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PSYCHOPATHOLOGICAL ASPECTS INVOLVED IN FIBROMYALGIA

Alessandra Corrêa

Psychologist from UniGuairacá Centro
Universitário, Guarapuava/PR, Brazil

Gislaine Terleski Michelc

Psychologist from UniGuairacá Centro
Universitário, Guarapuava/PR, Brazil

Luciane Kellen Puerari Pauli

Psychologist, Master in Health
Promotion from UniGuairacá Centro
Universitário, Guarapuava/PR, Brazil

Luiz Alfredo Braun Ferreira

Adjunct Professor of the Department
of Physiotherapy at the Universidade
Estadual do Centro-Oeste (UNICENTRO),
Guarapuava/PR, Brazil

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Abstract: Fibromyalgia's etiology is still uncertain, therefore, it is a disease with a subjective diagnosis, as it includes a large number of symptoms with multifactorial origin. Therefore, this article sought to investigate how psychology is related to psychopathological aspects such as depression, anxiety and stress and how it contributes to the diagnosis and treatment of fibromyalgia. The method used was a bibliographic review, in which data were collected through the Virtual Health Library – VHL, Google Scholar, Pepsic and Scielo databases, using the keywords Fibromyalgia, Psychopathological Aspects, Anxiety as descriptors; Stress and Depression; which had as inclusion criteria: scientific articles indexed in at least one search site, originally written in Portuguese and English. After reading the titles and summaries of the documents initially found, 44 articles were identified and selected that met the objective of our research. The results demonstrated the extreme importance of having a multidisciplinary approach when there are associated psychiatric symptoms because it can intensify existing symptoms or lead to more symptoms. We also observed that when patients undergo psychological treatment, their emotional and relational levels tend to stabilize, resulting in a reduction in physical pain.

Keywords: Fibromyalgia, Psychopathological Aspects, Anxiety; Stress and Depression.

INTRODUCTION

According to the Brazilian Society of Rheumatology (2019), Fibromyalgia (FM) is a condition that is characterized by widespread, chronic muscle pain (lasting more than three months), but which does not present evidence of inflammation in the pain areas. It is accompanied by typical symptoms, such as unrefreshing sleep and tiredness, and there may also be mood disorders such as anxiety

and depression, complaints of changes in concentration and memory, genetic and neuroendocrine factors.

Isolated or combined factors can favor the manifestation of the condition, including serious illnesses, traumas, accidents and hormonal changes. According to Cavalcante (2006), the prevalence of FM in the world population, according to the criteria proposed by the *American College of Rheumatology*, varies between 0.66 and 4.4% according to the profile evaluated and the study methodology. The prevalence of diffuse chronic pain is higher than the prevalence of fibromyalgia, with values between 11 and 13% being found. All studies indicate that the syndrome is more prevalent in women than in men, especially in the age group between 35 and 60 years. Studies with children, adolescents and special groups are scarce and inconclusive.

In Brazil, data from the Brazilian Society of Rheumatology (2004) indicate a prevalence of approximately 2% in the population and the reason for approximately 15% to 20% of consultations in rheumatology outpatient clinics. According to Souza, Perissinotti (2018, p.347) “the prevalence of FMS in the Brazilian population was 2% with a proportion of 1 man for every 5.5 women. These results are equivalent to previous studies carried out in specific regions of Brazil, such as São Paulo. However, when compared to more recent studies, they present a lower prevalence value than the United States and European countries.”

It is known that, according to the study by Berber (2005), the prevalence of psychiatric abnormalities, particularly depression, is high among patients with fibromyalgia, ranging from 49% to 80%. According to data from the IBGE census 2020, the Brazilian population corresponds to 211 million inhabitants, considering these data, it is known that the average among people with fibromyalgia

with worsening psychiatric abnormalities corresponds to an average of 2,067,800 to 3,376. 000 million people.

