



Aptitude and clinical diagnostic attitude of the family doctors on low back pain based on the clinical practice guide

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ABSTRACT

Non-specific lumbar pain has become a public health problem worldwide and is so far one of the leading causes of work absenteeism. The knowledge, attitudes and beliefs of first-level physicians influence the course of the back pain of their patients; there are guidelines designed to improve the efficiency and quality of lumbar pain care. The main objective of this research was to determine the aptitude and clinical diagnostic attitude of family physicians on low back pain based on clinical practice guidelines. An observational, prospective, descriptive and transversal study was carried out in the FMU 2 Puebla, with a sample of forty-six (46) family physicians. Prior to authorization of the participant, two instruments were applied, one of attitudes (abs-mp) and another of aptitudes which was designed and validated. A total of thirty-three (33) doctors surveyed were obtained, eighteen (18) women (54.4%) and fifteen (15) men (45.5%), while 97% know the Clinical Practice Guide and use it in 75%, the attitude was good, the fitness was regular by 80%, low by 16% and high by 4%; the internal consistency of the validated instrument obtained a reliability value of 0.97 with the Kuder Richardson 20 test. Despite the broad knowledge about the existence of the Clinical Practice Guidelines, the aptitude is based on experience and own criteria. The attitude was good, recognizing the psychosocial aspects and reactivation as the main objective in the treatment of low back pain.

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INTRODUCTION

Low back pain is defined as pain located in the lumbar spine starting from L1 to L5; it may or may not be irradiated to both pelvic extremities and compromise musculoskeletal structures, which can cause functional limitations that hinder the activities of daily life (Pérez et al., 2016).

Non-specific low back pain has become a public health problem worldwide and is one of the leading causes of work absenteeism, which translates into a great impact on the economy of the country (Peña et al., 2002). In the Mexican Institute of Social Security (IMSS), it is the eighth cause of consultation with the family doctor, registering a total of 907,552 consultations in the first level of care (Clinical practice guide, 2016). Clinical practice guidelines are a national reference based on systematic reviews, which are used as support for decision making in clinical

practice, with the aim of optimizing health care.

However, Finestone (2009) mentioned that although the guides on the management and treatment of non-specific lumbar pain are widely distributed in medical journals, it is not an effective method of dissemination. It also recognizes the need for different guidance programs on the knowledge of the guidelines, since doctors are not aware of the current recommendations for the management of low back pain. Other researchers evaluated and studied the attitudes, beliefs and perceptions of doctors who provide care to patients with low back pain and its impact on the evolution of the pathology. For example, Magalhaães (2012) concluded that there is an association between the attitudes and beliefs of physicians and clinical decisions, which have an impact on the patient's recovery.

Bansal et al. (2016) defined the word "Attitude" as a way

of doing something in terms of what one thinks is right. Be the attitude we have, we tend to behave in a certain way towards a person, object or condition, therefore, attitudes will always have a positive and negative aspect. This act of doing and thinking can affect the way of working with our patients; likewise, it can condition the treatments and the follow-up that we give to each patient. Beliefs and attitudes about the management of low back pain play an important role, since the course of the disease can be modified against the patient, thereby resulting in a chronic back pain that will end in a disability.

Pincus (2006) developed and tested an instrument "The attitudes to Back PainScale" (ABS-mp) with the objective of studying the beliefs and attitudes about low back pain of different professionals specialized in the musculoskeletal system; the focus of the scale was inspired by the most relevant issues obtained in interviews with different doctors. One of the topics was the attitudes of professionals when making a clinical decision in real life, such as continuing with the treatment despite the lack of improvement. The personal interaction factor reflects the process of care that is predicted to influence the way of practice and decisions about treatment time. The psychosocial factor focuses on the need to investigate the affective side of the patient. The internal structure has an acceptable psychometric property and good validity.

