

The Biopsychosocial Effects of Rheumatoid Arthritis

Rheumatoid arthritis (RA) is an autoimmune disease that causes chronic inflammation of the joints. It is the most common chronic inflammatory disease, affecting .8 percent of the population (Treharne, Kitas, Lyons, & Booth, 2005). Rheumatoid arthritis is a progressive illness that has the potential to cause joint destruction and functional disability. Patients with Rheumatoid arthritis suffer from pain, fatigue, and stiffness. They also experience more psychological problems than the general population, as depression is very common in patients with rheumatoid arthritis (Treharne, Kitas, Lyons, & Booth, 2005).

I chose to research the biopsychosocial effects of rheumatoid arthritis because my dad has been living with rheumatoid arthritis for ten years. I have grown up watching him cope with the disease and believe that by learning more about the disease myself, I can provide him with suggestions as how to cope. I reviewed six articles that describe the biopsychosocial effects of rheumatoid arthritis including: well-being, perceptions of health related quality of life, physical self-perceptions, fatigue, negative workplace events, and physical fitness.

A study by Treharne, Kitas, Lyons, & Booth (2005) examined the psychosocial effects on well-being in patients with rheumatoid arthritis. The experimenters hypothesized that “patients’ perceptions about the illness and its medication and their optimism, pessimism, self-consciousness, and social support would be related to well-being in rheumatoid arthritis” (Treharne, Kitas, Lyons, & Booth, 2005, p. 460). To test their hypothesis, experimenters examined three disease duration groups: patients who

were diagnosed with rheumatoid arthritis in the past 6 months, patients who had been living with RA for a range of 1 to 7 years, and patients who had been diagnosed with RA at least 7 years ago. Each participant completed questionnaires that measured their perceptions of the consequences of rheumatoid arthritis, optimism/pessimism, self-consciousness, social support, and anxiety. Physical symptoms were also measured using scales that measured patients' perceptions of the current severity of their pain and fatigue. Morning stiffness was also used as a measure of physical symptoms and was recorded each day.

Results of these measures indicated that different psychosocial factors have different impacts for patients in different stages of disease duration (Treharne, Kitas, Lyons, & Booth, 2005). For example, having social support caused lower fatigue for patients who had been diagnosed for more than a year, but lead to more fatigue in patients who had recently been diagnosed. Optimism also related to better life satisfaction for all participants, but those who had been living with the disease for more than 7 years associated optimism with more pain. There were also differences in demographics, as women reported longer morning stiffness than men and those who were in full or part-time work reported less pain. Participants taking antidepressants reported more anxiety, depression, and lower life satisfaction while those taking steroids reported longer morning stiffness and more pain. This raises the question of which medications are effective for treating rheumatoid arthritis. It seems to me that psychotherapy may be the best option to increase patient functioning and optimism. Optimism is important in patients with rheumatoid arthritis, as this study indicated that optimism was related to reduced anxiety, depression and increased life satisfaction. The results of this study also

demonstrate that it is important to consider all psychosocial factors when investigating their impact on the well being in people suffering with rheumatoid arthritis. The study also indicates that it may be beneficial to design and vary treatments according to the duration of the disease.

The next study I reviewed was designed to determine how health related quality of life is perceived by patients with rheumatoid arthritis and patients with chronic low back pain (Nunez, Sanchez, Casals, Alegre, & Gomez, 2005). Experimenters designed a two-part questionnaire, one for patients of chronic low back pain and rheumatoid arthritis patients and one for the patients' therapists. Participants answered questions about age, sex, educational level, marital status, and economic independence. The questionnaire for therapists had questions related to the patients' functional status and disease duration.

Participants with rheumatoid arthritis and chronic low back pain used very different terms to describe health related quality of life (Nunez, Sanchez, Casals, Nunez, Alegre, & Munoz- Gomez, 2005). Rheumatoid arthritis patients tended to center their perception of health related quality of life on their ability to do things while the participants with chronic low back pain centered their answers on health. For example, the most common response from rheumatoid arthritis patients was "to be able to do household tasks" (Nunez, Sanchez, Casals, Nunez Alegre, & Munoz-Gomez, 2005, p. 98). Rheumatoid arthritis patients also reported higher disability than those with chronic low back pain. This study showed that rheumatoid arthritis patients tended to be concerned with functional status and disability while chronic low back pain patients were focused on health status and pain. Therefore, treatment of rheumatoid arthritis should include strategies that maintain function and prevent disability.

A study by MacSween, Brydson, and Fox (2004) also looked at the perceptions of people diagnosed with rheumatoid arthritis. This study specifically focused on the physical self perceptions of women with rheumatoid arthritis. Disease status, walking ability, functional capacity, and aerobic power were measured among 52 women with rheumatoid arthritis (MacSween, Brydson, and Fox, 2004). Physical self perceptions, perceived importance, and depression/anxiety were used as psychological measures. It is important to note that this study also assessed the reliability and validity of the Physical Self-Perception Profile (PSPP) and the Perceived Importance Profile (PIP). These tests were developed to assess physical self perceptions and self esteem. These tests were used in this study to compare women with rheumatoid arthritis with healthy American college women and obese women.

The scores on the Physical Self-Perception Profile indicated that the physical self perceptions of women with rheumatoid arthritis are extremely low when compared to the scores of healthy college women and obese women (MacSween, Brydson, and Fox, 2004). The RA patients scored particularly low on perceived strength, which may reflect a lack of confidence caused by a loss in physical abilities. The general view of the physical self was also very low for women with RA. This may be attributed to these women attaching lower importance to aspects dealing with physical competence and appearance. These results indicate that strategies for improving competence may help increase physical self worth and help patients to cope with their rheumatoid arthritis. I found it interesting that depression was related to the physical conditions, but not to physical self perceptions. Instead, physical self perceptions were related to swollen joint count and other direct markers of the disease. This study demonstrates that physical self-

perceptions are related to mental well-being and physical ability. Therefore, these physical self perceptions are important in the treatment of rheumatoid arthritis.