In this sense, fibromyalgia syndrome depends on an essentially clinical diagnosis based on classificatory criteria, and according to the *American College of Rheumatology* of 1990 it depends primarily on the presence of diffuse pain (above and below the waist, right and left side and axial) and physical examination of painful points. These criteria were developed exclusively for the inclusion of patients in scientific studies.

The 2010 ACR preliminary FM diagnostic criteria are based on the number of painful regions of the body and the presence and severity of fatigue, non-restorative sleep and cognitive difficulty, as well as the extent of somatic symptoms. (HEYMANN, 2017)

The subjectivity of Fibromyalgia symptoms greatly expands the possibilities of differential diagnoses to be considered by the doctor. According to Heymann (2017, p.474), diffuse chronic pain, the preponderance in women and the lack of objective imaging data and laboratory tests are some of the characteristics that can generate diagnostic confusion, since these symptoms are present in a large number of cases. number of other diseases.

It becomes evident that over time, in clinical practice, especially in primary care, painful points have not been used, or have been used incorrectly by untrained doctors, leading to failures in the final diagnosis. As a result, the diagnosis began to often be assessed solely based on patients' complaints.

According to Heymann (2017), despite controversies in the literature regarding psychiatric disorders and fibromyalgia, there are still some variables to be considered, for example, depression and anxiety are correlated with a worsening of the disease with worsening of functional disability. It is important to consider psychiatric indications,

because this makes it an element of great potential when making a prognosis.

Due to the impact that depression can have on the presentation of the disease, whether through the intensification of pre-existing symptoms or the production of additional symptoms, it is extremely important to have a multidisciplinary approach to depressive symptoms in both the assessment and treatment of patients with fibromyalgia. (SANTOS, 2012)

Psychiatric symptoms alone already have a major impact on patients' lives and when associated with a chronic pain syndrome, they can affect the resilience of these patients and consequently their adaptation. According to Carvalho (2016), people who are not very resilient possibly have greater exposure to stress and impaired coping in the face of adversity, which can generate symptoms of anxiety, depression, anger, impulsivity and low self-esteem.

Therefore, the justification for this study related to fibromyalgia is to realize that this pathology presents diverse and specific symptoms in each individual, therefore, this research is considered very timely, since in addition to the biological aspects that this syndrome presents, it also includes the aspects associated psychological problems, making life extremely difficult for the individual.

The objective of this work is to understand the psychopathological factors involved in fibromyalgia, as well as the responses of these factors to the painful processes in the syndrome, finding articles that address such issues, contextualizing the studies and identifying the implications for fibromyalgia and seeking support for the elaboration of a bibliographical research on the topic.

Firstly, the methodology used will be presented, and a brief history of the evolution of understanding about Fibromyalgia will be presented. Next, pain and other symptoms

and their relationship with psychological aspects will be highlighted, and finally, the contributions of psychology in a multidisciplinary context.

METHODOLOGY

The present study is a bibliographical research that is carried out based on the survey of theoretical references already analyzed, and published through written and electronic means, such as books, scientific articles, web pages. Any scientific work begins with a bibliographical research, which allows the researcher to know what has already been studied on the subject. There are, however, scientific researches that are based solely on bibliographical research, looking for published theoretical references with the aim of collecting information or prior knowledge about the problem to which the answer is sought (FONSECA, 2002).

Therefore, the objective of this research was to investigate, in the specialized literature, studies on the psychological aspects involved in fibromyalgia, to collect theoretical references already analyzed from national and foreign databases. The academic search sites were considered: Virtual Health Library – VHL, Google Scholar, Pepsic and Scielo. To search for the texts that served as the object of our investigation, we considered the expression “Psychological Aspects and Fibromyalgia” which was used as an inclusion criterion: scientific articles indexed in at least one search site, originally written in Portuguese and English. After reading the titles and summaries of the documents initially found, 44 articles were identified and selected that met the objective of our research.

ANALYSIS AND DISCUSSION OF RESULTS

44 articles were found. Among them, after reading the title and abstract, those that presented research data on the chosen topic and its relationship with psychological processes were selected so that subsidies could then be gathered for the preparation of the research. The results obtained from the discussion of the contents found will be presented below.

