Preparation of the Map of Health Empathy in the Patient's Perception (MES-PP)

Elaboração do Mapa da Empatia em Saúde na Percepção do Paciente (MES-PP)

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ABSTRACT

Introduction: The relationship between self-assessed empathetic capacity and the physicians' empathetic behaviors correlates poorly or not at all with patients' perspectives on the aspect of doctor-patient interactions. Thus, any assessment of doctor's empathy must consider the patients' perspectives. This allows a more concrete understanding of the doctor-patient interaction.

Objective: To develop an instrument based on the Health Empathy Map (HEM) to evaluate the empathetic care of medical students from the patient's perspective.

Method: This is a study with a qualitative and descriptive approach aimed to construct an instrument capable of evaluating the clinical empathy of medical students, from the patient's perspective. The Study consisted of three phases: 1. Preparation of the Health Empathy Map according to the patient's perception (HEM-PP): adaptation of the Health Empathy Map (HEM); 2. Adequacy of the instrument content: using the expert panel technique; 3. Assessment of the degree of clarity and feasibility of the instrument in the target population in the learning scenario: distribution to patients in the outpatient setting.

Results: The adequacy of the instrument to be used by patients, in health teaching scenarios, took into consideration the conceptual pillars of empathy – perspective taking, emotional sharing and empathetic concern – as well as the experts' suggestions and the pre-tests carried out with patients. All suggestions were debated by the researchers and accepted, after a consensus that they indicated advances and improvements to the instrument, allowing its use by patients in health learning scenarios. The final version of the HEM-PP has 4 quadrants containing closed questions/emojis addressing the patient's feelings and needs regarding the clinical picture, as well as the health professional's perception and conduct in relation to the biomedical, affective and social aspects.

Conclusion: The final version of the Health Empathy Map from the Patient's Perception (HEM-PP) proved to be easy to understand and apply in the context of care teaching and was considered by the participants in the different phases of the study to be an educational tool with great instructional potential regarding the development of empathy, in the clinical learning scenario.

Keywords: Education, Medical; Empathy; Doctor-Patient Relationship.

RESUMO

Introdução: A capacidade empática autoavaliada e os comportamentos empáticos dos médicos se correlacionam mal ou não se correlacionam com as perspectivas dos pacientes sobre o aspecto das interações médico-paciente. Assim, qualquer avaliação da empatia do médico deve considerar as perspectivas dos pacientes. Isso permite uma compreensão mais concreta da interação médico-paciente.

Objetivo: Este estudo teve como objetivo elaborar um instrumento baseado no Mapa da Empatia em Saúde (MES) para avaliação do atendimento empático do estudante de medicina na perspectiva do paciente.

Método: Trata-se de um estudo de abordagem qualitativa e descritiva para construção de um instrumento capaz de avaliar a empatia clínica de estudantes de Medicina na perspectiva do paciente. O estudo teve três fases: 1. elaboração do Mapa da Empatia em Saúde na Percepção do Paciente (MES-PP): adaptação do MES; 2. adequação do conteúdo do instrumento: utilizando a técnica de painel de especialistas; 3. avaliação do grau de clareza e da exequibilidade do instrumento na população-alvo, no cenário de aprendizagem: distribuição para pacientes no cenário ambulatorial.

Resultado: A adequação do instrumento para ser utilizado pelos pacientes, nos cenários de ensino em saúde, levou em consideração os pilares conceituais da empatia – tomada de perspectiva, compartilhamento emocional e preocupação empática –, bem como as sugestões dos especialistas e os pré-testes realizados com pacientes. Todas as sugestões foram debatidas pelos pesquisadores e acatadas, após consenso de que indicavam avanços e melhorias do instrumento, no sentido de viabilizar a utilização pelos pacientes em cenários de aprendizagem em saúde. A versão final do MES-PP apresenta quatro quadrantes contendo questões fechadas/emojis abordando os sentimentos e as necessidades do paciente perante o quadro clínico, bem como a percepção e a conduta do profissional de saúde em relação aos aspectos biomédicos, afetivos e sociais.

