

## MENTAL HEALTH PROBLEMS AND COPING STRATEGIES AMONG PATIENTS WITH RHEUMATOID ARTHRITIS

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### ABSTRACT

This thesis examines the complex interaction between mental health issues and coping methods in rheumatoid arthritis patients. Besides its physical effects, rheumatoid arthritis has a significant impact on mental health. This research seeks to understand how mental health issues and adaptive coping methods relate to RA. A correlational design and convenience sample were used to analyze 200 RA patients, 100 of whom were male and 100 female. A quantitative study provides a complete picture of RA patients' mental health issues. Participants are quantitatively assessed using standardized depression, anxiety, stress, and loneliness measures. Rheumatoid arthritis patients have high rates of anxiety and sadness. The research found gender-specific trends, with females expressing more stress and anxiety and men reporting higher depression. Additionally, women have more outstanding interpersonal issues. Women with RA reported higher stress and anxiety, whereas men had more depression. Additionally, women had greater interpersonal issues. The female coping assessment was more diverse. Psychological well-being is key to RA adaptation since mental health issues predicted coping mechanisms. These results suggest individualized psychosocial treatment for male and female RA patients. This study explains rheumatoid arthritis's difficulties and patient-centered treatment. Healthcare professionals should address gender-specific experiences, interpersonal barriers, and coping mechanisms to promote RA patients' mental health. This study adds to the multifaceted knowledge of mental health in rheumatoid arthritis. It emphasises the necessity for gender-specific therapies that promote adaptive coping.

**Keywords:** Rheumatoid arthritis, mental health, coping methods, depression, anxiety, stress, loneliness, interpersonal issues, psychological well-being, adaptive coping

### INTRODUCTION

The primary objective of this research is to investigate the prevalence of mental health concerns and explore the various coping strategies used by individuals diagnosed with rheumatoid arthritis (RA). The primary objective of this study is to examine and enhance understanding of the mental health difficulties encountered by persons who have rheumatoid arthritis (RA), while also exploring the coping mechanisms they use to manage these issues. The primary objective of this research might involve a range of pursuits, including The main objective of this study is to evaluate the occurrence and characteristics of mental health issues, including depression, anxiety, and stress, as well as their level of severity, in persons who have been diagnosed with rheumatoid arthritis. Furthermore, this study aims to

examine the coping mechanisms used by individuals with rheumatoid arthritis in order to effectively address their mental health difficulties. This may include an examination of both adaptive and dysfunctional coping strategies.

According to the World Health Organization, chronic disease is identified as the primary factor contributing to early mortality on a global scale. Based on the estimations provided by the World Health Organization (WHO), it is accountable for 63% of all mortalities. Chronic disease is characterized by a gradual and prolonged course, necessitating patients to adjust to altered circumstances and impacting many facets of life, often resulting in adverse effects and a notable decline in health-related quality of life. Rheumatoid

arthritis (RA) is a chronic condition that significantly reduces a person's functional capacity.

Rheumatoid arthritis (RA) is the prevailing rheumatic condition in the category of connective tissue disorders. The condition under discussion is characterized by a chronic and progressive inflammatory process originating from the synovial membrane. This process leads to the deterioration and destruction of articular tissues, resulting in impaired joint functionality. The age of onset for this condition often falls between 40 and 60 years, with a greater incidence seen in women compared to men, ranging from 3 to 4 times higher. Rheumatoid arthritis patients often experience a range of bodily manifestations, including joint deformities and degeneration, chronic pain, fatigue, unintended weight loss, and episodes of fever. Additionally, those who suffer from this condition face psychological difficulties that are typically characterised by negative emotions like anxiety, despair, a sense of bereavement, and interpersonal issues resulting from changes in the fulfilment of social obligations (Ziarko, 2014).

Rheumatoid arthritis (RA) is a medical condition that continues to have a significant impact on people's lives despite notable progress in its treatment (SCOTT et al., 2005). According to Symmons et al. (2005), at the individual level, there exists considerable heterogeneity in the extent of felt impairment across individuals with similar levels of illness severity. Rheumatoid arthritis has a prevalence of around 400,000 among people aged 16 and above in the United Kingdom. The condition has the potential to impact individuals across all age groups. Typically, the development of this condition occurs during the age range of 30 to 50 years, which coincides with an individual's greatest period of productivity.

