

# Humanistic training in Medicine through dancing in the hospital: students' perceptions

*Formação humanística em medicina por meio da dança em hospital: percepções de alunos*

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## ABSTRACT

**Introduction:** The humanization of assistance is associated to empathy, embracing, and effective communication, being part of the medical training. According to its nature, humanization requires methods that involve affections and stimulates critical thinking.

**Objective:** Extensive literature shows the benefits of the arts in medical education; however, there are still few studies on dancing, the subject of this study, which was carried out by medical students and whose aim was to investigate hospital dancing in the teaching of humanization, from the perspective of medical students.

**Method:** A qualitative action research study was designed, in which medical students performed choreographies for patients, companions and employees in three different wards of the teaching hospital. The action consisted of continuous cycles in the planning of interventions, performance, observing, reflection, and re-planning of subsequent actions, in a systematic manner and controlled by the researchers. Data production took place by direct observation, narratives and focal group. The data were analyzed using the content and thematic analysis methods.

**Results:** For three months, 17 female and 7 male students between 18 and 24 years of age performed the action, producing data that was subsequently classified into 3 thematic categories: 1. Dimension of affection: contents of the student's emotional character; 2. Care dimension: contents about caring for the patient; 3. Dance dimension: contents on dance in the humanistic training in Medicine. In the triangulation of the techniques, it was observed that joy, anxiety, and the perception of dance as an instrument of bonding were significant. The experience of changing socially-marked places for the student and the patient made the student face and overcome different feelings. The dance allowed the refinement of the look and the capacity to understand the other, taking into account perspectives that converge to or diverge from their own convictions. On the other hand, the students experienced the anxiety and joy of an encounter with themselves, perceiving dance as a pleasurable and humanizing activity.

**Conclusion:** The dance in the hospital lead to experiences and reflections that stimulated the students' self-knowledge, favored the student-patient relationship, and brought elements to understand the use of dancing in medicine, mainly for the teaching of empathy and humanized care.

**Keywords:** Humanism; Medical Education; Dancing; Qualitative Research; Empathy.

## RESUMO

**Introdução:** a humanização está relacionada à empatia, acolhimento, e comunicação efetiva, fazendo parte da formação médica. Pela sua natureza, a humanização requer métodos que mobilizem afetos e estimulem pensamento crítico, justificando o uso das artes como ferramenta de ensino. Vasta literatura mostra os benefícios das artes no ensino médico, entretanto ainda há poucos estudos sobre a dança, objeto deste artigo, em que apresentamos uma pesquisa conduzida por estudantes de medicina, cujo objetivo foi investigar a dança em hospital no ensino de humanização, na perspectiva dos estudantes.

**Método:** desenhou-se uma pesquisa qualitativa do tipo pesquisa-ação, na qual alunos de medicina executaram coreografias para pacientes, acompanhantes e funcionários em três diferentes enfermarias do hospital-escola. A ação consistiu em ciclos contínuos de planejamento das intervenções, realização, observação, reflexão e replanejamento das ações subsequentes, de forma sistematizada e controlada pelas pesquisadoras. A produção de dados se deu por observação direta, narrativas e grupo focal. Os dados foram analisados pelos métodos de análise de conteúdo e temática.

**Resultados:** durante três meses, 17 alunas e 7 alunos entre 18 e 24 anos de idade realizaram a ação, produzindo dados posteriormente classificados em 3 categorias temáticas: 1. Dimensão do afeto: conteúdos de caráter emocional do aluno; 2. Dimensão do cuidado: conteúdos sobre cuidar do paciente; 3. Dimensão da dança: conteúdos sobre dança na formação humanista em medicina. Na triangulação das técnicas, verificou-se que alegria, ansiedade, e percepção da dança como instrumento de criação de vínculo foram expressivas. A vivência da mudança dos lugares socialmente marcados para o estudante e do paciente fez com que o aluno enfrentasse e superasse sentimentos diversos. A dança permitiu o refinamento do olhar e da capacidade de compreender o outro, levando em conta perspectivas convergentes ou divergentes às suas próprias convicções. Por outro lado, os alunos vivenciaram ansiedade e alegria de um encontro consigo mesmo, percebendo a dança como atividade prazerosa e promotora da humanização.

