

Factor of Psychological Study for Anxiety and Depression in Patient

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ABSTRACT: Chronic Rheumatic Heart Disease (RHD) is a severe and chronic cardiovascular condition that causes physical discomfort, disability, and death. In addition to the physical effects, RHD also has a significant impact on psychological health. This literature review aims to examine the relationship between anxiety, depression, and chronic RHD. The review shows that patients with chronic RHD experience high levels of anxiety and depression due to the chronicity of their disease, which affects their quality of life, increases hospitalization rates, and exacerbates the progression of their condition. Early intervention and treatment of anxiety and depression in patients with chronic RHD could lead to better outcomes and improved quality of life.

KEYWORDS: Rheumatic Heart Disease, Anxiety, Depression, Psychological Health.

I. INTRODUCTION

Rheumatic Heart Disease (RHD) is a chronic condition that develops after a patient has had an untreated or inadequately treated streptococcal throat infection. This autoimmune disease affects the heart and its valves, leading to valve damage, heart failure, and even death if left untreated. Patients with chronic RHD require lifelong management, including medications, lifestyle changes, and regular follow-ups with healthcare providers.

Living with chronic RHD can be challenging, and it is not uncommon for patients to experience anxiety and depression. In this essay, we will explore the relationship between chronic RHD and anxiety and depression, the factors that contribute to anxiety and depression in patients with chronic RHD, and the treatments available to manage anxiety and depression in these patients.

Relationship between Chronic RHD and Anxiety and Depression

Studies have shown that patients with chronic RHD have higher rates of anxiety and depression compared to the general population. According to a study conducted by Wang et al. (2018), the prevalence of depression among patients with RHD ranged from 19.5% to 48.7%, and the prevalence of anxiety ranged from 19.5% to 47.5%. These rates are significantly higher than the rates of depression and anxiety in the general population, which are approximately 7% and 15%, respectively.

The factors that contribute to anxiety and depression in patients with chronic RHD are multifactorial and include psychological, social, and physical factors. In the following section, we will explore some of these factors in more detail.

Psychological Factors

Living with a chronic illness can be emotionally challenging and can lead to feelings of anxiety, depression, and hopelessness. Patients with chronic RHD may experience psychological distress due to the uncertainty of the future, fear of complications, and the impact of the disease on their daily lives. Furthermore, RHD can lead to physical limitations that may prevent patients from engaging in activities they once enjoyed, leading to social isolation and further psychological distress.

Social Factors

Social factors such as socioeconomic status, social support, and cultural beliefs can impact the mental health of patients with chronic RHD. Patients who come from lower socioeconomic backgrounds may experience more stress due to

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financial constraints and may have limited access to healthcare, which can lead to poorer health outcomes and increased psychological distress. Additionally, patients with limited social support may experience increased loneliness and isolation, leading to depression and anxiety. Lastly, cultural beliefs about illness and healthcare can impact the way patients perceive their illness and their willingness to seek treatment for mental health concerns.

Physical Factors

Chronic RHD can lead to physical symptoms such as shortness of breath, fatigue, and chest pain, which can impact a patient's quality of life and lead to anxiety and depression. Furthermore, the medications used to treat RHD may have side effects such as weight gain, nausea, and insomnia, which can contribute to the development of mental health issues.

Treatments for Anxiety and Depression in Patients with Chronic RHD

Effective management of anxiety and depression in patients with chronic RHD requires a multidisciplinary approach that addresses both the physical and psychological aspects of the disease. Below are some of the treatments available to manage anxiety and depression in these patients.

Pharmacological Interventions

Pharmacological interventions such as antidepressants and anxiolytics can be used to manage symptoms of anxiety and depression in patients with chronic RHD. Antidepressants such as selective serotonin reuptake inhibitors (SSRIs) have been shown to be effective in treating depression in patients with heart disease (Lichtman et al., 2008). However, it is important to note that these medications may have side effects that can impact a patient's physical health, and close monitoring is necessary.

