Family and health Quarterly, vol13, Issu3, Autumn 2023, ISSN: 2322-3065
https://sanad.iau.ir/Journal/fhj/Article/1203711

Family and health

Comparing the effectiveness of schema therapy with cognitive-behavioral therapy and drug therapy in reducing pain in patients with rheumatoid arthritis who have anxiety and depression and inconsistent coping strategies

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Abstract

Introduction: Rheumatoid arthritis is the most common chronic inflammatory autoimmune disease. Social factors and prolonged stress have an effect on Rheumatoid arthritis. Limitation of movement in these patients can cause mental disorders, especially anxiety and depression. The purpose of this study is to compare the effectiveness of short-term dynamic psychotherapy, schema therapy, cognitive behavioral therapy with drug therapy in reducing pain and pain dimensions in patients with rheumatoid arthritis with anxiety, depression and coping strategies.

Research method: The research method was semi-experimental with a pre-test and post-test design and follow-up with the control group. The statistical population was all patients with rheumatoid arthritis with anxiety and depression in Tehran, who referred to the rheumatology clinics of Imam Khomeini Hospital in Tehran in the spring of 2014. There are 60 volunteers selecting by purposive sampling technique. According to Cohen's table the sample were divided into group of 20 people. We use Standard Depression questionnaires, anxiety, and Revised McGill pain questionnaire for collecting data. Data analysis has been done by using multivariate analysis of variance with repeated measurement at a significant level of 0.05 through SPSS version 26.

Results: The results showed that psychotherapies are effective in reducing pain, and schema therapy was the most effective method in reducing cognitive pain and various pain in patients with rheumatoid arthritis who have anxiety and depression and inconsistent coping strategies

Conclusion: The use of psychotherapies along with drug therapy can be more effective than drug therapy alone and can help reduce the pain of patients with rheumatoid arthritis by treating anxiety and depression and correcting coping strategies.

Keywords: anxiety, cognitive behavioral therapy, coping strategies, depression, Rheumatoid arthritis, schema therapy

Received: 14/ December/ 2023 **Accepted: 31/ May/ 2024**

Citation: Aramesh sedigh P, Bahreiniyan M, Mansouri A. Comparing the effectiveness of schema therapy with cognitive-behavioral therapy and drug therapy in reducing pain in patients with rheumatoid arthritis who have anxiety and depression and inconsistent coping strategies, Family and health, 2023; 13(3): 163- 173

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Introduction:

Rheumatoid arthritis is a chronic, inflammatory and progressive disease with unknown etiology that leads to joint damage and physical and mental disability. This disease is the most common inflammatory rheumatic disease and affects between 0.5 and 0.1% of the adult population. Women are affected by this disease 2 to 3 times more often than men (1). In Iran, the frequency of this disease is estimated at 19% in urban areas and 33% in rural areas (2). Nowadays, in addition to the physical basis, the role of psycho-social factors in the creation and continuation of pain is emphasized a lot. Therefore, to ensure treatment success, the aforementioned psycho-social factors should be evaluated and treated in conjunction with physical factors and underlying psychological factors. Apart from this, researches show that the family and social contexts in which pain persists also play an essential role in the continuation of disability caused by pain (3).

The most annoying side effects of rheumatoid arthritis are severe pain and joint destruction. The goal of treatment is to reduce pain and prevent joint deformity. Pain is a sensory, emotional and cognitive experience (4). Joint pain and destruction spread to other joints and may remain with the patient until the end of his life. Even anti-inflammatory drugs and painkillers cannot cure it. Basically, the pain caused by chronic diseases in the long term causes severe psychological problems and affects all aspects of the life of rheumatoid arthritis patients. But biological factors are not the only cause of pain aggravation. Some studies have concluded that biological factors are not the only determinants of pain intensity and its effects, and psychological factors such as stress and anxiety are also involved (2, 5, 6).

On the other hand, studies show that although new medical treatments are highly effective in reducing pain and preventing joint damage, knowing the causes and initial symptoms of the disease can save patients from drug treatments with dangerous side effects, along with drug treatments, psychological treatments is also strongly required (45). In the last few decades, the schema therapy approach is used to treat anxiety, depression, maladaptive coping strategies, and personality disorders. Yang believed that the cause of chronic mental disorders lies in the primary maladaptive schemas formed in childhood. Paying attention to the psychological condition of rheumatoid arthritis patients is of considerable importance. Because psychotherapy affects the course of the disease and the ability to adhere to treatment. So, in case of not paying attention to mental problems (such as depression, anxiety, etc.) in patients with rheumatoid arthritis, it will reduce the prognosis of the patients and increase the treatment costs for the patient and the society. It has been proven that one-third of working patients with rheumatoid arthritis lose their work after 5 years of diagnosis, and this ratio increases to one-half after ten years (12). The relatively high prevalence of depression in these patients, and the disruption in various social, academic and professional functions, etc., is an issue that needs serious attention (50). If depression is not properly diagnosed and treated, the possibility of drug abuse, suicide, and psychological, social, and academic dysfunction increases (13).

