

Impact of Fibromyalgia on the Quality of Life of Patients in Brazil

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Abstract—*Background: The use of specific evaluation instruments in research demonstrates the reliability of criteria and reliability of the results, giving significance to the context. Methods: Through a search of an online database (LILACS, MEDLINE and SCIELO).*

Results: This systematic review selected 6 research articles that used FIQ as a collection instrument and presented the results in a total score. It was identified the predominance of research in the southern region, and the quality of life of fibromyalgia patients is significantly reduced for all samples analyzed.

Conclusions: There is a need for research and qualified professionals throughout the country to meet the needs of this complex clinical picture.

Keywords—*Fibromyalgia, Quality of life, Fibromyalgia Impact Questionnaire.*

I. INTRODUCTION

Fibromyalgia is classified as a rheumatological syndrome from the patient's complaint regarding the presence of distributed pain throughout the body, without obvious trauma, with the persistence of pain for more than 3 months continuously and the associated the other disturbances such as fatigue, stiffness, paresthesia, headache, irritable bowel syndrome, sleep disorders, anxiety, depression, and difficulty concentrating, occurring preferentially on women aged between 30 and 60 years [1]. Of yet unknown etiopathogenesis but multifactorial, the diagnosis is clinical, according to the complaints of the patient, whereas the complementary examinations will exclude the possibility of other diseases related to the anamnesis [2].

Use the scenario of quality of life (QL) to assess the commitment of diseases in health became a prominent tool on the definition of health in relation to physical, mental and social well-being [3], defining the term as the individual's perception of their position in life, inserted in the cultural and values context, respecting their

expectations, standards and concerns [4].

The measurement of the QL of patients with fibromyalgia uses the Fibromyalgia Impact Questionnaire (FIQ) as facilitator, sensitive and reliable instrument, as well as affordable, simple, easy interpretation and response. In Brazil, was translated by Marques et al. (2006) [5], revised and validated recently as FIQR-Br by Lupi et al (2017) [6]. In this, the 21 questions are scored from 0 to 10 and separated into 3 domains (function, global impact, and symptoms), and the lower the score, the better the quality of life.

In view of the clinical picture, Fibromyalgia interferes negatively in the context of physical, mental and social health of the patient, that is, the presence of the disease interferes with the quality of life. Thus, the assessment of the impact of the disease on patients quality of life reveals itself as an important tool to check the magnitude of compromises and even the effectiveness of treatment, highlighting the need to know the impact of Fibromyalgia on quality of life of Brazilian patients with the use of the Fibromyalgia Impact Questionnaire (FIQ).

II. MATERIALS AND METHODS

This systematic review began with the selection of teams-related terms from the health sciences descriptors [7], such as Fi-bromyalgia (FM) and quality of life (QL), to search in free health electronic holdings. Access to the Virtual Health Library presented the context indexing in the following bibliographic databases: LILACS, MEDLINE and SCIELO, with the amount of 1,004 results for FM to refine the search using the terms FM and QL, showing 222 results. Reading the summaries followed the criteria of the sample population of Brazilian women and use of FIQ as an instrument of data collection in 69 articles. From reading the original articles available in full to the presentation of FIQ numerical score, finishing the refinement with the selection of 6 articles, as illustrates the flow diagram (Figure 1). The timeframe and the language

selection were not used as fill.

Were eligibility criteria: research on QL in Brazilian women diagnosed with FM, using the FIQ as an instrument of collection and presentation of the results in the total score. Were exclusion criteria, the comparative

research of FIQ in interventions of therapeutic methods and the duplication of files? The article found in the MEDLINE database was deleted by presenting a male volunteer in the sample.

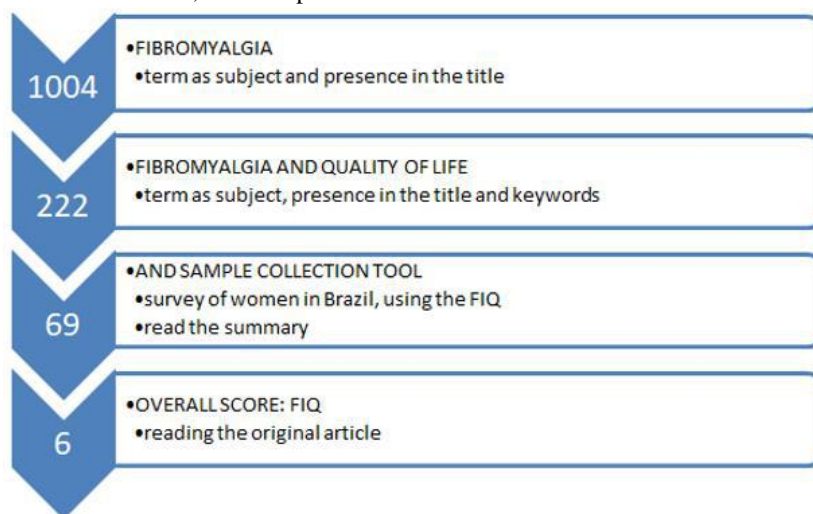


Fig. 1: Flowchart for identification and selection of articles for a systematic review of the impact of FM in QL of Brazilian women using FIQ

Source: Authors, 2017.