**Conclusão:** A dança no hospital provocou vivências e reflexões que estimularam o autoconhecimento, favoreceram a relação estudante-paciente, trouxeram elementos para entender o uso da dança em medicina, especialmente para o ensino da empatia e do cuidado humanizado.

**Palavras-chave:** Humanização da Assistência; Educação Médica; Dança; Pesquisa Qualitativa; Empatia.

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## INTRODUCTION

Humanization in medical care is related to empathy, embracing, and effective communication in the doctor-patient relationship, being considered essential for treatment adherence, patient safety, and the best health care quality and outcomes<sup>1</sup>.

Empathy is considered the main attribute of humanization<sup>2-4</sup>. Some authors<sup>5,6</sup> understand empathy as an innate characteristic difficult to be taught, while others<sup>4,6</sup> classify it as communication competence that can be acquired. Certain authors<sup>3,4,6</sup> describe two dimensions for the clinical empathy involved in the doctor-patient relationship: an affective and a cognitive one. The latter would be a competence that can be acquired and improved through targeted educational experiences. Despite this lack of consensus, the importance of empathy in clinical practice is well understood in the literature<sup>4</sup>. It increases patient satisfaction, improves treatment adherence, improves clinical results and decreases professional negligence acts. Empathy, therefore, is an indispensable attribute for humanization and must be part of humanistic medical training.

However, for some time, it has been questioned how much is invested in humanistic training in medical education, or even in humanization, starting with the environment of the medical school itself. These are situations arising from a multifactorial context, with the following standing out: predominance of a strictly technical-scientific teaching method, lack of didactic-pedagogical infrastructure, poorly designed curricula that burden the student without necessarily being associated with the acquisition of skills, a hidden curriculum that devalues humanistic teaching<sup>7</sup>; all of them would have a dehumanizing effect. Some authors<sup>8,9</sup> even claim that the academic environment of constant coping with stressful situations would lead students to the burnout syndrome<sup>9,10</sup>, compromising the learning of communication skills, empathy and relational competence necessary for humanized care.

Attentive to this reality, many medical schools have developed educational or extension actions that aim to awaken humanization<sup>11-13</sup>. In Brazil, the National Curriculum Guidelines of the Ministry of Education<sup>14</sup> reinforce the teaching of humanization. Still, there remains a great distance between proposals for humanistic training and practical results in terms of humanization, either due to the difficulty of including humanistic content in the medical curriculum centered on biotechnological training, or because humanistic training requires less known educational strategies in the traditional medical education.

The starting point for teaching humanization requires the students to meet the patients from the perspective of the human dimension<sup>15</sup>. From this point, humanization occurs through the implementation of a reflexive posture on the people

involved in the meeting. For the humanistic teaching<sup>16</sup>, it is not enough to introduce the theoretical content of the humanities, it is necessary to create spaces to experience and reflect on the meeting with the patient. Among the active methodologies for the teaching of humanization and, particularly empathy, the use of arts as a means of educating sensitivity stands out<sup>17</sup>. Nise da Silveira<sup>18</sup> said that art allows the contact with the deepest forms of human emotions. The experience created by using art as a source of cognitive and emotional experience followed by reflection would allow the development of empathy, of more welcoming academic environments, of the intersubjective meeting.

In this article, we present a study in which dancing was used as a teaching tool for humanization in Medicine. In the medical school that was assessed, dancing is a university extension activity. It is a group founded in 2014, aiming at promoting dance activities among students. The group develops classes, rehearsals, workshops and presentations, bringing together people interested in practicing dancing as a form of artistic expression, body awareness, physical activity, leisure, perception of oneself and the other or even as social interaction. According to the literature, dancing has communicative, artistic, sociocultural and therapeutic functions<sup>19-21</sup>, allowing access to the dancer's inner world when interacting with the outside world. From this perspective, it could be used in medical school as a resource for humanistic training, as it promotes experience and reflection as explained in the previous paragraphs. Therefore, a study was carried out by medical students from the dance group under the guidance of teachers from a teaching-hospital in a public medical school in the state of São Paulo, with the aim of studying the perceptions of medical students about the effects of dancing as an instrument of humanization and teaching of humanized care in medical training.