Conclusão: A versão final do MES-PP mostrou-se de fácil entendimento e aplicação no contexto do ensino assistencial e foi considerada pelos participantes das diferentes fases do estudo uma ferramenta educacional com grande potencial instrucional no que tange ao desenvolvimento de empatia, no cenário de aprendizagem clínica.

Palavras-chave: Educação Médica; Empatia; Relação Médico-Paciente.

INTRODUCTION

Empathy has a multidimensional concept, which implies affective, cognitive, behavioral, and moral components[1,2]. Frequently studied today, "it consists in the capacity to perceive and understand the perspective of the other, as well as to feel their emotional state" and it can be learned[3,4]. Clinical empathy can be understood as a medical competence to understand the patient's context, perspective, and feelings; communicate this understanding, verify it and act on it in a therapeutic way[5,6].

Empathy can be measured from three different perspectives: self-assessment (assessment of empathy through standardized questionnaires completed by the subjects), observer's rating (standardized assessments by an observer to rate empathy in interactions between health care personnel and patients), and patient evaluation (use of questionnaires handed to patients to assess the health care provider's empathy during clinical care)[7]. Many of these tools have limited scope for predicting the presence or absence of empathy in clinical settings. The most common methods for this measurement are based on students' self-reporting, which does not necessarily correspond to the behavior[1].

The relationship between self-assessed empathetic capacity and physicians' empathetic behaviors correlate poorly or do not correlate with the patients' perspectives on the aspect of doctor-patient interactions[6]. Studies indicate an asymmetry in this relationship, with disagreements between the perception of doctors and patients in relation to the reported disorders, disregard of psychiatric and psychosocial aspects[8] as well as about the professional's empathetic behavior[9,10]. Doctors' views of their own empathy can be incorrect at worst and biased at best. A study carried out by Cançado (2020)[11] observed that resident physicians tended to have a more negative view of the consultation than their patients.

Thus, any assessment of doctor's empathy must consider the patients' perspectives, thus allowing a more concrete understanding of the doctor-patient interaction[12].

The literature shows that instruments that consider the evaluation of the patient's perception in comparison to the doctor's self-report are more relevant to measure empathy, hence the importance of including the patient in the process of evaluating the received empathy[13].

Educational activities that promote self-awareness and listening skills are important in the development of empathetic clinicians. Professional training should help students deal with the moral conflicts of medical practice[14]. In this sense, the development of an instrument that can identify empathy in clinical practice, from the patient's point of view, is essential to stimulate the reflection of both the student and the teacher on the subject, allowing the improvement and humanization of the doctor-patient relationship.

The objective of this study was to develop an instrument to assess the empathetic behavior of medical students perceived by the patient called: Health Empathy Map from the Patient's Perception (HEM-PP).

METHOD

This is a study with a qualitative and descriptive approach to build an instrument capable of assessing medical students' empathy in the clinical learning scenario, from the patient's perspective.

The study consisted of 3 phases:

Phase 1: Creation of the Health Empathy Map from the patient's perception (HEM-PP):

The creation of the instrument was guided by the components related to the capacity of empathy, favoring the rescue of affective and cognitive elements during teaching activities in health. Based on theoretical aspects and validated instruments mentioned in the literature, which have similar objectives, such as the Jefferson Scale of Empathy (JSE) for the patient[15] and the CARE scale[16], the Health Empathy Map (HEM), developed by Peixoto and Moura (2020), was adapted[3] for the patient's view of the health professional's empathetic ability, in the scenario of teaching and outpatient clinical practice.

Phase 2: Adequacy of the instrument content

The Expert Panel technique was used for content validity, allowing opinions to be added to the creation of the instrument in a constructive, but not definitive, way to validate the proposed instrument[17].

