Satisfaction of patients receiving physiotherapy care for musculoskeletal conditions: a cross-sectional study

Satisfação de pacientes que recebem cuidados fisioterapêuticos para condições musculoesqueléticas: um estudo transversal

Satisfacción de pacientes que reciben cuidados fisioterapéuticos para condiciones musculoesqueléticas: un estudio trasversal

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ABSTRACT | We measured the satisfaction of patients who receive physiotherapy care for musculoskeletal conditions in the Southeast region of Brazil. The MRPS instrument (MedRisk instrument for measuring Patient Satisfaction) was used to measure the satisfaction of 403 patients of eight physiotherapy clinics of the states of Minas Gerais and São Paulo. In addition, we collected demographic and clinical characteristics of participants and the Global Perceived Effect (GPE) scale. The MRPS was described through mean and standard deviation. Pearson correlation coefficients were calculated to investigate the association between GPE and the total score of the MRPS. Linear regression models were used to analyze the characteristics of patients that could predict total satisfaction. High satisfaction was observed with the physiotherapeutic care, being the mean score a total of 4.5 points (SD=0.4). A moderate correlation was observed between the total satisfaction and the GPE (Pearson's r of -0.31, p<0.001). Only gender influenced the total score of satisfaction, as males showed the highest satisfaction with the received care. The level of patient satisfaction with the physiotherapy treatment in the Southeast region of Brazil can be considered high.

Keywords | Physiotherapy; Patient Satisfaction; Orthopedics.

RESUMO | Mensurou-se a satisfação dos pacientes que recebem cuidados fisioterapêuticos para condições musculoesqueléticas na região Sudeste do Brasil. O instrumento MedRisk Instrument for Measuring Patient Satisfaction (MRPS) foi utilizado para mensurar a satisfação de 403 pacientes de oito clínicas de fisioterapia dos estados de Minas Gerais e São Paulo. Além disso, foram coletadas as características demográficas e clínicas dos participantes e a Escala de Percepção do Efeito Global (GPE). O MRPS foi descrito por meio de média e desvio-padrão. Coeficientes de correlação de Pearson foram calculados para investigar a associação entre a GPE e o escore total do MRPS. Modelos de regressão linear foram utilizados para analisar as características dos pacientes que poderiam predizer a satisfação total. Foi observada alta satisfação com os cuidados fisioterapêuticos, sendo a média do escore total 4,5 pontos (DP=0,4). Foi observada moderada correlação entre a satisfação total e a GPE (coeficiente de Pearson -0,31, p<0,001). Apenas o gênero influenciou o escore total de satisfação, sendo que o gênero masculino apresentou maior satisfação com os cuidados recebidos. O nível de satisfação do paciente com o tratamento de fisioterapia recebido na região Sudeste do Brasil pode ser considerado alto.

Descritores | Fisioterapia; Satisfação do Paciente; Ortopedia.

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RESUMEN | Se mensuró la satisfacción de los pacientes que reciben cuidados fisioterapéuticos para condiciones musculoesqueléticas en la región Sudeste del Brasil. Se utilizó el instrumento MedRisk Instrument for Measuring Patient Satisfaction (MRPS) para mensurar la satisfacción de 403 pacientes de ocho clínicas de fisioterapia de los estados de Minas Gerais (MG) y São Paulo (SP). Además, se colectó las características demográficas y clínicas de los participantes y la Escala de Percepción de Efecto Global (GPE). El MRPS fue descrito mediante la media y desviación estándar. Se calculó los coeficientes de correlación de Pearson para investigar la asociación entre la GPE y la puntuación total del MRPS. Modelos de regresión linear fueron utilizados para analizar las características de los pacientes que podrían predecir la satisfacción total. Se observó alta satisfacción con los cuidados fisioterapéuticos, siendo la media de puntuación total 4,5 puntos (DP=0,4). Se observó moderada correlación entre la satisfacción total y la GPE (coeficiente de Pearson -0,31, p<0,001). Solamente el género influenció la puntuación total de satisfacción; el género masculino presentó mayor satisfacción con los cuidados recibidos. El nivel de satisfacción del paciente con el tratamiento de fisioterapia recibido en la región Sudeste del Brasil es considerado alto.

Palabras clave | Fisioterapia; Satisfacción del Paciente; Ortopedia.

INTRODUCTION

Satisfaction has been used as an indicator of quality of care received in the health sector[1,2]. The current consensus is that satisfaction reflects the patient's perception regarding the quality of the service received[3]. As a concept, it is a broad theme, influenced by three factors: sociocultural values, therapist-patient interaction and environmental conditions of the service[4]. In the physiotherapy field, therapist-patient interaction tends to be more intense than in other health care professions, due to the nature of the physiotherapeutic treatment, divided into multiple scheduled sessions, in which the patient's satisfaction can be directly influenced[2,3,5-7].