As pointed out by Moore et al. (2000) cited by Queiroz (2009, p. 10), pain can be a warning sign or a representation of danger. When the cause is unknown, pain generates fear, which, combined with other variables, contributes to the chronic state of pain.

The fear of pain can keep the person in a constant state of alert, and in this sense, it can become a continuous stressor that can consequently worsen the pain condition even further (Vlaeyen & cols., 2002).

In the same context Turk and Okifuji (2002) cited by Queiroz (2009, p. 9) emphasize that the assessment of pain must consider three dimensions: physical, psychosocial and behavioral. The physical assessment includes the characteristics of the pain, its etiology and prognosis. In this way, the psychosocial dimension refers to current vital conditions associated with beliefs and possible psychopathological characteristics with their cultural meanings. In the behavioral or functional dimension, they consider the patient's resources and their actions in the face of pain, which in most cases is specific and individual, covered in senses and meanings that influence treatment.

However, the International Association for the Study of Pain (IASP) defines pain as an uncomfortable sensory and emotional sensation resulting from actual or possible injury to the body's tissues. It highlights an essentially particular manifestation,

its exposure varying from individual to individual. It is an accentuated sign, considered the fifth vital sign to be analyzed in medical consultations GOLDENBERG (2014).

This way, it is clear that depending on the intensity of pain that fibromyalgia causes to the patient, the greater the negative impact will be in relation to their quality of life, as their functional capacity tends to decrease in the personal, professional, family and social areas, which can trigger symptoms of depression and/or anxiety.

According to Oliveira (2015), the symptoms of fibromyalgia make the patient's coping strategies difficult, reinforcing the feeling of incapacity. Thus, depression or anxiety can initiate or perpetuate the symptoms of fibromyalgia and its characteristics can manifest feelings of guilt, fatigue, victimization and low self-esteem.

Thus, Silva (2018) clarified that patients with fibromyalgia have a worse quality of life and higher levels of depression when compared to people without this pathology and suggest the existence of a close relationship between fibromyalgia and depression and that this can be considered a secondary symptom of fibromyalgia.

According to Santos (2012), fibromyalgia is often related to emotional aspects, such as depression, anxiety and stress, with depression and anxiety being frequent symptoms, with a rate of 50% to 86% of diagnosed patients.

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V, 2014), for pain to be considered acute, its duration must be less than six months and to be considered chronic, the period is six months or more. In addition to this (Wolfe et al., 1990) shows that symptoms commonly related to the pathology may include headaches, irritable bowel syndrome, dysmenorrhea, atypical patterns of paresthesia, irritable bladder, non-restorative sleep, increased sensitivity to

cold, Raynaud's phenomenon, restless legs syndrome and temporomandibular joint pain.

Therefore, understanding fibromyalgia requires a comprehensive assessment of pain, function and psychosocial context (CAVALCANTE, 2006).

In this sense, Oliveira and Rocha (2019) refer that patients with fibromyalgia not only experience the sensation of pain, but are compelled to live with changes that occur in their daily lives caused by the restriction of activities, suspension of routines and changes in mood, low energy and sleep disorders. All these variations end up destabilizing family relationships, as well as developing a tendency towards social isolation and ending up limiting social contacts, influencing habits and routines, making patients adjust to the new reality.

The perception of the body as a means of expressing suffering is linked to the conception that "being sick has to have a meaning" (GRODDECK, 1992). The author highlights that an illness process involves a conflict, and its symptoms are the symbolic representatives of this dimension.

Due to the pain, it is common for fibromyalgia to lead to abnormalities in the nervous system, changing the way patients deal with stress. Constant fatigue also generates isolation from activities, anxiety, lack of energy, feelings of guilt and many other symptoms that trigger depression, which we can also relate to the loss of motivating stimuli in the patient's daily life, thus generating a vicious circle, making treatment even more difficult.

According to Ursin (2000), studies currently show that the autonomic nervous system is responsible for the functioning of internal organs and that it is regulated by our limbic system, that is, it is affected by emotional and affective experiences. The immune system influences and is influenced by the brain.