III. RESULTS AND DISCUSSION

The 6 selected articles are structured in table 1 from the time lapse of existing research, and from 2011 to 2016. The characterization of the sample by age reveals the diversity of incidence of fibromyalgia since the average involves adults. In relation to the average overall score of FIQ stands out the negative impact of fibromyalgia on quality of life, with scores between 60 and 75 points, that is, moderate impact (50 to 70) to severe (70 to 100).

The geographical distribution of the research reveals the insertion of the EpiFibro group as national data collection network in Fibromyalgia, concentrating its researchers in the South and Southeast and revealing the absence of them in the North of the country.

You can still highlight the low amount of available sources, despite the severity of the patient’s commitments in relation to disease, which requires continuous attention due to your chronic character.

Table.1: Characteristics of research on the impact of FM in QL of Brazilian women using FIQ, second author, year, title, sample, age, rank, and base location.

Authors	Title	Sample	Age (years)	FIQ = 0 - 100	City/State	Base
Homann et al, 2011	Assessing the functional capacity of women with fibromyalgia: direct methods and autorrelatados	n=38	20-64	73,11 DP ± 16,93	Curitiba / PR	SCIELO
Homann et al, 2012	Perception of stress and depressive symptoms: functionality and impact on the quality of life in women with fibromyalgia	n=20	29-52	68,88 DP ± 15,04	Curitiba / PR	SCIELO
Rezende et al, 2013	EpiFibro-a national database on fibromyalgia syndrome – initial analysis of 500 women	n=500	17-89 média = 50 DP = ± 10	60,82	SP, RJ, MG,PR, RS, MS, PE	LILACS
Gequelim et al, 2013	Clinical-epidemiological study of fibromyalgia in a university hospital in southern Brazil	n=146	média = 50,93 DP = ± 9,67	65,78 DP ± 15,09	Curitiba / PR	LILACS
Lorena et al, 2016	Evaluation of pain and quality of life of patients with fibromyalgia	n=45	30-55	75,9	Recife / PE	SCIELO

Batista et al, 2016	Assessment of the dietary intake and quality of life of women with fibromyalgia	n=43	18-60	69,12 DP ± 18,85	Curitiba / PR	SCIELO
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Source: authors, 2017.

Homann et al (2011) [8] in order to verify the functional capacity of women with fibromyalgia of rheumatology outpatient clinic of the Clinical Hospital the Federal University of Paraná (ROC/CH/UFPR), used dynamometric and 6-minute walk test in a sample of 38 volunteers with an average age of 47 years. Yet compared the result of functional capacity questionnaire reply HAQ (evaluation of patients with rheumatological diseases functionality), FIQ and AVS (analogic visual scale) which were applied before and after the physical tests of functional capacity. They observed that the pain intensity is incapacitating and the main cause of the impairment of activities of daily living and QL.

Evaluating the perception of stress, depressive symptoms, functionality, impact the quality of life and painful intensity, Homann et al (2012) [9] investigated 40 women from ROC/CH/UFPR, divided into two groups, one with a diagnosed volunteer with FM and other healthy patients. From results observed that women with FM have a higher perception of stress and pain intensity, thus reducing the functionality and quality of life, and these factors are directly related to depressive symptoms of these patients.

Gequelim et al (2013) [10], through the standard questionnaire EpiFibro, conducted the evaluation of 146 women met in the ROC/CH/UFPR, relating to FM with high rates of headaches, sleep disorder and paresthesias. The volunteers average age was 50 years, noting that the FM presented with late diagnosis and most of them took more than six months to seek care. Noting that the criteria of the American College of Rheumatology of 2010 have a higher diagnostic sensitivity when compared to 1990.

In order to compile the epidemiology of FM in Brazil, along with the consequences for individuals who suffer from this disease, Rezende et al (2013) [11] used the EpiFibro group database (online questionnaire filled out by doctor and patient) with 500 women between the ages of 17 and 89 years from public and private hospital. The results revealed that there are several symptoms related to FM, such as depression, sleep disturbance, fatigue, anxiety, headache, paresthesia, and there is a relatively large delay both in the search for medical help as in diagnostic rheumatologist. The QL of the volunteers was greatly affected after the emergence of sorrows and most of them have the impression that the trigger point for FM was the stress at work, consequently affecting the musculoskeletal system.

In the study by Lorena et al (2016) [12], with women of the middle ages in 46 years, recruited at the time of the first appointment in the service of rheumatology of a University Hospital in Recife, the volunteers were evaluated by FIQ, GPI (generalized pain index) and AVS so that the quality of life is inversely proportional to pain caused by Fibromyalgia.