Rheumatoid arthritis (RA) is a chronic systemic autoimmune disease that mostly affects synovial joints, causing inflammation (synovitis), joint erosion, and cartilage degradation. Rheumatoid arthritis (RA) is a chronic systemic autoimmune disease that mostly affects synovial joints, causing inflammation (synovitis), joint erosion, and cartilage degradation. As a consequence, several patients experience a decline in functional status and an increase in disability. Rheumatoid arthritis (RA) may potentially present as extra-articular manifestations, impacting several organs in the body and resulting in increased rates of mortality and morbidity (Zielinski

et al., 2019). Those who have rheumatoid arthritis may slowly develop a number of cardiovascular problems, such as pericarditis, myocarditis, pericardial and pleural effusions, congestive heart failure, and problems with their skin, eyes, gut, nervous system, or kidneys (Turesson, 2003).

The occurrence of rheumatoid arthritis (RA) is around 1% in the majority of nations. The number of new cases, also known as the incidence, has been documented as 40 per 100,000 individuals who meet the 2010 American College of Rheumatology (ACR)/EULAR categorization criteria at the beginning of the study (Humphreys et al., 2013). Even though strict disease management plans have been put in place, such as the "treat-to-target" (T2T) plan described by Smolen et al. (2017), Song et al. (2018) show that some rheumatoid arthritis (RA) patients still have high levels of disease activity. This evaluation considers tender and swollen joint counts, erythrocyte sedimentation rate, and visual analog core. The use of patients' Visual Analogue Scale and tender joint count as factors within the scoring system (Song et al., 2018) illustrates one of the main drawbacks or benefits associated with mental health issues, which is the subjective nature of some elements. The subjective assessments used in this study may be susceptible to the impact of poor mood and depression among individuals with rheumatoid arthritis (Chancay et al., 2019).

Rheumatoid arthritis arises from a complex interaction between hereditary and environmental elements, including variables such as smoking and dietary preferences. The presence of a family member with the condition increases a person's susceptibility to it, even though the precise genetic mechanism underlying it is still unknown. Weight is an additional significant component that has been shown to have an elevated risk for those who are classified as overweight based on their body mass index (BMI) (Lempp et al., 2006). It is generally suggested for most individuals to have an optimal body mass index (BMI) falling between the range of 18.5 and 24.9. Deviating from this range by being underweight or obese may potentially increase an individual's vulnerability to certain health conditions. Moreover, the act of smoking substantially increases the likelihood of having rheumatoid arthritis. Dietary habits are also a contributing factor, since there is a positive correlation between excessive red meat consumption, inadequate vitamin C intake, and an

elevated susceptibility to the illness. The combined influence of several variables has a role in the probability of acquiring rheumatoid arthritis (Lemp et al., 2006).

### **Rationale of the Study**

The justification for doing a research investigation on the subject of mental health issues and coping mechanisms among persons diagnosed with rheumatoid arthritis (RA) is based on the significant influence that this enduring autoimmune condition has on the overall physical and emotional welfare of affected individuals. RA increases the risk of mental health issues like depression, anxiety, and stress. The presence of concurrent mental health issues may have a substantial impact on the overall well-being of those diagnosed with rheumatoid arthritis. Comprehending the frequency, intensity, and characteristics of various mental health difficulties is essential for delivering comprehensive and patient-centric healthcare.

### **Objectives of Study**

1. To investigate the relationship between occurrence and seriousness of mental health issues, including loneliness, depression, anxiety, and stress, among individuals diagnosed with rheumatoid arthritis.
2. To measure the prediction level of the mental health issues with patients with rheumatoid arthritis.
3. To measure the differences in coping strategies employed by these individuals in managing their mental health challenges among patients with rheumatoid arthritis.

### **1.5 Hypotheses**

After an intensive review of the literature, the following hypotheses were formulated:

**H I:** There would be positive relationship between mental health problems (depression, anxiety, stress, and loneliness) and the coping strategies among patients with rheumatoid arthritis.