Another variable studied by the researchers is the clinical aptitude, which is understood according to Casas et al (2014) 8 as "Ability to face and solve clinical problems from the identification of signs and symptoms with the use of diagnostic and therapeutic resources; which implies skills such as reflection, for which reason clinical aptitude represents a quantitative indicator more attached to the objectivity of medical evaluation". One of the best techniques for the evaluation of clinical aptitude is through real clinical cases, in which the evaluated subject responds according to his criteria the correct answers to the clinical situation assigned to him.

The present research work was carried out in family physicians of the UMF number 2, of the Mexican Institute of Social Security (IMSS), with the purpose of evaluating the clinical and diagnostic attitude and aptitude in the cases of lumbar pain, as well as, evaluating the adherence to the Clinical Practice Guideline on low back pain, because at present this is one of the entities of greater frequency and socio-economic impact, in addition to the wide variability in medical management.

MATERIALS AND METHODS

Design

An observational, descriptive, prospective and cross-sectional study was carried out in the Family Medicine Unit number 2 of the IMSS, Puebla, from the month of June, 2016 to November, 2017.

Participants

The subjects were forty-six (46) doctors assigned to the medical unit of both sexes, and of the two shifts (morning and evening). The inclusion criteria were all the family doctors of the UMF2 who wished to participate in the research. Exclusion criteria involved eventual physicians. Elimination criteria include questionnaires that were not 100% completed. The sampling used was at the convenience of the study.

Instruments

Prior to informed consent two instruments were applied, one of attitudes (ABS-mp) and another of skills, designed and validated. The first questionnaire (ABS-mp) covers two aspects, the first "personal interaction" which is made up of 4 dimensions which includes: limited sessions (4 items), psychological (4 items), connection with the health system (3 items), trust and concern (2 items); and the second "treatment orientation" which includes two dimensions: reactivation (3 items) and biomedical (3 items). It consists of 19 items in total, whose resolution is by a Likert scale of 7 points, with an acceptable reliability Cronbach Alpha of 0.91.

To assess fitness, an instrument was designed with five real clinical cases of patients with lumbar pathology. The instrument consisted of 100 items. The response options were true, false and I do not know. The value of each correct answer was: plus one point, each incorrect answer minus one point, and answers classified as I do not know, no points were added or subtracted. The final grade was obtained by subtracting the number of incorrect answers from the number of correct answers. The evaluation instrument explored five indicators: integration of differential diagnoses (21 items), identification of alarm signs (20 items), use of therapeutic resources (19 items), adequate use of diagnostic resources (20 items) and expected complications (20 items).

To check its validity, content and construct, the instrument was subjected to five rounds of review by six experts, 3 orthopedic doctors and 3 methodological. Adjustments were made to the instrument in accordance with the observations and recommendations issued regarding the drafting of clinical cases, indicators and items. A pilot test was carried out with 10 family medicine residents of the third year. They were invited to participate and the purpose of their participation in the study was explained to them. To determine the reliability of the instrument, we used the formula of Kuder Richardson 20 and to determine the answers by chance, the Pérez-Padilla and Viniestra formula was used.

RESULTS

The final population was integrated by thirty-three (33)

Table 1: Indicators used in the aptitude questionnaire, with average success.

Indicator	Number of items	Average percentage of correct answers (%)
Integration differential diagnostics	21	76.0
Identification of alarm signs	20	87.8
Utilization of therapeutic resources	19	83.1
Proper use of diagnostic resources	20	86.4
Expected complications	20	94.3
Total	100	

Table 2: Results of the survey of attitudes indicating the result by dimension.

Attitudes	Media
Limited Sessions (SL)	13.84
Psychological (P)	18.90
Connection with the health system (CSS)	14.12
Confidence (trust) and concern (CP)	8.33
Reactivation (RA)	18.75
Biomedical (BM)	16.15

Table 3: Ranks on the scale of attitudes for low back pain.