Usually, satisfaction is measured through multidimensional questionnaires[2,3]. Different models of questionnaires were validated in several countries[2,7-9]. In Brazil, only two instruments were properly tested[6,8]. The instrument proposed by Moreira et al.[6] was developed for applicability only in the public health sector, and the instrument proposed by Mendonça and Guerra[8] was tested in the private health sector. Both studies, conducted in the northeastern region of Brazil, measured the satisfaction of the patient who receives physiotherapy care for different health conditions, such as, for example, patients with neurological, musculoskeletal, or cardiorespiratory disorders.

A new instrument, MRPS[5] (MedRisk instrument for measuring Patient Satisfaction), was developed to investigate the variables associated with the global satisfaction of patients receiving physiotherapy care for musculoskeletal conditions in public or private sectors. This instrument was previously translated and transculturally adapted into Brazilian Portuguese[7] and has already been used in some countries such as the United States of America and Australia, facilitating possible international comparisons[2,10-12].

Therefore, it is necessary to research patients' satisfaction level concerning the assistance of musculoskeletal physiotherapy in Brazil[6,8]. Therefore, the primary objective of this study was to evaluate the satisfaction of patients who received physiotherapy care for musculoskeletal conditions in the Southeast region of Brazil, using a previously validated instrument[7]. The secondary objectives were to verify the existence of a correlation between clinical improvement and patient satisfaction and to investigate which characteristics of the sample could predict patient satisfaction.

METHODOLOGY

Participants

This study counted with 403 patients, who were undergoing physiotherapy treatment for any musculoskeletal condition. Literate patients were recruited, aged between 18 and 80 years, with any musculoskeletal injury, at any stage of duration of symptoms. Patients were recruited, for convenience, in eight physiotherapy clinics (four were private and four were school clinics). These clinics were located in the cities of Belo Horizonte (four clinics) and São Paulo (four clinics). This study was approved by the Research Ethics Committees.

Instruments

Evaluation form

Participants' characteristics were collected through an evaluation form with questions related to demographic and anthropometric data, as well as information about the clinical situation of the participants, for example, the health condition being treated and the duration of the patient's symptoms.

MRPS (MedRisk instrument is measuring Patient Satisfaction)

The MRPS instrument[7] is a questionnaire containing 13 items, subdivided into three factors. Factor 1 is called Interpersonal, and contains six items related to therapist-patient interaction or the patient's interaction with other employees of the clinic. Factor 2 is called Convenience and Efficiency, and it is composed by three items such as the statement "The opening hours of this clinic were convenient for me." Factor 3 is called Patient Education, and has two items regarding the commitment of the physical therapist in raising awareness and educating their patients such as the statement "My physical therapist gave me detailed instructions about the home exercise program." Finally, the instrument has two items not allocated in specific factors, for being considered global items, for example, the statement "I would return to this clinic for future services"[7]. The patients answer their level of satisfaction for each item through a Likert-type scale ranging from 1 (I completely disagree) to 5 (I completely agree), in addition to the option "it does not apply", available for some statements. Higher scores represent higher satisfaction. This instrument was previously translated and transculturally adapted for the Brazilian population[7].

Global Perceived Effect Scale (GPE)

GPE[7] verifies the global impression of the patients' recovery, comparing the start of their symptoms with their current health condition. It is a Likert-type scale of 9 points[7], ranging from 1 (extremely better) to 9 (extremely worse), in which lower scores represent patients who were better and higher scores represent those that worsened after the beginning of the treatment.

Procedures

Potential participants were approached in the waiting room of physiotherapy clinics. Therefore, there was no interference in the treatments received by the patients. All patients received information about the objectives and procedures of the study and signed an informed consent form that guaranteed the confidentiality and anonymity of responses. Then, patients answered the evaluation form, the MRPS instrument and the GPE. All data were collected after patients had performed at least five sessions of physiotherapy. Thus, patients would have established opinions about their satisfaction regarding the received services.

Statistical Analysis

To analyze the participants' characteristics, the means (standard deviations - SD) were calculated from the continuous variables and the description of categorical data was calculated through numbers (percentages). To calculate the satisfaction of patients who received physiotherapy, means (SD) were calculated for each item of MRPS and for the total score of the questionnaire. Pearson correlation coefficients were calculated to investigate the association between GPE and the total score of the MRPS. To predict patient satisfaction, linear regression models were built.