Despite research confirming the effectiveness of psychotherapy programs in the treatment of depression and anxiety, these programs also have shortcomings. According to Yang et al., some patients who have been treated for depression using classical cognitive behavioral therapy have not been able to go through the treatment process successfully, or their problems have recurred as

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soon as the treatment ends (14) ased on this, the aim of this research is to compare the effectiveness of schema therapy with cognitive behavioral therapy and drug therapy in reducing pain in patients with rheumatoid arthritis who have anxiety and depression and inconsistent coping strategies. The results of the research showed that there is no significant difference between schema therapy and cognitive-behavioral therapy with drug therapy in reducing the sensory pain of patients with rheumatoid arthritis. But there is a significant difference between schema therapy and cognitive-behavioral therapy with drug therapy in reducing the emotional and cognitive pain of patients with rheumatoid arthritis. There is a significant difference between schema therapy and drug therapy in various pain reduction and the overall pain score of patients with rheumatoid arthritis. There is no significant difference between cognitive behavioral therapy and drug therapy in reducing various pain and the overall pain score of patients with rheumatoid arthritis.

Research Method:

This research was a semi-experimental study with a comparison design of pre-test, post-test and follow-up with the control group. The statistical population of the research was made up of all patients with rheumatoid arthritis with anxiety and depression in Tehran who had visited the rheumatology clinics of Imam Khomeini Hospital in Tehran in the spring of 1400; The sample size based on Cohen's table, taking into account the minimum required test power and average effect size and error probability of 0.05, 20 people were considered for each group. This test was divided into three groups randomly. The number of samples is 60 people (20 people for each of the groups in such a way that each group consisted of an equal number of patients with rheumatoid arthritis).

Findings:

The results showed that psychotherapies are effective in reducing pain and schema therapy was the most effective method in reducing cognitive pain and various pain in patients with rheumatoid arthritis who have anxiety and depression and inconsistent coping strategies ($P>0.05$).

Discussion and conclusion:

The aim of this study was to compare the effectiveness of short-term dynamic psychotherapy, schema therapy, cognitive-behavioral therapy and drug therapy in reducing pain in patients with rheumatoid arthritis with anxiety and depression. The results showed that schema therapy had an effect in reducing the pain of rheumatoid arthritis patients with anxiety and depression and inconsistent coping strategies. And its results have continued in the follow-up phase. Based on Yang's (2003) schema therapy model, people who have non-adaptive schemas about themselves and their relationship with others guide attention and cognitive processes when they are in a certain situation, Yang et al. (2007) expanded Beck's work and They identified a variety of primary maladaptive schemas, which were assumed to be defined as a broad, maladaptive, and pervasive pattern consisting of memories, emotions, cognition, and physical sensations about oneself and relationships with others that are formed during childhood or adolescence. and they become complicated during a person's life (7, 27), as well as researches that have shown that schema therapy on depression and thinking (28-32), emotional schemas (33) and pain self-efficacy of patients with chronic pain (34) pain and depression It is effective and consistent in patients with rheumatoid arthritis (30, 35).

In addition, the results of the present study showed that schema therapy was the most effective method in reducing the pain of rheumatoid arthritis patients with anxiety and depression and coping strategies. Schema therapy causes changes in cognitive and experiential, emotional and behavioral fields (36). In explaining these findings, it should be stated that the given educational techniques cause cognitive flexibility and correct dysfunctional beliefs and change the patient's attitude so that they accept their pain and face its psychological consequences in a reasonable way, which is achieved by using mindfulness techniques and creating a positive schema. They can manage their pain and in short, based on the findings of this research on the effectiveness of schema therapy and in terms of clinical application, the patient can be taught to change their beliefs and strive for a better life (37, 38).

The results showed that there is a significant difference between schema therapy and cognitive behavioral therapy in reducing pain in patients with rheumatoid arthritis. One of the main reasons for this can be the difference between the two methods in their treatment approach. Cognitive therapy adopts a top-down approach in the form of cognitive levels. First, it goes to the surface knowledge, then the underlying assumptions and then the schemas. But in schema therapy, on the contrary, it goes directly to the deepest cognitive level (schemas) and adopts a bottom-up approach (7). Other results of the present study also showed that cognitive behavioral therapy was effective in reducing the pain of patients with rheumatoid arthritis. In line with this research, other studies have also shown that cognitive behavioral therapy on anxiety and depression (39, 40), psychological well-being of rheumatoid arthritis patients (16, 41), pain self-efficacy of chronic pain patients (34), depression of rheumatoid arthritis patients (17, 42) is effective. Also, the results showed that there is no significant difference between schema therapy and cognitive-behavioral therapy with drug therapy in reducing the sensory pain of patients with rheumatoid arthritis. As a result, it is not possible to say which treatment is more preferable in reducing sensory pain, but the most important finding of the research is that if these treatments work the same, then they can be a suitable alternative to drug therapy to reduce the pain of patients with rheumatoid arthritis suffering from anxiety and depression and inconsistent coping strategies. The results of the present study can be generalized to patients with rheumatoid arthritis in the city of... and if it is necessary to generalize to other patients with rheumatoid arthritis, this should be done with caution and sufficient knowledge. It is suggested that the research should be conducted with a larger sample size and a wider geographical area in order to provide dense and coherent literature on how to use the mentioned variables.

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