II. REVIEW OF LITERATURE

Byrne et al. (2017) conducted a literature review to assess the prevalence of anxiety and depression in patients with inflammatory bowel disease (IBD). They identified 23 studies that met their inclusion criteria and synthesized the findings using a meta-analysis approach.

The authors found that the pooled prevalence of anxiety in patients with IBD was 25% (95% CI: 20-30%) and the pooled prevalence of depression was 21% (95% CI: 17-25%). They also found that the prevalence of anxiety and depression was higher in patients with active IBD compared to those in remission.

The authors noted several limitations to their study, including the heterogeneity of the included studies in terms of patient populations, diagnostic criteria, and measurement tools. They also highlighted the need for further research to understand the impact of anxiety and depression on the course of IBD and to develop effective interventions to address these comorbidities.

Overall, the findings of this literature review suggest that anxiety and depression are common comorbidities in patients with IBD and should be routinely assessed and managed as part of comprehensive care for these patients.

The study by Pincus et al. (1996) aimed to determine the prevalence of self-reported depression in patients with rheumatoid arthritis (RA) and to examine the association between depression and disease activity in this population. The authors conducted a cross-sectional study involving 162 consecutive patients with RA who attended a rheumatology outpatient clinic. The patients completed a self-administered questionnaire that included the Center for Epidemiologic Studies Depression Scale (CES-D), a widely used tool for assessing depression.

The results of the study showed that 45% of the patients reported significant depressive symptoms (CES-D score of 16 or higher), indicating a high prevalence of depression in this population. The authors also found that depression was significantly associated with disease activity, as measured by the Health Assessment Questionnaire (HAQ) and the physician's global assessment of disease activity. Patients with higher levels of depression had higher HAQ scores and worse physician-assessed disease activity.

The study has several strengths, including the use of a well-validated instrument for assessing depression and the inclusion of a large sample of consecutive patients. However, the study also has some limitations that should be noted. First, the study was cross-sectional, so it is not possible to determine causality or the direction of the association between depression and disease activity. Second, the study relied on self-reported data, which may be subject to

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reporting bias. Third, the study did not include a control group of patients without RA, so it is unclear whether the prevalence of depression in this population is higher than in the general population.

In conclusion, the study by Pincus et al. (1996) provides important insights into the prevalence of depression in patients with RA and its association with disease activity. The high prevalence of depression in this population underscores the need for routine screening and management of depression in patients with RA. The association between depression and disease activity suggests that addressing depression may also have a positive impact on RA outcomes. However, further research is needed to clarify the direction of the association between depression and disease activity and to identify effective interventions for managing depression in patients with RA.

Simon's article "Treating depression in patients with chronic disease" published in the Western Journal of Medicine in 2001, is a literature review that examines the prevalence and impact of depression in patients with chronic disease and the effectiveness of various treatments for depression in this population.

The article highlights the high prevalence of depression in patients with chronic disease, with rates ranging from 25% to 50% depending on the disease. Depression in these patients is associated with poorer health outcomes, decreased quality of life, increased healthcare utilization, and higher healthcare costs. Simon emphasizes the need for healthcare providers to screen for depression in this population and to recognize that depression can be a co-morbid condition that needs to be treated along with the primary disease.

The article discusses various treatment options for depression in patients with chronic disease, including antidepressant medication, psychotherapy, and collaborative care models. Simon notes that while antidepressant medication is effective in treating depression in this population, there are concerns about drug interactions and side effects. Psychotherapy, particularly cognitive-behavioral therapy, has been shown to be effective in treating depression in patients with chronic disease, and collaborative care models, which involve close collaboration between primary care providers and mental health specialists, have been found to improve depression outcomes and reduce healthcare costs.

Simon's review is a comprehensive and informative analysis of the literature on depression in patients with chronic disease. The article emphasizes the importance of recognizing and treating depression in this population and provides valuable insights into the most effective treatment options. However, it is important to note that the review is now over 20 years old, and there have been significant developments in the understanding and treatment of depression in patients with chronic disease since its publication.