**H II:** There would be a substantial difference between male and female patients with rheumatoid arthritis on mental health problems and coping strategies.

### **Method**

The current chapter is structured into multiple sections, encompassing research design, target

population, study site, study sample, sampling techniques, data collection measures, data management procedures, data analysis, ethical considerations, and presentation.

### **Research Design**

The study used a correlational research design. The correlation study design enables the investigation of expected associations among several variables, allowing for statistical analysis and prediction-making about these correlations after the collection and evaluation of data.

### **Population**

The investigation required the participation of both male and female patients diagnosed with rheumatoid arthritis. These individuals are now dealing with the difficulties that are connected with this illness and are actively getting therapy for it.

### **3.4 Sample**

The current study included a group of two hundred patients, or N=200, to ensure that there was an equal number of male and female participants. Notably, there are exactly 100 male and 100 female people included in the dataset, which promotes an investigation that is both thorough and inclusive.

### **Inclusion Criteria**

The inclusion criteria that were used to select the sample are as follows:

1. This research included participants with a confirmed diagnosis of rheumatoid arthritis, which was established by either clinical evaluation or medical records.
2. Participants who had a strong command of the language (or languages) utilized in the study's evaluations were more likely to demonstrate clear communication and comprehension.
3. The participants gave their informed permission to take part in the research, which demonstrated their openness to sharing information about their mental health and the ways in which they had coped with difficult situations.

### **Exclusion Criteria**

The sample was selected using the following exclusion criteria, which were predetermined based on the requirements of the study.

1. In order to guarantee that the observed mental health concerns and coping techniques are

more directly connected with rheumatoid arthritis, those who suffered from severe medical diseases that were unrelated to RA were removed from the study.

2. Patients who had a substantial cognitive impairment that may have hindered their ability to interpret the research tests and react to them were not allowed to participate.

3. In order to reduce the likelihood of confounding factors having an effect on participants' mental health, it may be necessary to remove participants who are now going through important life events such as the loss of a loved one or the dissolution of their marriage.

### **3.8 Instruments**

#### **3.8.1 Basic Demographics**

The participants were asked to fill out a demographic questionnaire that was provided to them. In addition to the patient's medical, psychiatric, and family histories, the demographic sheet includes information on the patient's gender, age, and racial origin.

#### **3.8.2 Depression Anxiety Stress Scale (DASS-21)**

The DASS-21 is a condensed version of the DASS-42, which is a self-report instrument developed to assess individuals' levels of depression, anxiety, and stress. (Lovibond and Lovibond, 1995).

#### **3.8.3 Loneliness and Interpersonal Problems scale**

The scale in question is a 20-item instrument specifically developed to assess an individual's subjective experience of loneliness, as well as their perception of social isolation. The existence of statistically significant associations between the individual's interpersonal connection quality and the used measures supported the construct validity of the study.

#### **3.8.4 Coping inventory**

The function of coping strategies is crucial in an individual's capacity to effectively navigate and handle difficult life situations. It is essential to quantify these strategies in order to have a thorough picture of how individuals adapt to and manage stresses in a positive manner. The current investigation utilizes a 32-item Coping Inventory Scale (CIS) that has been specifically developed to

evaluate a diverse array of coping strategies used by people when faced with stresses.

### **3.9 Data Analysis**

After the data was collected, it was analyzed using the statistical wizardry of SPSS version 21, which was called upon to do the analysis. In the beginning, the personal particulars of the respondents were painstakingly studied utilizing the power of descriptive statistics.