The meeting started with a brief presentation of the research project, objectives of the meeting, definition of empathy and its components and the dynamics of the work operation. The participating experts signed the free and informed consent form (FICF) and filled out a sociodemographic questionnaire with the following data: age, gender, graduation, time since graduation, time in clinical practice, time of experience as a teacher, area of work and academic title. After completing the questionnaire, the HEM and the version of the Health Empathy Map from the patient's perception (HEM-PP) were presented. The guests were then instructed to individually evaluate the items of the HEM-PP considering the semantics, content, pertinence, feasibility and need for inclusion or exclusion of the item. Subsequently, a plenary session was held to discuss the content of the items and evaluate the relevance between the researchers and the invited experts. The discussion was coordinated by a moderator (researcher) and all suggestions presented were noted by a draftsperson for further analysis by the researchers.

Phase 3 Assessment of the clarity and feasibility of the instrument in the target population in the learning setting

For this evaluation, one of the researchers invited a group of patients cared by students attending the 9th semester of medical school from a private educational institution shortly after the end of the consultation. Those who accepted, read and signed the FICF were instructed to answer a sociodemographic questionnaire, and subsequently, the HEM-PP. These printed questionnaires were administered in a private room, where the patient was reminded that they could interrupt their participation at any time. Those who were illiterate were allowed to answer after the questionnaire and the instrument were read by the researcher. The instrument was applied randomly, by convenience.

Ethical considerations: The project was forwarded to the Research Ethics Committee, having received a favorable Opinion – Certificate of Presentation for Ethical Appreciation (CAAE) N. 50991321.3.0000.5143 and Opinion n. 4.997.082.

RESULTS

In the first phase of the study, the HEM was adapted to be answered by the patient, as described below:

In the instruction: The words: "After performing the service, fill out the Health Empathy Map. Record your impressions and feelings about this person's current situation" were replaced by "After receiving care, fill out the Patient's Empathetic Perception Map in the numerical order that is presented. Record your impressions and feelings about the service".

The question in quadrant 1: "What would you feel if you were in this person's place? (perspective taking)" was changed to "What do you think the person who assisted you noticed about your feelings at the time of the consultation?". This quadrant aims to assess whether the patient felt that the professional put themselves in the patient's place and communicated this in some way.

The question in quadrant 2: "What is your perception of this person's current and future needs and wants? (perspective taking)" was changed to "What do you think the person who assisted you noticed about your needs and desires, current and future?". This quadrant aims to assess whether the patient felt that the professional took their perspective and understood their needs.

The question in quadrant 3: "How do I feel knowing this person's story? (Emotional sharing)" was changed to "What do you think the person who assisted you felt when they heard your story?". This quadrant aims to evaluate empathetic resonance, whether the patient perceived that the professional had emotional contagion or not.

The question in quadrant 4: "How can I help this person? (empathetic concern)" was changed to "What did the person who assisted you propose to help you?". This quadrant aims to assess whether the patient identified the professional's performance regarding their needs.

At the end, six illustrations featuring emojis with the most common feelings/emotions were placed so that the patient could choose the one that they thought predominated in the professional who provided the care: joy, sadness, fear, surprise, anger, indifference, and then complete the central emoji with the perception of the professional's feelings.

This version was submitted to content and feasibility analysis, using the expert panel technique (Phase 2). The meeting was held online, lasting two hours, on a date that suited all participants. The group consisted of eight specialists. The participants were characterized by being: 87.5% female; with a mean age of 49 years (ranging from 23 to 57 years), comprising 4 doctors, 2 pedagogues, 1 nurse and 1 psychologist; with an average time since graduation of 28.0 ± 5.0 years. The experts evaluated each item, considering semantics, pertinence and feasibility. All suggestions were debated until a consensus was reached by the participants. The suggested changes are described in Table 1.

The second version was submitted to a pre-test with five patients and it was verified that they had difficulties in answering the open questions.