## METHOD

A study was carried out with a qualitative action-research design<sup>22</sup>. Action research is a qualitative method widely used in educational research on relatively well-known study objects on which one wants to develop and test educational intervention models. At the same time an educational action under testing is developed, data are obtained on the research subjects' perception regarding the model of which they were part. Through this method, it is possible to obtain quality information for the planning and evaluation of educational methods.

The educational action consisted of dance presentations, performed by medical students, for patients, patient companions and employees of the teaching hospital sectors. Continuous cycles were designed for the planning of artistic interventions, carrying them out, observation, reflection and re-planning of

subsequent actions, in a systematic manner and controlled by the researchers. During the research, we sought to understand subjective behaviors and ways to experience the use of dancing to teach humanized care from the students' viewpoint.

The students and research subjects were part of the college dance group. The students who volunteered to participate in the research totaled 24 students attending between the 1<sup>st</sup> and the 6<sup>th</sup> undergraduate years of medical school.

Three places of the teaching hospital were selected for the dance presentations: dermatology ward, digestive surgery ward and pediatric ward. The selection of each location was made by the type of patient and hospital admission (adults and children, inpatients for clinical and surgical interventions), considering the criterion that the area allows dance activities in its wards.

The total duration of the action comprised three months, one month for each chosen location. Each month, weekly dance performances were held, always on the same day and time of the week, respecting the medication and mealtimes of each ward, as established by the professional staff of each ward. The presentations lasted around eight to nine minutes and did not exceed ten consecutive minutes.

The presentations were prepared by the performing researchers, who had previous personal experience with dancing, selecting songs and choreographies of a neutral or cheerful character, considered more appropriate for the hospital environment. Dramatic, tragic or inappropriate content for children under 18 was avoided. The selected choreographies were the same for the adult wards. For the pediatric ward, choreographies more focused on children and adolescents were chosen, containing music from children's films and musicals.

The students carried out an average of three rehearsals per presentation and defined the costumes they used among themselves. On the day of each presentation, both the dancers and the researchers arrived at the wards around 20 minutes before the time established for the presentation to prepare the sound equipment and the space and to invite the patients, companions and staff to attend the presentation of three choreographies. The presentation spaces were defined by the nursing staff, taking place in the corridors of the infirmary, patient recreation rooms, amphitheaters, playroom or even inside the rooms. The public would go to the places and watch the performances while standing or sitting on chairs.

In each presentation, a student who did not dance and who fulfilled the role of observer was previously defined, manually recording in their field diary their impressions of the preparation, the action itself and the completion of the action. In addition to these empirical data, data were obtained through student accounts and focal group carried out after all presentations. The narratives were written individually, asking

students to provide their impressions on the experience of the presentations and of the latter on humanistic training. The focal group was carried out by the researcher responsible for the project and the students. The entire content of the focal group was recorded and later transcribed for analysis.

The analysis of the empirical material obtained from the students' narratives, the field diary of direct observation and their interaction in the focal group took place in two separate lines of qualitative analysis, one through the content analysis method and the other through the thematic method. Three analytical categories were created regarding the students' perceptions of the experience under study: the dimension of affection, the dimension of care, and the dimension of dance. The study reliability was achieved through the triangulation of the data obtained by the three different techniques of data production analyzed through discussion and construction of consensus among the researchers.

The research project was approved by the Ethics Committee under number 2,071,212, and the research subjects signed the Free and Informed Consent Form.

## RESULTS AND DESCRIPTIVE ANALYSIS

A total of 24 students participated in this action-research field. The students were aged between 18 and 24 years old and were predominantly females (17 female students and 7 male students). Of these students, 13 wrote narratives and 13 participated in the focal group.