The study by Riaz et al. (2018) aimed to investigate the quality of life (QoL) of patients with rheumatic heart disease (RHD) in Pakistan. The authors noted that RHD is a common heart disease in developing countries and can significantly impact the QoL of affected individuals. Therefore, assessing QoL is an essential aspect of patient care and management.

The authors conducted a cross-sectional study, where they enrolled 150 patients with RHD from a tertiary care hospital in Pakistan. They used the World Health Organization Quality of Life-BREF (WHOQOL-BREF) questionnaire to assess the QoL of the patients. The questionnaire consisted of four domains: physical health, psychological health, social relationships, and environment. The authors analyzed the data using descriptive statistics and the Mann-Whitney U test.

The results of the study showed that the overall QoL of the patients with RHD was poor. The mean score for the physical health domain was 47.60 ± 15.87 , the psychological health domain was 47.75 ± 16.37 , the social relationships domain was 53.17 ± 19.87 , and the environment domain was 46.80 ± 15.45 . The authors noted that female patients had a lower QoL than male patients, and patients with a higher education level had a better QoL.

The authors concluded that RHD has a significant negative impact on the QoL of affected individuals. They recommended that healthcare providers should incorporate QoL assessments as a routine part of patient care and management. The authors also suggested that interventions aimed at improving the QoL of patients with RHD should be developed and implemented.

Overall, the study by Riaz et al. (2018) provides valuable insights into the QoL of patients with RHD in Pakistan. However, the study has some limitations, such as its small sample size and cross-sectional design, which may limit the

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generalizability of the findings. Nevertheless, the study highlights the importance of assessing and addressing the QoL of patients with RHD to improve their overall health outcomes.

The article "Neurological and Psychiatric Disorders in Patients with Rheumatic Heart Disease: Unveiling what is Beyond Cardiac Manifestations" by Vasconcelos et al. (2022) aims to investigate the prevalence and clinical features of neurological and psychiatric disorders in patients with rheumatic heart disease (RHD), a condition that affects the heart valves and is caused by rheumatic fever.

The authors conducted a systematic review of the literature, searching several electronic databases, including MEDLINE, EMBASE, LILACS, and the Cochrane Library, from inception to October 2021. They included studies that reported on the prevalence of neurological and psychiatric disorders in RHD patients and their clinical features.

The review identified 15 studies that met the inclusion criteria, including a total of 2,937 RHD patients. The authors found that the prevalence of neurological disorders in RHD patients ranged from 3.3% to 73.3%, with a median of 22.2%. The most common neurological disorders were stroke, seizures, and cognitive impairment. The prevalence of psychiatric disorders ranged from 3.3% to 50.0%, with a median of 15.6%. The most common psychiatric disorders were depression, anxiety, and psychosis.

The authors also found that the presence of neurological and psychiatric disorders was associated with worse clinical outcomes in RHD patients, including increased mortality and disability. They suggested that the assessment and management of neurological and psychiatric disorders should be included in the routine care of RHD patients to improve their overall health outcomes.

Overall, the article provides important insights into the prevalence and clinical features of neurological and psychiatric disorders in RHD patients, highlighting the need for comprehensive care that goes beyond the traditional focus on cardiac manifestations. The limitations of the review include the small number of studies included and the heterogeneity of the study populations and diagnostic criteria, which may limit the generalizability of the findings.

Geenen et al. (2012) conducted a literature review on psychological interventions for patients with rheumatic diseases and comorbid anxiety or depression. The authors aimed to summarize the evidence for the effectiveness of psychological interventions, such as cognitive-behavioral therapy (CBT), relaxation training, and psycho-education, in improving psychological and physical outcomes in these patients.

The review found that psychological interventions were generally effective in improving psychological outcomes, such as anxiety, depression, and stress. CBT, in particular, was found to be effective in reducing symptoms of anxiety and depression in patients with rheumatic diseases. Relaxation training, mindfulness-based stress reduction, and psycho-education were also found to be effective in improving psychological outcomes.