In quadrant 1, which contained an open-ended question about what the professional understood of their feelings, very vague answers were obtained ("understood well", "understood that there was something wrong", "that they needed a consultation"). In quadrant 2, the patients had difficulty answering about their needs and desires. In quadrant 3, it was observed that there was difficulty in defining the feeling. In quadrant 4, patients were often limited to addressing only the biomedical issue of health. Thus, after a meeting among the researchers, it was decided to modify the instrument design, which now has the quadrants ordered by rows instead of columns. The instruction was modified to better clarify the instrument purpose and the way to fill it out. The answers were changed from open to closed answers, to facilitate its completion by the patient. The changes are described in Table 2.

Table 1. Changes to the Health Empathy Map from the Patient's Perception suggested by the specialists in the panel of experts.

Items	Version 1	Version 2
Introduction	"After receiving care, fill out the Patient's Empathetic Perception Map in the numerical order presented. Record your impressions and feelings about the service"	"This instrument aims, through your opinion, to improve the quality of consultation. After receiving care, fill out the Patient's Empathetic Perception Map in the numerical order presented. Record your impressions and feelings about the consultation".
Quadrant 1	"What do you think the person who assisted you noticed in relation to your feelings at the time of the consultation?"	What did the professional comprehend/understand about your feelings at the consultation?"
Quadrant 2	"What do you think the person who assisted you noticed about your needs and desires, current and future?".	What did the professional perceive of your needs, emotions and desires during the consultation?
Quadrant 3	"What do you think the person who assisted you felt when they learned about your story?"	What do you think the professional who assisted you felt when they learned about your story?
Quadrant 4	"What did the person who assisted you propose to help you?".	How did this professional who assisted you manage to help you?
Emojis	joy, sadness, fear, surprise, anger, indifference	Satisfaction, sadness, concern, surprise, impatience, indifference, and a blank one

Source: Study data.

Table 2. Changes in the HEM-PP (version 2) after pre-testing with patients.

Items	Version 2	Version 3
Introduction	"This instrument aims, through your opinion, to improve the quality of consultation. After receiving care, fill out the Patient's Empathetic Perception Map in the numerical order presented. Record your impressions and feelings about the consultation".	This instrument aims to assess the professional's empathy during the consultation. Fill out the questions below, reporting the impression you have about your needs and feelings about your disease and about the professional's care. Your opinion is very important, because with it we can improve the service provided to patients. Thank you for your cooperation.
Quadrant 1	What did the professional comprehend/understand of your feelings in the consultation?"	What are you feeling about your health condition? (Mark one or more faces that represent your feelings) Joy; sadness, fear; surprise; anger; indifference Do you think the professional was able to perceive these feelings? ( ) no ( ) yes, perceived little ( ) yes, perceived a lot
Quadrant 2	What did the professional perceive of your needs, emotions and desires during the consultation?	Regarding what motivated you to seek care, what are your needs and desires? (Check one or more options) ( ) Disease ( ) Feeling (e.g., sadness, distress, anxiety, fear, among others) ( ) Family aspects/Social life Do you think the professional identified your needs and desires during the consultation? ( ) no ( ) yes, little ( ) yes, a lot
Quadrant 3	What do you think the professional who assisted you felt when they learned about your story?	What do you think the professional felt when they learned about your story? (mark the face that best expresses this feeling) Satisfaction; sadness; concern; surprise; impatience; indifference; other
Quadrant 4	How did this professional who assisted you manage to help you?	How did the professional who assisted you manage to help you? ( ) addressed your illness ( ) addressed your feelings ( ) addressed aspects related to your family and social life Did the consultation meet your expectations? ( ) not ( ) little ( ) partially ( ) very much
Emojis at the end	Satisfaction, sadness, concern, surprise, impatience, indifference, and a blank one	They were removed

Source: Study data.

After the completion of the third version, a new pre-test was carried out with 10 more patients in a learning scenario. It was observed that the patients had difficulty in describing feelings that were not included among the options and were, however, frequent. The researchers, based on the suggestions of some patients, added the feelings/emotions of Anxiety/Distress and Hopeful in Quadrant 1. In Quadrant 2, patients continued to struggle to understand the words "needs" and "wants" in a consultation, despite the options. The researchers concluded that the question was long and could be further refined to facilitate understanding, and that these words should be excluded from the first question, leaving only the second question asking whether or not they were identified. Thus, the fourth and final version of the HEM-PP was prepared, with the modifications described in Table 3.