The first stage of the analysis consisted in the comprehensive reading of the focal group transcriptions, the narratives and the field diary. From this stage on, recurring or significant contents emerged in the context of the research. These contents were classified into three analytical categories described in Table 1.

Table 2 shows the contents that were grouped within each analytical category after the content analysis.

**Table 1.** Description of the analytical categories of the study

Analytical category	Description
Dimension of affection	Contents that express manifestations experienced by the students and named as emotional or sentimental in nature
Dimension of care	Contents that speak about care actions, especially the relationship between health professionals and patients
Dimension of dance	Contents that address dance as the central target of the experience in humanistic training in medicine.

**Table 2.** Content of the three analytical categories according to the technique of empirical data production

Technique/Content	Dimension of affection	Dimension of care	Dimension of dance
Narratives	Personal fulfillment	Empathy	Dance as part of care
	Commotion	Reinterpretation of the doctor-patient relationship	As a way to evoke feelings
	Hope	Break of paradigm	As a way to develop the medical student's sensitivity
	Gratitude	Communication	As a way to rethink the concept of health
	Motivation	Reinterpretation of the health concept	Creating a bond
	Personal satisfaction	Wholeness	
	Disappointment	Personalized look	
	Anxiety	Comfort	
	Joy	Alternative forms of care	
	Love		
	Change of emotional state		
Focal group	Mistrust regarding the effectiveness of dancing	Changing roles in caring	Dance as a way to develop the medical student's sensitivity
	Pleasure	Individualized look at the patients	Dance as one of other activities that would impact humanization
	Disappointment Surprise		Dance would allow conditions that other cultural activities would not
	Anxiety		Dance as a way of breaking paradigms in the doctor-patient relationship.
	Joy		
Direct observation	Discomfort	Creating a bond	Creating a bond
	Joy	Interaction	Dance as a form of interaction
	Anxiety	Adequacy in care	Dance as a flexible cultural activity
	Satisfaction Tiredness		
	Change of emotional state		

Through the triangulation of the three techniques used, the common contents among them were verified, as well as those that were manifested alone. Triangulation is a technique used to verify the reliability of qualitative data. The emergence of recurring content manifested by different techniques not only increases confidence in the research findings, but also allows a better understanding of the phenomenon being studied, through the combination of different and complementary views. Table 3 depicts the topics manifested in two or more techniques.

## INTERPRETATIVE ANALYSIS AND DISCUSSION

Using the thematic analysis method, we aimed to understand the meanings attributed to the experience of dancing in the hospital, having as the conducting thread of the analysis the students' perceptions about its meaning in medical training, particularly in the humanistic training in Medicine, and its effect on humanized care. Within each analytical category, the interpretation of the findings was undertaken in the light of the reference authors of this study.

**Table 3.** Recurring contents by the triangulation of techniques

Category	Direct observation	Narrative	Focal Group
Dimension of affection			
Joy	x	x	x
Change of emotional state	x	x	
Gratitude	x	x	
Motivation	x	x	
Anxiety	x	x	x
Disappointment		x	x
Personal satisfaction	x	x	
Dimension of care			
Creating a bond	x		x
Break of paradigm		x	x
Look directed at the patient		x	x
Dimension of dance			
Dance as an instrument of bonding	x	x	x
Dance as a way to develop the medical student's sensitivity		x	x
Dance as a flexible activity, adaptable to different locations and audiences	x	x	

### Thematic dimension of affection

Some students pointed out the strong emotion, the commotion and joy as the feelings experienced at the interventions. One student said:

*To be able to see the children, previously apathetic on their parents' laps, expressing concern, smiling, start dancing, and with that, making their parents smile too, was an indescribable emotion.*