It is possible that there is a relationship between chronic pain and the psychobiological process considered important, stress. According to Reis and Rabello (2010), whenever an organism identifies changes in the environment, potentially positive or harmful, that require significant changes in response, a set of adaptive changes with hormonal, physical, behavioral and cognitive components begins.

Results demonstrate that some stressful situations involving family relationships, especially with regard to neglect and abuse in childhood, can facilitate the development of chronic pain, especially in fibromyalgia. (REIS and RABELLO, 2010).

Another psychological aspect addressed in this research is anxiety, which according to Santos (2012,) is considered a common and often severe secondary symptom in cases of fibromyalgia. The prevalence of these symptoms among fibromyalgia patients varies between 13% and 71%. Anxious symptoms can compromise the course of the disease. The presence of anxiety in patients with fibromyalgia is related to a greater number of physical symptoms and greater pain intensity, thus increasing the severity of the disease. Still according to the same author, he reiterates that the frequency of anxious and depressive symptoms among patients with fibromyalgia, socio-cultural and care differences between populations mean that there is a variation in the frequency of these symptoms between them.

As previously mentioned, there is a relationship between pain and psychiatric symptoms, considering a possible relationship between them, meaning that many patients do not present objective physiological changes, which reinforces the belief that fibromyalgia is a psychopathology. This way, many patients come to be considered psychiatric patients, mainly because biomedical specialties cannot

reach a diagnostic consensus.

According to Teixeira (2001), he points out that the symptoms of fibromyalgia have a great impact on daily life and promote disruption of routine, the consequence of which tends to persist over time, due to the chronicity of the disease.

In addition, Pimenta (2000) says that the non-resolution of pain and the permanence of the consequences arising from it contribute to the emergence of a progressive feeling of hopelessness, impotence and despair. This process leads to the onset of depression. This way, it has been suggested that pain and depression go together and one aggravates the other.

According to the WHO, health is defined as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”, however for some critics this definition for the moment is unrealistic and unilateral, because, as we can characterize the perfection”? Even if external evaluation concepts are used, perfection cannot be definable. Only a subject who, within his beliefs and values, legitimized it could thus speak of well-being, happiness or perfection.

Therefore, quality of life can be defined according to Fleck et al. (1999), as the individual's perception of their position in life, in the context of the culture and value system in which they live, and in relation to their goals, expectations, standards and concerns.

Currently, according to Lana et al. (2007) this consideration became more comprehensive, starting to use the term Health-Related Quality of Life (HRQoL).

This definition implies that the concept of QoL (Quality of life) is subjective, multidimensional and includes both positive and negative assessment elements. (FLECK et al. 1999).

In relation to the current scenario, it is

known that quality of life has an important influence in relation to fibromyalgia. Within this we can include clinical drug treatment aimed at relieving pain, improving sleep quality, emotional balance and reducing fatigue. It is also known that ideal treatment requires a multidisciplinary approach, with the combination of different therapeutic modalities.

According to Lorena (2016, p. 09), due to the lack of knowledge about the etiopathogenesis of FM, the adoption of global strategies to approach the patient is often limited. Understanding the clinical characteristics of the syndrome contributes to the emergence of new therapies, pharmacological and non-pharmacological, and strengthening existing techniques.

According to Silva (2008), it must be prepared in discussion with the patient, according to the intensity of their pain and their functionality. Another alternative to physical exercise is hydrotherapy, baths and aerobic exercises in water.

Therefore, the more the patient seeks to build healthy practices associated with psychological treatment, drug treatment, and therapeutic practices, there is a reduction in pain, improving their quality of life. The importance of health education by the patient ends up being paramount so that they have better awareness of their condition.

According to Lima et al. (2018) there is a concern and seriousness regarding knowledge about Fibromyalgia, with the psychologist's work being of great importance with the sufferer of the syndrome as well as their family, to clarify the disease and its complications, considering that the sufferer may possibly Playing the victim by denying your suffering or maximizing your pain for your own benefit.