The final version of the HEM-PP (Figure 1) was applied to 40 patients assisted by 9th-semester medical students at a private educational institution, in the family health internship, during the months of August and September 2022. After signing the free and informed consent form and completing the sociodemographic questionnaire, the patients completed the HEM-PP immediately after the consultation. During the application of the last version of the HEM-PP, the patients were able to fill out the instrument easily, demonstrated understanding of the items and showed themselves to be respected.

Table 3. Modifications of the HEM-PP (version 3) after pre-testing with patients.

Items	Version 3	Version 4
Introduction	This instrument aims to assess the professional's empathy during the consultation. Fill out the questions below, reporting the impression you have about your needs and feelings in relation to your disease and about the professional's care. Your opinion is very important, because with it we can improve the service provided to patients. Thank you for your cooperation.	There were no changes
Quadrant 1	What are you feeling about your health condition? (Mark one or more faces that represent your feelings) Joy; sadness, fear; surprise; anger; indifference Do you think the professional was able to perceive these feelings? ( ) no ( ) yes, they perceived a little ( ) yes, they perceived a lot	The following feelings were added: anxiety/distress and hopeful
Quadrant 2	Regarding what motivated you to seek care, what are your needs and wants? (Check one or more options) ( ) Illness ( ) Feeling (e.g., sadness, distress, anxiety, fear, among others) ( ) Family aspects/Social life Do you think the professional identified your needs and wants during the consultation? ( ) no ( ) yes, a little ( ) yes, a lot	What do you expect the professional to address during your care? (Check one or more options) ( ) your illness ( ) your feelings (e.g. sadness, distress, anxiety, fear...) ( ) your family issues Do you think the professional identified your needs and wants during the consultation? ( ) no ( ) yes, a little ( ) yes, a lot
Quadrant 3	What do you think the professional felt when they learned about your story? (mark the face that best expresses this feeling) Satisfaction; sadness; concern; surprise; impatience; indifference; other	There were no changes
Quadrant 4	How did the professional who assisted you manage to help you? ( ) addressed your illness ( ) addressed your feelings ( ) addressed aspects related to your family and social life Did the consultation meet your expectations? ( ) not ( ) a little ( ) partially ( ) very much	There were no changes
Emojis at the end	They were removed	There were no changes

Source: Study data.

Figure 1. Health Empathy Map from the patient's perception (HEM-PP).

Patient Empathetic Perception Map (HEM-PP)

Name (initials):   **Age:**   **Gender:**   **Date: ___/___/___**

> **Instructions:** This instrument aims to assess the professional's empathy during the consultation. Fill out the questions below, reporting the impression you have about your needs and feelings in relation to your disease and about the professional's care. Your opinion is very important, because with it we can improve the service provided to patients. Thank you for your cooperation.

WHAT ARE YOU FEELING ABOUT YOUR HEALTH CONDITION?
(Mark one or more faces that represent your feelings)

Joy   Sadness   Fear   Surprise   Anger   Indifference

DO YOU THINK THE PROFESSIONAL WAS ABLE TO PERCEIVE THESE FEELINGS?

( ) No ( ) Yes, a little ( ) Yes, a lot

REGARDING WHAT MOTIVATED YOU TO SEEK CARE, WHAT ARE YOUR NEEDS AND WANTS?
(Check one or more options)

( ) Disease ( ) Feelings (Example: sadness, distress, anxiety, fear, among others)
( ) Family aspects/Social life

DO YOU THINK THE PROFESSIONAL IDENTIFIED YOUR NEEDS AND WANTS DURING THE CONSULTATION?
( ) No ( ) Yes, a little ( ) Yes, a lot

WHAT DO YOU THINK THE PROFESSIONAL FELT WHEN THEY LEARNED ABOUT YOUR STORY?
(Mark the face that best expresses this feeling)

Satisfaction   Sadness   Concern   Surprise   Impatience   Indifference

HOW DID THE PROFESSIONAL WHO ASSISTED YOU HELP YOU?