RESULTS

A total of 403 patients were included in this study. We observed that 54.6% of the sample were women, with an average age of 50.5 (SD=16.7) years. Regarding the body area under treatment, 24.6% (N=99) of the patients had lumbar spine disorders, followed by 22.8% (N=92) with malfunctions in the hip and/or knee. The comprehensive features of these participants can be found in Table 1.

Chart 1 presents the means (SD) of patients' satisfaction for each item evaluated in the MRPS instrument along with the mean (SD) of the total score. In general, patients were satisfied with the physiotherapy care, showing an average of 4.5 (SD=0.4) of total score. We noticed that Factor 1, Interpersonal, showed the highest average 4.6 (SD=0.4) of total score. Followed by Factor 2, Convenience and Efficiency, with average point of 4.5 (SD=0.6); while Factor 3, Patient Education, presented the lowest average of 4.0 of total score (SD=1.1).

Table 1. Data concerning the characteristics of the participants (n=403)

Variables	N (%)
Gender	
Female	220 (54.6)
Male	183 (45.4)
Marital status	
Single	135 (33.5)
Married	197 (48.9)
Divorced	30 (7.4)
Widower	36 (8.9)
Not informed	5 (1.2)
Collection site	
Private clinics	195 (48.4)
School clinics	208 (51.6)
Time taken to get to the clinic	
Less than 15 minutes	111 (27.5)
from 16 to 30 minutes	104 (25.8)
From 31 to 60 minutes	121 (30.0)
Less than 60 minutes	67 (16.6)
Type of treatment	
Neck/Cervical	40 (9.9)
Lumbar Spine	99 (24.6)
Shoulder/Arm/Forearm	56 (13.9)
Hip/Knee	92 (22.8)
Ankle/Foot	41 (10.2)
Wrist/Hand	26 (6.5)
Other	49 (12.2)
Mean (SD)	
Age (years)	50.5 (16.7)
Weight (kilograms)	70.7 (12.3)
Height (meters)	1.7 (0.1)
BMI (kilograms/meter^2)	25.6 (4.1)

Categorical data are described by n (%), continuous data are described by the mean (standard deviation). BMI=body mass index

Data described in the Table are presented as mean (standard deviation). The score of each item of the questionnaire varies from 1 (completely dissatisfied) to 5 (completely satisfied). Chart 1. Patient satisfaction regarding the physiotherapeutic treatment received, measured through the MRPS instrument.

Chart 1. Patient satisfaction regarding the physiotherapeutic treatment received, measured through the MRPS instrument

Factor 1 – Interpersonal	Mean (standard deviation)
The receptionist was polite.	4.6 (0.69)
The registration process was adequate.	4.6 (0.72)
The waiting room was comfortable (lighting, temperature, furniture).	4.4 (0.78)
My physical therapist treated me respectfully.	4.8 (0.43)
The staff at the clinic were respectful	4.8 (0.50)
The clinic and its dependencies were clean.	4.6 (0.63)
Total score	4.6 (0.44)
Factor 2 – Convenience and efficiency	
The opening hours of this clinic were convenient for me.	4.6 (0.80)
My physical therapist explained carefully the treatments I received.	4.5 (0.93)
My physical therapist answered all my questions.	4.6 (0.81)
Total score	4.5 (0.60)
Factor 3 – Patient education	
My physical therapist advised me about ways to prevent future problems.	4.0 (1.25)
My physical therapist gave me detailed instructions about the home exercise program.	4.0 (1.34)
Total score	4.0 (1.14)
Global Items	
In general, I'm completely satisfied with the services I received from my physical therapist.	4.7 (0.51)
I would return to this clinic for future services or treatment.	4.8 (0.51)
Total score	4.54 (0.43)

Categorical data are described by n (%), continuous data are described by the mean (standard deviation). BMI=body mass index

We observed a negative and statistically significant correlation between GPE and the total score of the MRPS instrument and also between GPE and the two global items of MRPS instrument. Pearson correlation coefficient was -0.31 (p<0.001) for the total score of the MRPS instrument; -0.27 (p<0.001) for the item "In general, I am completely satisfied with the physiotherapy services"; and -0.17 (p=0.001) for the item "I would return to this clinic for future services or treatment." Although statistically significant, these estimates are considered to be from low to moderate in magnitude.

Among the traits evaluated, only gender was able to influence the level of satisfaction, and the male gender showed higher satisfaction with the care received, with beta coefficient = 0.09 point (95%CI 0.01 to 0.18), p=0.03.