In the not-too-distant past, doctors were advised to avoid expressing emotions, as their manifestation could be seen as a sign of weakness incompatible with the strength expected from a good doctor<sup>11</sup>. Not expressing emotion did not mean that the doctor could not have emotions, but that, as something detrimental to good professional practice, the act of feeling was seen as a private experience, little addressed in the context of working or teaching. On the other hand, and somehow reinforcing this fact, the complexity of medical work, which requires decisions that bring high responsibility and

risk<sup>12</sup> ended up strengthening reason over emotion. After all, ethical decision-making should not be motivated by emotion, but by the analysis of well-founded facts, values, responsibilities and duties<sup>13,14</sup>. However, nothing will stop the doctor from feeling. The problem is when they distance themselves from the perception of that feeling and, without realizing it, act and decide with less reason than they should. In other words, failing to recognize one's emotions allows them to interfere with one's actions more than they should and inappropriately so. For this reason, in the psychosocial models of health care, the doctors' self-knowledge and the development of emotional intelligence that allows them to deal with themselves and with others in professional practice<sup>15,16</sup> are recommended.

According to the students'speeches, the acknowledgement of different emotions during dance activities shows their power in producing the encounter with themselves at the time when they present themselves to the other:

*At that presentation (...) when we did the square dance (...) I was very embarrassed to ask people to dance with us and be rejected.*

In patient-centered care, the perception of one's emotions and feelings occupies a strategic place, as several communication skills and empathy derive from them, which is essential for good medical practice<sup>17,23</sup>. In this study, dancing showed to be an experience that triggers the emotional tone that allows the student to cognitively learn these skills, as illustrated by the student's speech:

*For me, what may have changed internally, was that when I was presenting it, we were concerned about perceiving the reaction of the people watching. I think I managed to transmit this a little bit for the daily routine, to pay a little more attention to the patients I am caring for, taking patient history... What their reaction is. I think if we had the sensitivity to understand how they are doing and not just what they say... I think it activated this sensitivity a little.*

Many students reinforced the feeling of personal satisfaction and gratitude after participating in the project, as we can see in the speeches:

*I am very grateful to have been able to participate in this project and to experience these unique practices of special connection with the patients. This is not learned at school. This is experienced.*

Satisfaction in the context of the doctor-patient meeting is a topic studied in the literature, especially from the patient's point of view on the quality of care<sup>18</sup>. From the doctors' point of view, some studies have identified the quality of the doctor-patient relationship as one of the variables of the degree



of satisfaction with their career<sup>24,25</sup>. Similarly, the students' satisfaction with the good student-patient relationship established in the presentations appeared in the students' speeches, associating the satisfaction and gratitude derived from the dance experience with a resignification of their choice for Medicine, as in this example:

*I believe that the interventions stimulated me to rescue that love for medical practice, and to realize that we are not only dealing with diseases, but with complex people.*

Learning would be stimulated by the expansion of the sensory field resulting from the change in perspective that the dance activity provides. A perspective that goes beyond the trained eye for classical anamnesis and incorporates humanistic elements that begin with the perception of oneself. The student's speech illustrates this reflection:

*I started to understand better the importance of the inpatients' well-being. They go through moments of great fragility, exposure and feelings of strangeness caused by the environment. Is it extremely important to bring them comfort, entertainment and, why not, joy? The wards do not have to be heavy and morbid environments.*

Learning in a pleasant way can also cause feelings of strangeness among the students themselves. The stereotype of the doctor in training is that of someone overloaded with obligations and sacrifices<sup>26</sup>. Doctors begin a life of sacrifices even before entering college, having to go through competitive university admission exams and to give up common pleasures to dedicate themselves to study. During college, the student is frustrated in the basic cycle when faced with densely theoretical and sometimes little didactic classes. During the clinical cycle, the anxieties of insufficient knowledge arise when in contact with patients<sup>27</sup>. They suffer from reduced hours of leisure and available opportunities to be with their family and friends; and in recent years, at the internship, they have to face work difficulties during duties and in their relationships with teams and classmates<sup>28</sup>.

On the other hand, studies<sup>11,29,30</sup> show that, during training, pleasure would present itself during the discovery of being a doctor, in the development of knowledge that allows clinical reasoning, in the search for answers to questions about life, death, disease, cure<sup>11</sup>. That is, already during the medical training, the student can experience Medicine in a pleasurable way in its essence. The problem is the way as Medicine is taught and learned in very technical environments and distant from the affective and subjective dimensions of medical practice<sup>31</sup>. In this sense, the dance activity, by combining a pleasurable activity with the learning of humanistic skills, provided students with a unique experience of significant learning of being a doctor.