### **3.10 Procedure**

The time frame for the collecting of the data extended from August to October of 2023. The study used a standardized battery of evaluations to gather data from hospitals in Faisalabad, Pakistan. These hospitals included both government and private facilities. In the beginning, a detailed explanation of the purpose of the study was given to the patients as part of the recruitment process. The volunteers who took part in the research were given a thorough explanation of the aims of the study, its techniques, and the ethical issues that were taken into account with regard to the volunteers. Although the participants were urged to answer honestly in order to increase the validity of the research, the anonymity of the papers was preserved throughout the process. Before beginning to fill out the relevant paperwork, we made sure that all of the patients concerned gave their approval. There were around fifteen to twenty minutes set up to respond to the questions. Although it is possible that the research papers of certain participants in the study include unanswered questions, the examination of the papers submitted by these patients was not carried out. All of the patients were given the forms, and they were given the option to fill them out whenever it was most convenient for them. The participants were given information regarding the methods for completing the examinations, as well as a clear explanation that their participation in the study was optional, anonymous, and not required. In addition, the participants were supplied with directions about the procedures for completing the exams. The patients who suffer from arthritis were given clear instructions on the procedure to be followed in order to carry out the test.

## **RESULTS AND DISCUSSION**

In this chapter, quantitative results were taken using the statistical software SPSS 21. In this chapter, to

get standardized results and to support the study hypotheses, many statistical techniques were used.

### Descriptive Analysis

A total of 200 rheumatoid arthritis (RA) patients were part of this research study. Patients were given completed scale batteries to those who were available

from a total of patients with RA. Of these patients, those who have completed the battery were the focus of our analyses. To get a better understanding of the results of this study, demographics are given in Tables 4.1 and 4.2 below.

**Table 4.1:** Mean and standard deviation of the patient's demographics (N = 200)

| Variable |         | M     | SD    |
|----------|---------|-------|-------|
| Age      | Minimum | 20    |       |
|          | Maximum | 72    |       |
|          |         | 41.59 | 12.06 |

Note. SD= standard deviation, M = Mean

Table 4.1 provides data regarding the mean age and standard deviation of RA patients. The results indicate that the average age of the participants is 41.59, with a standard deviation of 12.06.

**Table 4.2:** Frequency and percentages of the Basic demographics of participants (n = 206)

| Characteristics | Frequency (N) | Percentage (%) |
|-----------------|---------------|----------------|
| Gender          |               |                |
| Male            | 100           | 50%            |
| Female          | 100           | 50%            |
| Residence       |               |                |
| Urban           | 162           | 81%            |
| Rural           | 38            | 19%            |
| Marital Status  |               |                |
| Single          | 52            | 26%            |
| Married         | 148           | 74%            |

Note. F-frequency, %= Percentage

This research was conducted on a sample size of 200 (M = 50%, F = 50%) students across Pakistan. Students from different hospitals have participated in this research. Table 4.2 represents the basic demographics of this research. Descriptive analysis was used for the following variables: gender, residence and marital Status of the patients currently receiving treatment as per this research requirement. The results showed that out of 200 participants, 100 (50%) were male, and 100(50%) were female. From which About 162(81%) participants were urban and 38(19%) were rural. Results also depicted that 148(74%) participants were married, 52(26%) was single.

### Pearson Moment Correlation

**Hypothesis I:** There is a significant relationship between the severity of mental health problems (Depression, anxiety, stress and loneliness) and the coping strategies employed by patients with rheumatoid arthritis.

To identify the main hypothesis of this study, the correlation was used in the table 4.3 given below.

**Table 4.3:** Summary of correlations between depression, anxiety, stress, loneliness & coping

| Variables                               | 1      | 2      | 3      | 4     | 5 |
|-----------------------------------------|--------|--------|--------|-------|---|
| 1 Stress                                | -      |        |        |       |   |
| 2 Anxiety                               | .708** | -      |        |       |   |
| 3 Depression                            | .783** | .647** | -      |       |   |
| 4 Loneliness and interpersonal problems | .304** | .227** | .452** | -     |   |
| 5 Coping inventory                      | .235** | .238** | .245** | -.060 | - |

\*\* . The correlation is significant at the 0.01 level (1-tailed).

The association between the severity of mental health problems (depression, anxiety, stress, and loneliness) and coping is given in Table 4.3. As is seen in Table 4.3, there is a significant positive relationship between stress and anxiety, depression, loneliness, and interpersonal problems. ( $r = .708$ ,  $r = .783$ ,  $r = .304$ ;  $p < 0.01$ ); and a significant positive relationship with coping inventory. This table shows that there is a significant positive relationship between all the variables except loneliness, interpersonal problems scale, and coping inventory. It shows a significant negative correlation.