( ) Addressed your illness
( ) Addressed your feelings
( ) Addressed aspects related to your family and social life
DID THE CONSULTATION MEET YOUR EXPECTATIONS?

( ) Not ( ) a Little ( ) Partially ( ) Very much

Source: Study data.

DISCUSSION

This study is part of a line of research that seeks to develop instruments that facilitate or stimulate the development of empathy in the clinical learning scenario and aimed to develop and validate an instrument capable of identifying the patient's perception of the empathetic behavior of medical students during clinical care.

To achieve the proposed objective, different methodological strategies were used. Initially, a qualitative stage was carried out, which consisted of a review of the national and international literature on instruments used to assess the patient's perception of the care received by them. Among the instruments developed for this purpose, we identified the CARE (Consultation and Relational Empathy) scale, which was validated to be used in primary care consultations; and the Jefferson Scale of Patient's Perceptions of Physician Empathy. These two scales only assess the patient's perception of medical conduct in the context of clinical care.

The differential of the instrument proposed in this study was not only to take into account the patient's perception of medical conduct in clinical care, but also the patient's feelings about their health condition and their expectations regarding the health professional's conduct, mirroring it with the reality of the care received. Thus, this instrument was able to stimulate the patient's reflection on their feelings and needs, as well as to point out the gaps in the student's learning in relation to empathetic behavior in the clinical care context.

The version that was initially created, submitted to content validation or calibration, used the expert panel technique. According to Figueiredo *et al* (2015)[18], the "expertise" of its members may be related to the environments or situations of interest for the treatment of the issues involved in the research objective. In other words, people whose opinion they can add, because they have some type of contact with the situation of interest for the investigation. The diversity of the experts' choice (whether because they study empathy or act in the context of the relationship with the patient) took into account the ability to give their opinion both in relation to the construct domains and the language that should be accessible to the target population, so that the instrument could be easily understood. The use of the expert technique in this study proved to be an advantage, since the consensus on the suggested changes contributed to the development of a more accessible and reliable instrument. The instrument evaluation took into account the domains of clinical empathy, as well as the objectivity and clarity of the items, refining and improving long and detailed sentences or ambiguous terms, which can result in inadequate and inaccurate answers[19].

For the content evaluated by health instruments to be current and relevant, it is essential for the researcher to insert themselves in the social context of the target population, knowing their needs and particularities[20]. Thus, the new version was applied to a small sample of patients in the academic outpatient care setting. This step proved to be essential to achieve the final version.

Many changes were made to the instrument, due to the difficulties observed when the patients were filling it out. Initially, it was observed that the patients had great difficulty in answering the open questions. Denscombe (2008)[21], argues in their study that open-ended questions can result in variable data due to the participants' different writing and interpretation skills, which can affect the consistency and comparability of the collected data.

Our results were similar, with patients often responding with one word or not being able to respond at all. These results led to the creation of closed questions, which facilitated the understanding and filling out of the instrument by the patients. In an experimental study carried out by Gunther and Lopes Júnior (2012)[22], comparing the two types of questions, the authors concluded that, in general, closed questions are not inferior to open ones. For these authors, closed questions offer greater advantages than open ones. The open questions, despite allowing the respondent to express themselves in their own words, are subject to the respondent's variability, requires longer time to be answered and often do not provide a direct solution, and may even present impediments to obtaining validity in the answers. As the target audience of this instrument has a very large variability in relation to writing ability, closed questions were chosen to direct the respondent to the objective of the study.

In addition to the change in the type of responses, it was also decided to change the layout of the instrument, placing the frames one below the other, which allowed for the placement of emojis to facilitate reflection on feelings, making the instrument more playful and more accessible to patients.