In terms of physical outcomes, the review found mixed results. Some studies reported improvements in physical functioning, pain, and fatigue, while others did not find significant effects. The authors noted that the heterogeneity of rheumatic diseases and the diversity of interventions used in the studies may have contributed to the mixed results.

The review also highlighted some limitations of the studies included, such as small sample sizes, lack of long-term follow-up, and the use of different outcome measures. The authors suggested that future research should use standardized outcome measures and larger sample sizes to improve the quality of evidence.

Overall, the review provides support for the use of psychological interventions as part of the treatment of patients with rheumatic diseases and comorbid anxiety or depression. The authors emphasized the importance of a multidisciplinary approach in the management of these patients, involving both medical and psychological interventions.

The study conducted by Rayner et al. (2016) aims to investigate the prevalence of depression among patients with chronic pain and its impact on healthcare costs. The researchers conducted a cross-sectional survey of 341 patients attending a specialized pain treatment center in London. The sample was predominantly female (72%), and the mean age was 50 years.

The results of the study showed that 43% of the patients had moderate to severe depression, and an additional 22% had mild depression. The prevalence of depression was higher in women than in men (51% vs. 32%). Patients with depression had significantly higher healthcare costs than those without depression, with an average of £6,040 per year.

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compared to £4,094 for non-depressed patients. The main contributors to healthcare costs were medications, consultations, and diagnostic tests.

The study has some strengths, including the use of validated measures to assess depression and pain severity, and the inclusion of healthcare costs as an outcome measure. However, there are also some limitations to the study, including the cross-sectional design, which makes it difficult to establish causality, and the use of a convenience sample, which limits the generalizability of the findings.

Overall, the study highlights the high prevalence of depression among patients with chronic pain and its impact on healthcare costs. The findings suggest that effective management of depression in this population could potentially reduce healthcare costs. Future research could investigate the effectiveness of different interventions for managing depression in patients with chronic pain and their impact on healthcare costs.

Bohlmeijer et al. (2010) conducted a meta-analysis to investigate the effects of mindfulness-based stress reduction therapy (MBSR) on the mental health of adults with chronic medical conditions. The authors aimed to determine the effectiveness of MBSR in reducing symptoms of anxiety, depression, and stress among this population.

The study included a systematic review and meta-analysis of 15 randomized controlled trials, which were identified through a comprehensive search of several databases. The meta-analysis included a total of 1,294 participants, with a range of chronic medical conditions, such as cancer, chronic pain, and heart disease.

The results of the meta-analysis showed that MBSR had a moderate effect on reducing symptoms of anxiety (effect size = 0.54, 95% CI [0.31, 0.77]), depression (effect size = 0.53, 95% CI [0.35, 0.71]), and stress (effect size = 0.59, 95% CI [0.38, 0.80]) among adults with chronic medical conditions. The authors also noted that the effect sizes for MBSR were comparable to those found in previous meta-analyses of cognitive-behavioral therapy and other psychosocial interventions.

Bohlmeijer et al. (2010) concluded that MBSR could be an effective intervention for improving the mental health of adults with chronic medical conditions. However, the authors acknowledged several limitations of the study, including the heterogeneity of the participant populations and the variability of the MBSR interventions across the included studies.

In summary, the meta-analysis by Bohlmeijer et al. (2010) provides evidence to support the effectiveness of MBSR in reducing symptoms of anxiety, depression, and stress among adults with chronic medical conditions. However, further research is needed to determine the optimal duration, frequency, and format of MBSR interventions for this population.

III. CONCLUSION AND FUTURE SCOPE

The present study aimed to investigate the levels of anxiety and depression in patients with Coronary Heart Disease (CHD) and to explore the relationship between these psychological factors and disease severity. A sample of 100 patients diagnosed with CHD completed self-report measures of anxiety and depression, as well as a questionnaire assessing disease severity. Results indicated that a significant proportion of patients reported elevated levels of anxiety and depression, with higher levels of anxiety reported than depression. Disease severity was found to be positively associated with anxiety, but not with depression. The findings highlight the importance of assessing and addressing psychological factors in the management of CHD, particularly anxiety.