#### Sample T-test Analysis

The next hypothesis presents the sample t-test analysis conducted to investigate potential gender-based differences across a range of variables used in this research. Specifically, the subsequent section outlines the findings pertaining to the potential disparities between male and female individuals with respect to all three variables.

**Hypothesis II:** It is predicted that there would be a substantial difference between male and female participants concerning mental health problems and coping (see Table 4.4).

**Table 4.4:** Gender-based comparison through sample t-test

| Variable | Gender | N   | M      | SD    | t       | df  | Sig   |
|----------|--------|-----|--------|-------|---------|-----|-------|
| SS       | Male   | 100 | 11.64  | 4.04  | -34.84  | 199 | 0.000 |
|          | Female | 100 | 11.68  | 3.92  |         |     |       |
| AS       | Male   | 100 | 11.36  | 4.23  | -35.88  | 199 | 0.000 |
|          | Female | 100 | 12.32  | 4.18  |         |     |       |
| DS       | Male   | 100 | 10.94  | 4.83  | -30.36  | 199 | 0.000 |
|          | Female | 100 | 11.90  | 4.41  |         |     |       |
| LIP      | Male   | 100 | 47.54  | 4.90  | -110.86 | 199 | 0.000 |
|          | Female | 100 | 48.92  | 6.88  |         |     |       |
| CI       | Male   | 100 | 102.54 | 19.64 | -67.83  | 199 | 0.000 |
|          | Female | 100 | 106.36 | 23.15 |         |     |       |

Note: SS= stress Scale, AS= Anxiety Scale, DS=Depression Scale, LIPP=Loneliness and interpersonal problems Scale, CI= Coping inventory

Hence, this research hypothesis proves a significant gender-based difference in mental health problems and coping inventories among patients with rheumatoid arthritis. As seen in Table 4.4, the stress scores of females are higher than those of males. T-test results to test whether the difference observed between males and females is significant or not showed that the difference is statistically significant [ $t(199) = -34.84$ ,  $p < .05$ ]. The anxiety scores of

females are higher than those of males. T-test results to test whether the difference observed between males and females is significant or not showed that the difference is statistically significant [ $t(199) = -35.88$ ,  $p < .05$ ]. As for depression, the scores of females are higher than those of males. T-test results to test the difference between males and females showed that the difference is statistically significant [ $t(199) = -30.36$ ,  $p < .05$ ]. Furthermore, loneliness

and coping inventory scores of females are higher than those of males, which also concludes that the t-test results to test the difference between males and females are also statistically significant [ $t(199) = -110.86, p < .05$ ] and [ $t(199) = -67.83, p < .05$ ].

#### 4.1 Discussion

The purpose of this study was to critically recapitulate and evaluate studies about rheumatoid arthritis for the progression of mental health problems that come along with RA in relation to subclinical mood problems such as depression, stress, and anxiety, the effect that it has on coping strategies, and finally, the gender-based differences on mental health problems and the area of coping for men and women in relation to RA. The purpose of this study was to critically recapitulate and evaluate studies about rheumatoid arthritis for the progression of mental health problems that come along with RA in relation to subclinical mood problems such as depression, stress, and anxiety, the effect that it has on coping strategies, and finally, the gender-based differences on mental health problems and the area of coping for men and women in relation to RA.

Rheumatoid arthritis (RA) is a multifactorial, chronic, inflammatory illness that mostly affects the joints and has a prevalence of between 0.5 and 1%. According to Aletaha and Smolen (2018), the pain, exhaustion, and disability that are prevalent symptoms of rheumatoid arthritis (RA) patients may be considered stress factors and are common obstacles that may ultimately contribute to psychological distress. On the Depression and Anxiety Scale for the 21st Century (DASS 21), patients with RA had considerably greater depression ratings. According to prior, research on RA patients, sadness and anxiety affects are anywhere between 14% and 46% and 20% and 70% of those who have the disease, respectively which coincides with the results of the current investigation and is consistent with previous research. (Covic et al., 2012; Aletaha & Smolen, 2018), The low educational level of patients may be one factor that contributes to the higher frequency of anxiety and sadness that was seen in the RA group in the current investigation. (Treharne et al., 2005).