After the refinement of the items, obtained by several presentations of the instrument to the target audience, the instrument proved to be easy to understand by patients, regardless of the level of schooling, which facilitates its use in the outpatient care setting. Moreover, we should emphasize how easy and fast was the completion of the questionnaire, favoring the adherence of volunteer patients to future studies focused on this topic.

Thus, this new instrument proved to be capable of assessing empathy in a multidimensional way, generating a reflective attitude in the patient not only about the care received but also about their desires and feelings present in the consultation.

Additionally, the HEM-PP, by mirroring the Health Empathy Map (HEM), which is an instrument filled out by the students, allows the comparison of the student's and the patient's perceptions about the consultation that was performed, being a tool with great educational potential, regarding the stimulation of empathy development in the clinical practice learning. By assessing empathy in the multidimensional sense, the HEM-PP is a tool that allows the teacher and student to assess the doctor-patient relationships at different educational levels.

Another positive point to be highlighted is that the patients felt respected, for having their opinion taken into consideration. By valuing the patient's opinion, we allow their inclusion as co-responsible for the construction of a more empathetic and better quality service.

The data obtained with the use of this instrument will allow the identification of aspects related to empathetic care that need to be developed in the context of clinical practice learning, aiming at improving the doctor-patient relationship. Especially, when used in association with the HEM, it will allow the student to assess whether their perception is, in fact, being communicated in the way they imagine. Another advantage of the instrument is that it allows both the student and the academy to identify which empathy component needs improvement, and if, in fact, where the student considers to be good or not is in agreement with what the patient perceives and considers.

As limitations of the study, we can mention the convenience sampling, consisting of patients from a single care center, and only in the outpatient context of Family Health Care and not in a hospital. This prevents the generalization of results to different contexts. Another important observation is that the HEM-PP was validated in an outpatient context, in the context of primary care whose population already has a bond with health professionals and medical students, which may interfere with these students' evaluation, since the patients seemed likely to evaluate the students well, with the intention of not harming them. This fact has already been reported in the literature[23].

Further studies are needed to improve the proposed instrument model. However, the instrument developed in this study proved to be promising to be used in future studies on the subject, as well as to assist in the development of empathy in the context of clinical practice learning, as it inserts the patient into their caregiver's evaluation, in a multidimensional way.

The instrument designed to assess students' empathetic ability in the clinical care scenario from the patient's perception can be used in medical undergraduate courses, in the clinical practice learning scenario, providing strategic points of intervention for the improvement of this skill and subsidies to support future curricular interventions with the objective of improving the development of socio-affective skills in health care scenarios.

We recommend this instrument be applied in association with the HEM in the educational context, so that there is a mirroring of the patient's perception and the student's perception, allowing a more in-depth approach to the care provided in the context of clinical practice learning, demonstrating to the educator and the student which empathy component needs intervention.

CONCLUSION

The instrument resulting from this study was considered by the patients to be easy to understand and fill out, and by the experts on the subject, capable of evaluating the medical student's empathetic behavior from the patient's perception. This tool proved to be easy to apply in the learning scenario with great educational potential, regarding the stimulation of empathy development in students, especially if associated with the simultaneous use of the HEM. Further studies should be carried out to evaluate the results of the instrument use in relation to the development of empathy and the possibility of using it with other health professionals.

AUTHORS' CONTRIBUTIONS

Liliane Faria Bernardes actively participated in the study design, data collection, data analysis, discussion of the results, and writing of the manuscript. Cleuza Guimarães Teixeira actively participated in the study design, data collection, data analysis, and discussion of the results. Camila do Carmo Said actively participated in the study design, data analysis, discussion of the results and the review and approval of the final version of the manuscript. José Maria Peixoto and Eliane Perlatto Moura actively participated in the study design, data collection, data analysis, discussion of the results, writing of the manuscript, review and approval of the final version of the manuscript, supervising the entire process.

CONFLICTS OF INTEREST

SOURCES OF FUNDING

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