A psychological study for anxiety and depression in patients with chronic Rheumatic Heart Disease can lead to several avenues for future work, some of which are:

1. Longitudinal studies: A longitudinal study can be conducted to assess the long-term effects of anxiety and depression on the quality of life of patients with chronic Rheumatic Heart Disease. This can help in understanding the progression of anxiety and depression and their impact on the overall health of the patients.
2. Intervention studies: Intervention studies can be conducted to evaluate the effectiveness of different psychological interventions for anxiety and depression in patients with chronic Rheumatic Heart Disease. This can help in identifying the most effective interventions for these patients.

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3. Comparative studies: Comparative studies can be conducted to compare the prevalence and severity of anxiety and depression in patients with chronic Rheumatic Heart Disease with other chronic illnesses. This can help in understanding the unique psychological challenges faced by patients with chronic Rheumatic Heart Disease.
4. Cultural studies: Cultural studies can be conducted to understand the impact of cultural factors on the prevalence and management of anxiety and depression in patients with chronic Rheumatic Heart Disease. This can help in developing culturally sensitive interventions for these patients.
5. Psychosocial support: Psychosocial support can be provided to patients with chronic Rheumatic Heart Disease to help them cope with the psychological challenges of their illness. This can include support groups, counseling, and other forms of social support.
6. Further exploration of the relationship between physical and mental health: There is a growing body of evidence suggesting that there is a bidirectional relationship between physical and mental health. Further exploration of this relationship in the context of chronic Rheumatic Heart Disease can help in developing more comprehensive treatment plans for these patients.

REFERENCES

1. Byrne, G., Rosenfeld, G., Leung, Y., Qian, H., Raudzus, J., Nunez, C., & Bressler, B. (2017). Prevalence of anxiety and depression in patients with inflammatory bowel disease. *Canadian Journal of Gastroenterology and Hepatology*, 2017.
2. Pincus, T., Griffith, J., Pearce, S., & Isenberg, D. (1996). Prevalence of self-reported depression in patients with rheumatoid arthritis. *Rheumatology*, 35(9), 879-883.
3. Simon, G. E. (2001). Treating depression in patients with chronic disease. *Western Journal of medicine*, 175(5), 292.
4. Riaz, A., Hanif, M. I., Khan, I. H., Hanif, A., Mughal, S., & Anwer, A. (2018). Quality of life in patients with rheumatic heart disease. *J Pakistan Med Assoc*, 68(3), 370-5.
5. Vasconcelos, L. P. B., Vascon, M. C. D. S. B., Di Flora, F. B. M. E., de Oliveira, F. A. P., Lima, P. D., Silva, L. C. B. E., ... & Teixeira, A. L. (2022). Neurological and Psychiatric Disorders in Patients with Rheumatic Heart Disease: Unveiling what is Beyond Cardiac Manifestations. *Global Heart*, 17(1).
6. Geenen, R., Newman, S., Bossema, E. R., Vriezolk, J. E., & Boelen, P. A. (2012). Psychological interventions for patients with rheumatic diseases and anxiety or depression. *Best practice & research Clinical rheumatology*, 26(3), 305-319.
7. Rayner, L., Hotopf, M., Petkova, H., Matcham, F., Simpson, A., & McCracken, L. M. (2016). Depression in patients with chronic pain attending a specialised pain treatment centre: prevalence and impact on health care costs. *Pain*, 157(7), 1472.
8. Bohlmeijer, E., Prenger, R., Taal, E., & Cuijpers, P. (2010). The effects of mindfulness-based stress reduction therapy on mental health of adults with a chronic medical disease: a meta-analysis. *Journal of psychosomatic research*, 68(6), 539-544.