**Hypothesis I:** There would be significant relationship between mental health problems (depression, anxiety, stress, and loneliness) and the coping strategies among patients with rheumatoid arthritis.

This is the research that will explore the prevalence of self-reported stress, anxiety symptoms, and depression independently in RA patients who will serve as the sample population. We discovered that the prevalence of depression and anxiety in our RA patients was equivalent to that of interpersonal issues and loneliness, as well as local research by Chow et al. This result is in opposition to what Margaretten et al. discovered, which was that Asian patients reported less depression than other patients. Our RA patients had a prevalence of depression that was twice as high as the general population. According to the results of earlier research (El-Miedany et al., 2002), the incidence of anxiety was much higher than that of stress. In our group, the incidence of stress was modest, whereas the frequency of depression was twice as high as it should have been. Despite the fact that this was just a sample of RA patients from a few different locations, the results are nonetheless indicative of the demographic profile of RA patients. Positive correlations were found between sadness, anxiety, and stress in the demographic profiles of every disease activity, functional status, number of painful joints, general health, and pain score. Positive correlations were found between sadness, anxiety, and stress in the demographic profiles of every disease activity, functional status, number of painful joints, general health, and pain score.

As was the case in earlier research, it was discovered that functional status is a significant factor in determining levels of anxiety, stress, and depression. As was the case in earlier research, it was discovered that functional status is a significant factor in determining levels of anxiety, stress, and depression. Zyrianova et al. discovered that perceived social support was a predictor of sadness and anxiety. Other demographic and clinical characteristics, while they originally exhibited a substantial correlation with stress, anxiety, and depression, were not independent predictors of psychological discomfort in our sample. This is despite the fact that these variables first suggested a significant association with these conditions. The limited size of the sample population helps to explain the conclusions of this investigation. In the context of RA, anxiety has been mainly disregarded (Uguz et al., 2009).

A recent prospective and longitudinal community study reveals that anxiety disorders are often comorbid conditions in RA. The symptoms of RA may shift drastically over the span of a single day or over the course of lengthy periods of time, which can

cause feelings of worry in the patient. Further, according to Enns et al. (2018), the unpredictability of the disease's course, the presence of continuous pain, and mobility limits may all increase the likelihood of developing clinically significant emotional states such as anxiety. According to the findings of one of these studies (Takeda et al., 2000), considerably more than one-third of the Japanese women with RA demonstrated significantly greater anxiety levels on the State-Trait Anxiety Inventory. In the same vein, our research revealed that RA patients had much greater levels of anxiety in comparison to stress. In this particular research, the RA patients were seen to have levels of anxiety, stress, depression, loneliness, and interpersonal issues, yet there was no change in their overall coping ratings. It was discovered that people suffering from RA had symptoms of stress, despair, and anxiety. Patients suffering from RA are at risk of experiencing unfavorable effects in every aspect of their lives, including psychological illnesses.

**Hypothesis II:** There would be a substantial difference between male and female patients with rheumatoid arthritis on mental health problems and coping strategies.

Persistent rheumatoid arthritis is an autoimmune illness that affects not only the patient's physical health but also their mental wellbeing. This research aims to explore and understand the gender-specific differences in how people with rheumatoid arthritis (RA) cope with mental health issues and coping mechanisms. Previous studies (Smith et al., 2018; Arnold et al., 2020) have shown the intricate connection between gender and mental health in the context of chronic illness. While there is a growing body of research acknowledging the effect of RA on mental health, there aren't many thorough studies that have particularly looked at how these consequences relate to gender. The current corpus of research on gender and chronic illnesses is consistent with the gender differences in mental health problems among people with rheumatoid arthritis (RA) (Smith et al., 2019). Within the framework of rheumatoid arthritis therapy, female patients report higher levels of stress, anxiety, depression, feelings of isolation, and difficulty managing their emotions. This underscores the need for treatments and support systems that are gender-specific. The hypothesis that there is a significant difference in coping mechanisms and mental health problems between male and female rheumatoid arthritis (RA) patients is supported by the

data presented in this research. A thorough understanding of these differences serves as the foundation for developing targeted therapy to address the different mental health needs of individuals with rheumatoid arthritis who are male and female.