Dimensión	Range	In agreement	Neutral	Disagreement
SL, P	4-28	19-28	10-18	<9
CSS, RA, BM	3-21	15-21	8-14	<7
CP	2-14	11-14	6-10	<5

family doctors assigned to the family medical unit number 2 of the IMSS, with an average age of 42 years, with a predominance of the female sex in 55%. The percentage distribution of those who are aware of the existence of the Clinical Practice Guideline was 97%, while 3% did not know of its existence. They were asked about the use of CPG in their daily clinical practice and 75% responded that they use it regularly. Based on the formula of Kuder Richardson 20, an internal consistency of the instrument of 0.97 was obtained. The application of the Pérez-Padilla and Viniestra test translated 11 possible responses expected by chance. With this, the degree of clinical aptitude was classified into 5 groups: low (12 to 34), regular (35 to 57), high (58 to 80), very high (> 80) and random (<11). 80% of family doctors were in regular skills, while in 16% low and only 4% had a high aptitude. None reached the level of very high.

Regarding the dimensions questioned with respect to the aptitudes, the greatest number of correct answers was in expected complications, followed by identification of warning signs (Table 1). Regarding the assessment of attitudes, two dimensions obtained the highest score, which were: psychological and reactivation. Table 2 shows the means of the dimensions of attitudes, while Table 3 depicts

the normal range for each dimension.

DISCUSSION

The use of problematic real clinical cases in the elaboration of the instrument is relevant, since it allows visualizing the way in which the specialist doctor uses his criteria and decisions to face a frequent situation of his daily assistance practice. The fitness and clinical attitude is a key in the development of all medical professionals, hence, the family physician as a specialist of first level of care should be the basis of health systems. With the obtained results we can approach the reality; the practice guides are instruments based on clinical evidence that support the doctors to avoid inefficient treatments and the optimization of resources since costs and disability times are reduced; finally, only 75% of the study group used the clinical practice guide.

This percentage is similar to what was found by Epstein (2017), when a study was conducted with 86 first level physicians to evaluate the knowledge of the guidelines on low back pain, the willingness to implement them and the agreement between attitudes and beliefs on low back pain.

The results showed a greater level of knowledge of the guides of the family physicians on the general practitioners, while in the attitudes the general practitioners obtained a higher level on the HC-PARIS scale. Despite sufficient knowledge, half of the first level doctors reported that they do not use the guidelines on low back pain, another 50% have attitudes and beliefs that do not fit with the biopsychosocial model based on the guidelines. In addition, no significant relationship was found among first-level professionals with knowledge of the guidelines and readiness to read them. Thus, the implementation of accepted international guidelines for low back pain is low among physicians despite relatively high knowledge about this pathology.

The clinical aptitude of the Family Physicians reflects that despite the daily experience of their actions before the patient, one does not develop the necessary capacities for the resolution of the cases in their daily practice due to the disassociation of theory and practice of traditional education, as mentioned by Baldomero (2007) in a study as to what exacerbates the routine and little reflection on his medical performance. These results allow us to observe the need for continuous training on clinical practice guidelines (CPG), through real clinical cases to promote the development of skills in the first contact physician. Applying this instrument can sensitize physicians in the management of patients with low back pain and perform the search of the CPG for their knowledge and attachment.

Similar to what we find, in a study conducted by Valjakka (2013), who studied the relationship between the doctors' attitudes about low back pain and its treatment, as well as, the attachment to the lumbar pain guidelines, found that attitudes were directed towards a psychosocial approach in 87% of its population, recognizing the need to evaluate the psychological and social aspects of its patients. Regarding the use of the guidelines, an excess in the use of imaging studies in the process of studying this pathology was recorded; the identification of red flags or alarm flags and the orientation of the patient are not used as treatment options. All this suggests that there is only a partial adherence with the lumbar pain guidelines.