The next study I reviewed also looked at the perceptions of rheumatoid arthritis patients, with this study exploring the perceptions of fatigue. Fatigue is one of the most common symptoms of rheumatoid arthritis, so it is important to understand how patients experience fatigue (Hewlett, Cocshott, Byron, Kitchen, Tipler, Pope, & Hehir, 2005). To identify patients who experienced fatigue, patients with rheumatoid arthritis were given a questionnaire designed to measure fatigue, and those who scored high in fatigue were then interviewed. The data showed that participants experienced fatigue as overwhelming and different from normal tiredness. Fatigue was described in two ways: heaviness and an extreme fatigue that will not allow you to carry on with everyday activities. The fatigue also varied in duration and frequency, but was often described in terms of a “loss of mental energy, motivation, and cognition” (Hewlett, Cocshott, Byron, Kitchen, Tipler, Pope, & Hehir, 2005, p. 699). Participants also saw fatigue as affecting all aspects of their lives because their abilities and self-esteem were reduced. The result that surprised me the most was that participants did not discuss fatigue with their doctors and those who do feel like their fatigue was overlooked. This study shows that fatigue plays a major role in the lives of people with rheumatoid arthritis and indicates that the management of fatigue needs to be included in treatment because it can make pain and disability worse.

Another study also dealt with health perceptions among patients with rheumatoid arthritis while also looking at physical activity and fitness. The purpose of the study was to describe self reported physical activity and outcomes of fitness tests in rheumatoid arthritis patients (Eurenius, Stenstrom, Para study group, 2005). Participants performed 5

physical fitness tests and completed two questionnaires along with an evaluation at a clinic. The questionnaires measured disease and perceived physical fitness while the fitness tests consisted of riding a bike or walking on a treadmill, the time needed to stand up from a chair 10 times, range of motion, and balance.

The results of these tests indicated that the majority of people with rheumatoid arthritis engage in low levels of physical activity (Eurenius, Strenstrom, Para study group, 2005). Women seemed to be less physically active and had more negative health perceptions than men. This difference could be due to society's expectation for men to be tough, which causes them to report less pain. Regardless of gender, activity behaviors were similar in that 50% of participants failed to meet recommendations on healthy physical activity. This study indicates that physical activity needs to be addressed among patients with rheumatoid arthritis. This is important because rheumatoid arthritis creates extra barriers to physical activity. However, physical activity is essential because even with participation in physical activity, RA patients are at risk for premature death.

There are many studies that look at job loss among patients with rheumatoid arthritis, but there is not much information about those who continue to work. I reviewed a longitudinal study that sought to compare the frequency of negative workplace events between employed patients with rheumatoid arthritis and healthy controls (Mancuso, Rincon, Sayles, Paget, 2005). There are many new employment options for rheumatoid arthritis patients that want to continue working. Therefore, it is important to know the challenges they face in order to help others maintain employment. Participants in this study were interviewed about their sociodemographics, medical characteristics, job characteristics, symptoms, and function. Participants were interviewed one year later and

asked about major and minor workplace events that had occurred over the previous year. They then answered questionnaires that measured effects of stress and physical symptoms and common stressful events that occur daily. The participants with rheumatoid arthritis were also asked whether they attributed the stressful events to their arthritis.

The results of the longitudinal study demonstrated that patients with rheumatoid arthritis had more fatigue, worse functional status, and more pain that affected work (Mancuso, Rincon, Sayles, Paget, 2005). Although the control participants did not experience these symptoms, they were less likely than the RA participants to want to work and continue working. There were also no differences between the controls and the RA patients in terms of the number of negative events at work. However, the RA patients were much less likely to have received a pay raise. The rheumatoid arthritis patients believed that fatigue, worse functional status, and more social stress led to negative events. For controls, working full time, better functional status, less help at home, and more social stress were associated with the occurrence of a negative event. This study provides evidence that people with rheumatoid arthritis are capable of working and experience negative events like the average person. However, flexible hours or working from home should be granted to patients with RA because they have to put more effort into their work than the average worker due to pain, fatigue, and reduced functional abilities.

These studies indicate that rheumatoid arthritis affects all aspects of a person's life. People with rheumatoid arthritis tend to experience chronic pain and fatigue, which lead to depression, reduced life satisfaction, perceptions of disability, reduced physical

self perceptions, reduced motivation, and even job loss. After reading these studies, I feel that psychotherapy should be included in a treatment plan for patients with rheumatoid arthritis. Because rheumatoid arthritis leads to reduced self esteem and resentment, it is important that these issues are addressed to prevent even more disability. These studies also demonstrated that optimism leads to improved functioning and reduced pain, so therapists should work with patients to foster this optimism. Psychotherapy is also critical to the recently diagnosed patients because they are more likely to be depressed than patients who had been suffering with the disease for many years. For patients who refuse psychotherapy, it is important that they discuss all symptoms with their medical provider. The study on fatigue revealed that patients fail to mention their fatigue to their medical provider, but those who do discuss fatigue feel that they are ignored. Because the fatigue in rheumatoid arthritis patients is very severe, it is important that doctors acknowledge this symptom and suggest methods for coping with it. For all patients with RA, it critical that they are given autonomy, as research indicates that autonomy is one of the best methods of reducing pain and improving function. This research has demonstrated that psychological and physiological symptoms have a reciprocal relationship in patients with rheumatoid arthritis and effective treatment of the illness requires careful consideration of all symptoms.

Works Cited

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