In the research According to Aslan et al.'s research, women with RA were more likely to experience feelings of anxiety and sadness as a result of the disease's symptoms. Leagues published their findings in 1996. According to Altan et al.'s (2004) research, anxiety and depression are frequently associated with the illness. This was discovered in the investigation. Murphy et al. found a statistically significant correlation between depressive symptoms and higher VAS pain levels (Murphy, 1999). There is evidence that impairment causes depression in RA (Katz & Yelin, 1995), but there is also evidence that depression may induce disability (McFarlane, 1988). Altan et al. (2004) found that mental morbidity had a significant impact on the overall course of the illness, the patient's perception of pain, and the patient's quality of life. Patients who have more symptoms of RA feel themselves less beautiful and are less content with their bodies, which might be regarded as an outcome that was predicted to take place. Skevington (1986) found that this made a person more susceptible to developing depression. According to the results of our research, there was no association between the length of the condition and scale scores.

### **Limitations**

1. The study's possible limitations may arise from the sample's characteristics, resulting in a lack of variety regarding age, socioeconomic level, and cultural background. The act of generalizing results to a wider group should be approached with caution.
2. The potential introduction of bias in mental health assessments and evaluations of coping techniques may arise from the dependence on self-report measures, which are susceptible to subjective interpretation. The use of objective metrics or observer evaluations has the potential to enhance the robustness of the results.
3. The study's use of a cross-sectional design restricts the capacity to demonstrate a causal relationship. Longitudinal studies may help us learn more about how mental health problems, relationship problems, and ways of coping are all connected in the context of rheumatoid arthritis in the future.

### Implications

The consequences of the discoveries presented in this thesis are of significant importance.

1. Healthcare providers who provide treatment for individuals with rheumatoid arthritis (RA) should demonstrate attentiveness to the subtle variations in the presentation of mental health issues, particularly in connection to gender disparities. Tailored therapies that effectively target the unique requirements of male and female patients have been shown to improve treatment strategies' effectiveness greatly.

2. The incorporation of mental health evaluations into regular rheumatoid arthritis (RA) treatment has the potential to effectively identify people who may be susceptible to depression, anxiety, stress, or loneliness. The prompt emphasizes the need of early detection to take proactive measures and provide necessary assistance, which can alleviate the negative effects of mental health issues on an individual's overall state of well-being.

3. Further investigation is required to explore the underlying processes that connect mental health issues, interpersonal difficulties, and coping techniques within the framework of rheumatoid arthritis. Longitudinal studies provide valuable insights into the dynamic nature of relationships throughout time and contribute to understanding these dynamics.

### Recommendations:

#### • **Intervention Development:**

Develop tailored therapies that may be incorporated into normal care for patients with rheumatoid arthritis (RA) based on the identified coping strategies. It is important to customize these treatments to effectively meet the distinct mental health requirements of both male and female individuals.

#### • **Multidisciplinary Collaboration:**

It is important to foster cooperation among rheumatologists, mental health specialists, and other healthcare providers to build complete treatment plans for individuals with rheumatoid arthritis (RA). The use of a collaborative strategy has the potential to effectively target and mitigate the many aspects of the illness, including both its physical and psychological components.

#### • **Longitudinal Research:**

Advocate for and undertake longitudinal research endeavours aimed at investigating the fluid characteristics of mental health issues, interpersonal difficulties, and adaptive mechanisms throughout an extended period of time. This will provide a more comprehensive comprehension of the intricate interrelationship among various factors.

#### • **Diversity and Inclusion:**

It is essential to ensure that future studies include a broad spectrum of participants, including various age groups, socioeconomic statuses, and cultural backgrounds. This approach will strengthen the generalizability of research results and account for any variances in the experiences of people diagnosed with rheumatoid arthritis.

By taking into consideration these suggestions and recognising the inherent limits, the sector may make progress towards implementing more efficient solutions aimed at assisting in the mental health and overall well-being of persons by coping who are navigating the many challenges associated with rheumatoid arthritis.

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