Thus, Goldenberg (2014) add that after the diagnosis of fibromyalgia is made by the doctor, preferably a rheumatologist,

drug treatment and psychoeducation are initiated, in order to explain the syndrome and, if necessary, referral to a psychiatrist to evaluate possible disorders. and especially the psychologist.

Much is said about psychoeducation, which is seen as a technique in intervention with patients with fibromyalgia, as it provides, in addition to self-knowledge, strategies for coping with pain, autonomy, confidence, self-esteem, management characterized by dealing with concrete circumstances, anxiety, stress. This must be done in the simplest and most didactic way possible, according to the language of each patient, making them perceive themselves as a whole, a dynamic and complex being within the areas: physical, emotional, cognitive and behavioral.

According to Wood et. al (1999) psychoeducation began in 1970, emerging as a model that involves the paradigm of the complexity of the human species, in this case, it involves different disciplines and theories that can be interrelated to understand and apply its techniques in the face of illness of the individual.

In this way, psychoeducational planning provides interdisciplinary work to the patient whose integrality is present. Wolfe (1999) suggests separating the term psychoeducation encompasses social, emotional and behavioral development and the action of the psychology professional approaches that of an agent of change who provides scientifically based assistance to the patient.

As Lima (2018) points out, the professional's contribution in the field of psychology needs to be guided and theoretically based on the biopsychosocial model, which maintains contact with other disciplines, helping in the process of constant pain, adjusting medications, as well as anguish, fears and frustrations.

Through psychological support, the

patient's emotional and relational levels tend to be regulated, as well as physical pain being minimized. Treatments within psychology can have a variety of approaches and techniques. One by one of the psychological interventions is group therapy, which can be used to help patients develop better coping mechanisms and improve their perspectives. Thus, the psychologist who accompanies the patient needs to guide family members, resolve doubts, explain how the disease happens and how the patient needs this family support (GOLDENBERG, 2014).

In this way, it is clear that when the patient undergoes psychological treatment, their emotional and relational levels tend to stabilize and, as a result, reduce physical pain.

According to Bennett (2007), he also adds that personal skills training and attention/meditation protocols are other effective techniques in mitigating stress and enhancing individual resilience. Optimism, cognitive reappraisal, active *coping*, humor, perceived social support, prosocial behavior, and *mindfulness* are all associated with greater vagal control of heart rate variability (HRV), a known autonomic response to stress.

Studies show a relationship with mental disorders, some of which include anxiety, depression and stress, which leads to a greater worsening of the clinical condition. When considering psychiatric abnormalities, in particular, patients with FM may present a significant reduction in resilience, which may lead to the development of post-traumatic stress disorder, depression and other psychiatric disorders.

Humor is one of the most mature defense mechanisms and can reduce depressive symptoms by perceiving a situation in a way that makes it less threatening. Other psychological aspects identified in this research were that anxiety is considered a frequent and common symptom that is associated with severe cases

of fibromyalgia, with a prevalence among patients of 13 and 71%, compromising the course of the disease and intensifying pain. Current diagnostic criteria do not sufficiently take into consideration, psychological, environmental and sociocultural factors, despite playing an important role in initiation, maintenance, diagnosis and treatment. However, sociocultural and care differences between populations were analyzed, as it ends up causing a variation in these anxious and depressive symptoms in patients with fibromyalgia, which could be an increase in pain or vice versa. (SANTOS, 2012).

To assess pain, three aspects are considered: physical, psychosocial and behavioral. Considering that physical assessment includes characteristics of pain, its cause and prognosis, while in the psychosocial aspect it is necessary to consider the essential conditions that are associated with beliefs, cultural and psychopathological meanings. It is noteworthy that these manifestations are especially particular and that the way in which they will be presented will occur in a unique way in each individual who finds himself compelled to live with the changes caused by this syndrome that will eventually cause limitations in day-to-day activities, changes mood, low energy and variations in your sleep.