DISCUSSION

The proposed objective of this study was to evaluate the satisfaction of 403 users of musculoskeletal physiotherapy services regarding the physiotherapeutic care received in the Southeast region of Brazil using the MRPS instrument. We observed that, in general, patient satisfaction was high regarding the received physiotherapy treatment. The items that presented the highest points were "My physical therapist treated me respectfully", "The clinical staff were respectful" and "I would return to this clinic for future services or treatment", presenting average points of 4.8 for each item. The items with lower scores, however, were "My physical therapist advised me about ways to avoid future problems" and "My physical therapist gave me detailed instructions about the home exercise program", both with an average of 4.0 points.

When separating the items of the MRPS instrument into three factors, as proposed in the validation of the instrument into Brazilian Portuguese[7], we identified that patients have higher levels of satisfaction on Factor 1, Interpersonal, which gathers items concerning therapist-patient interaction. This result is consistent with other studies already published, both in the national and international scenarios, since therapist-patient interaction is a strong predictor of satisfaction[2,3,5-8]. On the other hand, Factor 3, Patient Education, with items related to the commitment of the physical therapist to raise awareness and educate their patients, obtained the lowest averages. In contrast, a study that assessed the satisfaction of patients with musculoskeletal disorders through the MRPS instrument in the United States of America[12] obtained high levels of satisfaction for the items allocated in the Factor 3. This difference can be explained due to distinct populations that present different ways of conducting physiotherapeutic treatment.

The MRPS instrument has already been applied in patients from different countries, such as Australia[2], South Korea[11], Canada[13,14], United States of America[15], Ireland[3], England[16], and Sweden[17]. From this study, we observed that Brazil is the third country where patients report higher satisfaction with the care received in the physiotherapy sector for musculoskeletal conditions, with an average of 4.54 points of total score. The countries that presented the higher averages were: Canada, with 4.67 points[13]; and Australia, with 4.55 points[10]. Among these countries, coincidentally, the lowest average of satisfaction with 3.5 points was in Canada[14], but this study had a smaller sample size. It was possible to observe that Brazilian physical therapists, even though residing in a developing nation, offered a high quality service, when compared to developed countries such as the United States of America[15], Sweden[17], Ireland[3], England[16], and Canada[14] that showed smaller average points of 4.48; 4.40; 4.32; 3.77; and 3.50, respectively.

It is important to consider that patient satisfaction regarding the care received, as evaluated by MRPS, must be differentiated from the satisfaction with the clinical results obtained[5,7]. Conceptually, the first term describes the service that the patient receives during treatment. The second, however, refers to the treatment effect on the general state of health. These two constructs, although potentially tied to each other, are different and should be evaluated separately. It was possible to notice that the satisfaction related to the care received appears to be independent of the satisfaction with clinical results, due to the low magnitude of the correlation. This fact is consistent with other studies that applied the MRPS and that also showed low correlation between GPE and the global satisfaction items[7].

Comparing five demographic characteristics of the sample with the total score of the MRPS, we observed that only gender influenced satisfaction. Male patients were likely to report higher satisfaction with the care received. Our results are potentially linked to two studies that analyzed several factors that can influence the overall satisfaction[2,16]. In these studies, it was observed that although the term satisfaction and expectation of treatment are distinct, the expectation of clinical improvement for male patients was significantly higher compared to the female gender[2,16].

Summarizing the studies that have in common the satisfaction outcome, regardless of the health sector assessed, of the population or of the instrument used[2,5,6,8,9], the interviewees showed high satisfaction for the care received. This result is supported by the literature due the fact that satisfaction is a measure that

has a ceiling effect, making it difficult, therefore, to detect differences and important aspects that could influence or distinguish the different levels of satisfaction[18]. The possible reason in measuring satisfaction for the ceiling effect is the distribution of questionnaires, in which, the wider the question, smaller was the ability to specify the level of satisfaction[18].

It is important to highlight, as a limitation of this study, that the results cannot be generalized to all physiotherapeutic areas, it represents only patients who were undergoing treatment for musculoskeletal conditions. This happened because the questionnaire had been prepared and validated to the Brazilian population only in the musculoskeletal physiotherapy field, being necessary a new validation with adaptations for neurology patients or hospitalized ones to whom other aspects can be recommended to measure satisfaction. At the end of this study, we obtained means to assist physical therapists working in the musculoskeletal area to improve the provision of their services, in which, although the level of satisfaction presents the ceiling effect when evaluated, we identified that if the instrument is applied in private, public clinics and clinic schools the weakest points of these clinics can be identified, making future investments for local improvements close to the perception of the patient.

CONCLUSION

The satisfaction of users of musculoskeletal physiotherapy service in private clinics and clinic schools, in the southeast region of Brazil can be considered high, getting almost the maximum mean. In addition, we observed that the clinical improvement of the patient is not correlated with their level of satisfaction regarding the care received. And finally, male patients seemed to be more satisfied.

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