In search of Batista et al (2016) [13], developed in the ROC/CH/UFPR, evaluated 87 women with an average age of 47 years, divided into two groups of volunteers, one of 44 healthy and another with 43 with fibromyalgia, investigating the macro and micronutrients intake feed for three non-consecutive days. The control group showed both qualitatively and quantitatively intake higher than the volunteers with fibromyalgia, correlating the threshold of pain reduction and impact the quality of life. Food intake ratio and threshold painful observed that the higher protein intake increased tolerance to pain, and yet, vitamin E deficiency and related to worse QL.

The research on the quality of life of the patient with fibromyalgia is unanimous in the use of FIQ as a validated instrument. Since the higher incidence of use is the measurement of the effectiveness of therapeutic methods, as occurs for Komatsu et al (2016) [14], Kawakami et al. (2014) [15], Silva et al. (2012) [16], Letiere et al (2013) [17].

In relation to the epidemiological profile, Avila et al. (2014) [18] corroborate the description of patients with fibromyalgia being women, with an average age between 30 and 55 years old, married, with low education, low income, with delay of diagnosis, presence the disease for many years and low quality of life significantly when compared to the control group, according [11] .

Was consensus for Homann et al (2011) [8] and Homann et al (2012) [9] that high body mass index, in overweight and obesity, consists of aggravating factor to the worsening of quality of life. Batista et al. (2016) [13] still argue about the importance of a balanced diet to prevent other chronic diseases, overweight and worse quality of life.

General analysis on components that trigger and worsen the FM, Gequelim et al. (2013) [10], Rezende et al. (2013) [11] and Lorena et al. (2016) [12] identified the working environment as a factor to trigger clinical picture. Already Homann et al. (2012) [9] highlight that the intensity of the pain and the psychological disorders such as anxiety and depression are directly proportional,

whereas both factors favor the worsening of quality of life [11].

The delay in the diagnosis of FM is justified by the absence of complementary exams specific to the disease, in addition to the diversity of complaints that mask the initial pain, since the demand for this treatment refers to the commitment skeletal muscle to set often by orthopedic surgeon, that is based on direct trauma injuries evident [10] [11].

The pharmacological treatment prescribed by doctors who specialize in the area consists mostly of simple analgesics, as this class is not able to reduce the pain. The ideal drug, conduct prescribed by the rheumatologist is the combined utilization between antidepressants, anti-anxiety drugs, anticonvulsants, muscle relaxants, anti-inflammatory, and analgesic powerful sleep inducers [19].

Physical therapy reveals the combination of aerobic type exercises, strengthening and flexibility to conduct more effective in the long term to improve the clinical picture and thus the quality of life [23].

Several studies confirm that the physiotherapeutic treatment greatly improves the QL of women who live with the FM, of treatments ducts are numerous both in water as on land. The exercises in the aquatic environment provide doubly therapeutic effects in relation to exercise mechanically and hydrotherapy, corresponding to immersion and muscular relaxation [21]. Komatsu (2016) [14] by using the pilates as a physiotherapeutic treatment showed improvement in QL and the reduction in painful points in volunteers with fibromyalgia. Letieri (2013) [17] and Silva et al. (2012) [16] also evaluated patients treated in the aquatic environment through hydrotherapy kinesiotherapy and also achieved great results when compared the. FIQ before and after the intervention protocol. Confirm with that statement the search of Kawakami (2014) [15] that reports after a period of nine months by associating hydrotherapy and group psychotherapy, there was a considerable reduction in a number of areas of FIQ.

Alternative methods based on oriental medicine are also reported in the literature as beneficial to patients with fibromyalgia as Oliveira, Sousa, and Godoy (2014) [22] that verified the effect of acupuncture in reducing the intensity of the pain and the severity of symptoms.

To complement the multidisciplinary treatment, psycho-behavioral interventions are extremely important due to the vast commitment in relation to anxiety and depression on QL, and changes in habits are able to reduce the severity of clinical picture [1]. The effectiveness of the treatments available to FM is determined by the diversity of techniques and conducts long-term continuity since recurrences of crises arising

from physical and/or psychological stress interfere negatively in the clinical picture and consequently impacting on the quality of life [15].

IV. CONCLUSION

The general analysis of the availability of FM research reveals the greatest concentration of large samples data centers located in regions with higher technological development, such as South and Southeast, and to the North and Northeast region lacks epidemiological and experimental studies, although the national scenario of qualified professionals to meet the demand for services in rheumatology is still precarious, undermining the clinical picture of the patient.

Still, the FIQ must integrate into this context as an instrument of measurement of the QL of patients with FM on the impact of the disease, in order to encourage the beneficial, evaluating prognosis both clinical evolution of painting as therapy prescribed.

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