For Lima (2018), the failure to resolve the pain and the persistence of the consequences arising from it contribute to the continued hopelessness, impotence and despair of these patients, leading to the process of depressive conditions. Given this situation of changes, it is possible that family members become more fragile, thus causing an increase in social isolation, reducing social contacts and, as a consequence, influencing habits and routines.

Currently, many patients report feeling misunderstood by family, friends, healthcare professionals and society in general, living with

a stigmatized and invisible disorder, which points to the need for continued research for the complete legitimization and acceptance of Fibromyalgia. In this aspect, it is observed that the family institution becomes responsible due to the interaction of members and their respective roles, thus determining the balance of family relationships, being fundamental in restoring balance after moments of emotional stress.

In view of this, Lima (2018) states that the collaboration of professionals in the field of psychology will need to be outlined and based on a biopsychosocial model, so that it is possible to maintain contact with other areas to help in the process of constant pain, in adjusting the medications, as well as fears, anxieties and frustrations.

FINAL CONSIDERATIONS

When analyzing the articles, we see that, since 1904, Fibromyalgia was considered a combination of the absence of complaints and discoveries in the body with pain associated with the muscles, referring to it as fibrositis according to Williamson (1996). The disease was known as a confusing picture of a common clinical condition, often being associated with the absence of consistent complaints or physical findings.

The problem was considered an old discussion in terms of conceptions about health, diseases and their origins, and also the way in which they were constituted over time, whether through a duality, which considered the mind and body to be distinct essences, or in a concept of single principle, considering inseparable. However, it was observed that for many years it was a mystery for medicine to explain the mystery behind fibromyalgia, because it encompasses a series of symptoms that go beyond the manifest physical symptoms, one of which is psychological, which is often blamed the patient himself

when asking him if what he felt was not something just “in his head”.

Faced with these questions, it is known that today these oscillations that occur regarding belonging to the field of duality or individuality also reverberate in medical thought. This understanding of chronic pain syndrome is still considered predominant when it comes to health, however, there are studies that talk about the influence of the mind and emotions.

Fibromyalgia's etiology is still uncertain, making it a disease with a subjective diagnosis, as it includes a large number of symptoms with multifactorial origins. Serious illnesses, emotional or physical traumas and even hormonal changes can trigger symptoms that occur throughout the body, in addition to typical symptoms, such as unrefreshing sleep, tiredness, mood disorders, changes in concentration and memory, intense fatigue and headaches.

Due to the impact that psychiatric disorders can cause in the presence of the disease, it is extremely important to have a multidisciplinary approach when there are associated depressive symptoms because it can intensify symptoms that already exist or produce more symptoms.

Another interesting point to highlight is resilience, which can be seen as the “ability to adapt successfully to disorders that threaten the viability, function or development of the patient”. Resilience is, therefore, not only an individual's psychological and behavioral adaptation to a stressful event, but also the body's functional neurobiological reaction to the event itself. In this sense, psychotherapy treats the patient's emotional sphere to promote greater awareness and regulation of emotional reactions (CASALE, 2019, p.8)

In this way, it was possible to see in our research that fibromyalgia is a disease in which its treatment is constantly evolving,

and that all work carried out through psychotherapy, regardless of the approach, includes psychoeducation. It becomes evident that when patients undergo psychological treatment, their emotional and relational levels tend to stabilize and, as a consequence, reduce physical pain. Making the patient aware of their condition is a positive point in the treatment, as is the practice of exercise and healthy eating, so that they can enjoy a better quality of life in the personal, social and family spheres.

Among the varied psychological interventions, group therapy appears as

an alternative to help patients develop better coping mechanisms and improve their perspectives. Because the disease is subjective, it is necessary for professionals to take a different look at the dynamics of each carrier, recognizing the strategies and seeking the necessary care to improve the syndrome together with their family.

Therefore, it is understood that there is still a lot to be known about fibromyalgia and with this psychology can contribute to a change in the quality of life of sufferers, as well as, those interested in the topic, academics and health professionals.

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