With regard to the attitudes of physicians to patients with low back pain, we observed that most have a neutral position on limiting the duration of treatment and in the psychological dimension the vast majority has a willingness to be involved with the psychological problems or factors of their patients; in the third dimension, they feel identified and supported by the health system and the provision of services available at a third level. In the fourth dimension on trust and concern they obtained a neutral attitude, however, there is concern about the quality of treatment received by the patients they refer. In the penultimate dimension, which obtained one of the highest scores, family doctors recognize as one of the main objectives the reactivation of the daily activities of their patients, as well as, improving mobility and fast return to work.

Regarding the last dimension called biomedical, family doctors tend to recommend the care of their back to their patients, similarly, they have the belief that there is an underlying organic cause for the pain; however, they do not recommend the restriction of daily activities.

In general, the attitude of the family doctors was good, recognizing the importance of psychosocial and not only structural aspects of low back pain, showing an attachment and concern about reintegration to work activities, preventive measures and reactivation.

In the same way, Pincus (2007) studied the attitudes of three groups of professionals, who were chiropractors, osteopaths and physiotherapists, who played an important role in the care of patients with low back pain; the researchers used the ABS- mp "The attitudes to back pain scale for musculoskeletal practitioners", with a total of 900 subjects, and after making the corresponding analysis, concluded that the 3 groups of professionals endorse a psychosocial approach to treatment and its main objective is the reactivation of activities.

There are several publications that defend the position of the attitudes and beliefs of different health professionals and this has a very important influence on clinical behavior and may even affect the course of the disease, being an important factor for chronicity or the success of low back pain. Ostelo (2003) developed a tool which attempts to evaluate the strength of two possible orientations for the management of patients with chronic low back pain, the items were based on existing questionnaires (scale of kinesophobia TSK, questionnaire of beliefs about back BBQ, questionnaires about beliefs of fear avoidance FABQ). It consists of two scales, one biomedical and another biopsychosocial, the final scale was 19 items, 10 in the biomedical sub-scale and 9 in the biopsychosocial sub-scale. The results obtained suggest that most physiotherapists believe that chronic low back pain is not a serious condition and that physical activity should not be restricted in patients; they also recognize that the therapy can completely relieve functional discomfort. It is important to know that the attitudes and beliefs of patients with non-specific chronic low back pain are influenced by past pain experiences, social and economic factors. However, these beliefs are strengthened if the same beliefs are found in their doctors. He also mentioned that doctors have a wide range of attitudes and beliefs related to pain and these seem to be related to the treatment they give their patients.

Gardner (2017) carried out a systematic review; quantitative and qualitative studies were included in the discussion on the association between the attitudes and beliefs of physiotherapists on chronic low back pain and their clinical management. Ten works were included, five quantitative and five qualitative. The quantitative studies showed that a biomedical orientation was associated with the advice to delay the return to work and daily activities, as well as, the belief that returning to perform their work is bad and of bad prognosis for the patient. Scores on the fear

avoidance scale were positively correlated with the previous tips to avoid returning to work and daily activities, and increase sick leave certificate.

On the other hand, qualitative studies obtained two main factors attributed to the beliefs and attitudes of the physiotherapists which influenced the management of chronic low back pain; these two factors were treatment orientation and factors attributed to the patient. Both studies show that the orientation of treatment is directly related to clinical practice in chronic back pain.

Ruiz (2014) analyzed the knowledge and attitudes of physicians based on the clinical practice guide, with a total population of 56 respondents and concluded that 80% attend to patients with low back pain, however, the approach was done according to their criteria and personal experience, leaving aside the consultation of the CPG and in terms of knowledge of the pathology, they obtained a low level with less than 50% of the total score. As far as attitudes are concerned, similar to our work, a positive attitude was obtained in the psychological question, in the connection with the health system and in the reintegration to their work and daily activities. It is very important for the dissemination of CPGs, and positive attitudes for the benefit of an adequate and evidence-based treatment.

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