Medicine OPD in Govt. Medical College, Jammu. Diagnosis of rheumatoid arthritis was done on basis of 2010-ACR-EULAR classification criteria for RA.

In case of any diagnostic dilemma patients were suggested for:

- 1) Rheumatoid factor by nephelometry.
- 2) Anti CCP antibodies.
- 3) ESR/CRP.

### EXCLUSION CRITERIA

- Patients who needed hospital admission or those with any other forms of lower limb immobility or abnormality such as paraplegia.
- Critically ill patients, pregnant women, lactating women.

In the present study a co-relation of the impact of various factors like

**TABLE 1: Correlation between Demographic Factors, Clinical Variables, Biochemical Parameters and Psychological Domain Score of QOL**

Psychological Health Mean $\pm$ SD = (56.78 $\pm$ 20.522)	N=110	AGE Mean $\pm$ SD 51.34 $\pm$ 6.49	REHUMATOID Factor (Nephelometry) Mean $\pm$ SD 27.19 $\pm$ 19.137	No. of Doctors Attended Mean $\pm$ SD 3.36 $\pm$ 0.993	Anti CCP Mean $\pm$ SD 29.92 $\pm$ 17.086	DAS Score Mean $\pm$ SD 3.49 $\pm$ 1	VAS Score Mean $\pm$ SD 6.15 $\pm$ 1.312
	Pearson Correlation	-.411	-.542	-.474	-.511	-.693	-.681
Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

Correlation is significant at the 0.01 level (2-tailed)

demographic profile, disease activity score (DAS), biochemical parameters with the mental quality of life in rheumatoid arthritis was studied. The demographic profile of all the patients was taken example-age, sex, weight, BMI, urban verses rural, disease severity, Duration of disease, occupation, any sports activities etc. Detailed history about Rheumatoid Arthritis was taken. History about any other coexistence disease was taken. Detailed examination of the patients was done.

Visual Analogue Scale (VAS) & WHOQOL BREF Questionnaire (using 26 questions) was used to assess how patient of Rheumatoid Arthritis feels about his/her quality of life, health, or other areas of life.

**RESULTS:** The present study was carried out on 110 patients of the Rheumatoid Arthritis as diagnosed on the basis of ACR-EULAR criteria. The mean age of study population was recorded as 51.34 years. There was a female predominance as 79.1% of the patients were females in comparison to 20.9% males with a male to female ratio of 1:3.78. Using DAS score, most of the patients (54.54%) were found to have moderate disease activity followed by 24.54% of patients which were in disease remission phase. Using VAS score severe (50%) to very severe (37.3%) pain was seen in most of the patients. Using psychological domain score of QOL, most of the patients were found to have moderate (41.81%) to severe (29%) psychiatric symptoms. Co-relation was drawn using the Pearson Correlation test, between the demographic-epidemiological profile, disease activity score (DAS), biochemical parameters, clinical factors, and psychological quality of life in rheumatoid arthritis in patients under study. While undertaking sub-group analysis and correlation analysis with Demographic Factors, Clinical Variables, Biochemical Parameters like Age, RA Factor, Anti-CCP, DAS Score, VAS Score and No. of Doctors attended with the Psychological Health, a negative correlation was seen which was of statistical significance ( $P < 0.05$ ) i.e. as the Age, RA Factor, Anti-CCP, DAS Score, VAS Score and No. of Doctors attended increases Psychological Health decreases i.e. pain and functional disability increases. (Table no 1)

**Vilsteren et al, 2015(2)** in their study found that RA affects physical, psychologically, social as well as environmental domain score of QOL, which is in agreement with our study. In our study a negative correlation was observed between the Age, VAS Score, DAS Score, Rheumatoid factor, Anti-CCP and the psychological domain of QOL, which was statistically significant. Similar results have been obtained in the previous studies (**Bell et al, 1990(3)**; **Suurmeijer et al, 2001**). **Suurmeijer et al, 2001 (4)** in their study concluded in a multicenter, multidisciplinary longitudinal study that Rheumatoid factor was negatively correlated with QOL. **Bell et al, 1990(3)** concluded that both rheumatoid factor anti-CCP as well as age were negatively correlated with quality of life which corresponds to results in our study. The results of this study done support that psychological factors associate differentially with subjective and objective components of the total DAS scores in patients with severe RA. In addition and in particular, high VAS scores (which could significantly elevate a DAS28 score) may be more strongly influenced by other factors such as psychological variables

**CONCLUSIONS:** The current study highlights Rheumatoid arthritis to be very common rheumatological problem presenting commonly in 5<sup>th</sup> to 6<sup>th</sup> decade of life with female predominance. Thus results of the current study further impress upon comprehensive and aggressive management plan involving clinicians as well as persons from allied specialties for early diagnosis of Rheumatoid Arthritis as early as window period, so as to institute treatment and improve QOL of patients in all spheres.

Further for improving quality of life all health workers must specially pay attention to all the dimensions of QOL as well as Paradigms of quality of life predictors. Clinicians should therefore evaluate psychosocial factors, as well as subjective disease status, to improve the QOL of patients with RA.

**Conflicts of interest:** NONE

#### **Scope of study:**

- Early diagnosis and treatment of RA with especially focus on older people and these people should be assessed for their level of pain, functional limitations and QOL.
- Aggressive and comprehensive management plan for patients diagnosed with Rheumatoid Arthritis which should be a team work and should include healthcare providers from allied specialties like physiotherapists, occupational therapists, psychological counsellors, so as to improve overall QOL in patients of RA.

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