## Thematic dimension of care

Still from the perspective of significant learning, in this study the students spoke of the resignification of care provided by the dance activity. Humanized care would be the result of a meeting, in which the humanities of the doctor and of the patient would take place in the therapeutic relationship. For many years, the relationship between doctors and patients has been problematized, discussed, deconstructed, reconstructed, by scholars inside and outside the medical field<sup>30-35</sup>. Briefly, on the one hand, power relations are discussed in the so-called biomedical field<sup>31</sup>; and on the other hand, relations of responsibilities in the care models said to be patient-centered<sup>30,32</sup>. It is not within the scope of this work to discuss such notes, but rather the dance activity in the development of sensitivity for humanized care, based on the relationship with the patient. It is in this direction that we analyze the empirical data of the category related to patient care.

The first aspect that students pointed out as having an impact on the awareness of humanization in care refers to the experience of breaking the paradigm of a place socially marked as the medical student's place. In the narratives and in the focal group, the students spoke of certain feelings of strangeness when entering the hospital as a student who dances and not as a student who studies medicine:

*In practice, initially it was quite unusual to appear in the corridors of the infirmary where we usually play a very different role [as a medical student]. And I think that due to the lack of practice, it was often difficult to immerse myself in this new role, and we were embarrassed, not knowing how to captivate the public with which we are used to conduct anamnesis and physical examination, but not to involve it through dance steps, music, smiles and expressions.*

The strangeness or discomfort of students when exposing another face of their identities not directly linked to that of a medical student is a topic worthy of attention. The construction of a socially accepted identity for a profession is part of their culture. Starting from the stereotype of the doctor's role in society, which places them as someone who needs to distance themselves from the common place of human affections and fragilities, taking shelter in science and technology<sup>26</sup> in order to be able to exercise their role well, the students experienced a first moment of loss of references, which forced them to find other subjective and internal resources to realize what they were feeling and sustain this 'new place' in the dance activity. The strength of the identity role was evident, considering that they were experienced and resourceful students who were acquainted with dancing. After this first reaction, the students had a subjective integrating experience in which being a medical student could 'live' with being a person who has other

skills and tastes besides Medicine, without ceasing being a doctor, as shown by this student's speech:

*Thus, I felt that, in some way, that [dancing] was doing them good, if only for a moment, relieving them or making them forget their conditions of weakness or pain.*

Putting themselves before the patient in a different role from the socially accepted role of a medical student removed the student from their comfort and protected zone, challenging them to deal with less positive, expected and controlled reactions. Thus, the students had to face and overcome feelings of rejection and lower esteem as narrated by a student:

*It was an actual reality shock (...) with a patient who did not want to see us, an audience that was like 'no, we do not want to see it' (...) I had this idea (...) that art would be very cool, it would be good for the patients ... it was very good for some... but it is not a generalized thing.*

Students used to dancing on large stages and for large audiences were disappointed when faced with a small audience of patients in the wards, some of which were not interested in the performance. When faced with their idealization of this type of action, as something that would please everyone, they had to deal with attitudes of indifference or disinterest.

In opposition, the students had differentiated communication experiences, which they attributed to the fact of being in a relationship facilitated by the human encounter that art provided. Communication in the doctor-patient relationship is identified as the most frequent act in the life of a doctor, considered one of the most important clinical skills for the profession<sup>37</sup>. Despite the many existing communication protocols, communication quality, as well as empathy, depends on subjective factors that are difficult to train, because it also requires emotional mobilization for its development<sup>36-38</sup>. Dance showed to be a communication facilitator, either because the patients felt closer to the students who introduced themselves to them in a more informal way, or because the students felt less distant from the patients when they better perceived their own emotions before them. According to this student's concluding words:

*Thus, I conclude that what I got from this experience was the gain of a more subtle look at the forms of communication and interaction with patients.*

The human side of caring was perhaps the most striking aspect of the experience, according to the students' manifestations expressed in statements such as this:

*I believe that this is crucial for our training as doctors, as we need to think beyond the person's physical*

*health and help with what is within our reach to make the experience of the disease a less painful one.*

### Thematic dimension of dance

Unlike other artistic approaches such as clowns, music, literature and fine arts, dance is still an art modality that has been little studied in medical education and in the humanization of health care itself. The little familiarity of the services with the dance intervention was observed and recorded in the field diary:

*At first we noticed a certain resistance from the nursing team, so that we would not interfere with the operation of the ward, but the nurses always ended up helping us with the patients and, in the end, they showed empathy for the project; the doctors were hardly involved; the patients had little interaction with each other but showed interest both to attend the presentations and to undergo the interview.*

It was observed that, as the teams got to know the dance intervention better, they also became involved with the practice. In this other excerpt from the field diary, we can verify such observation:

*As in the previous week, we did a square dance at the end of the presentation and some patients participated. The nursing team was very excited with the presentation, demonstrating this more strongly than in the previous weeks. They took some pictures, encouraged patients' participation more intensively and also participated in the square dance.*

The students in this study were dancers with experience and appreciation for dancing. Their reflections on the effects of dancing for the teaching of humanized care, presented in part in the previous topics of this article, also brought elements more specifically focused on dance as an instrument or as a teaching method.

A concern that arose among them was about the patient's experience with the dance activity, since it is one of the main elements of analysis of the quality of care and the humanization of care<sup>39</sup>. The students observed and recounted that, the patients did not always like the dance. Although initially disappointed with this, learning to be attentive and take into account the patient's point of view is a task for the development of professionalism, of patient-centered care, and shared decision<sup>40</sup>.

The difficulties in dealing with certain patients and even the fact that some of them do not enjoy art activities in hospitals have been reported in other studies in Brazil<sup>41</sup>. In a study on the performance of clowns in a hospital in Minas Gerais, patients reported that accepting the visit of a clown depends a lot on their emotional state and the moment they are going through<sup>42</sup>. There are times when they prefer to be alone. Learning how to deal with patients' feelings and

emotions, especially the most negative ones, is an important task for the good exercise of the profession.

Before participating in the research, the students sought to join two great passions, dancing and Medicine, and thus, join emotion and joy in caring for patients. They had no doubts that it would be beneficial to the public. However, after the performance, some students questioned the effectiveness of dance for patient care, as the student in the focal group stated:

*Is it not a bit... arrogant on my part to think that I will come here, dance and improve someone ... and will I ... make any difference?*

Although several patients showed very positive reactions to the dance intervention, the question about the positive, negative or indifferent impact on the patient's well-being showed to be pertinent. Was it the dance itself, or the attention and affection implied in it, that actually provided a positive experience for the patient? This question is even reinforced by the fact that some were not pleased by the dance. Receiving attention and being treated with empathy, compassion and affection by health professionals is a common expectation among patients. Complaints of emotional detachment, not looking them into their eyes, not paying attention to their feelings and words, are frequently reported when investigating humanization (or dehumanization) in health services<sup>43</sup>. It is possible that the reported positive impact is more associated with the resulting affective experience than with the dance itself, an inference that requires further studies for its confirmation.

On the other hand, from the point of view of the students in this research, dancing is a pleasant activity and its effectiveness in teaching humanistic competences repeatedly appeared in statements such as this:

*As medical students we are taught to have compassion, which, more than empathy, is to have the desire to alleviate the suffering of others. I believe that was the project's contribution to my medical training. We prepared, rehearsed and dedicated to relieve the tension or suffering of those who are hospitalized.*

For these students, dancing allowed the refinement of the look that comprehends the other, as they were attentive to the patients' reactions to the presentations. It also promoted their ability to listen to the patients, taking into account converging or diverging perspectives of their convictions. The students experienced the anxiety and the joy of an encounter with the other, in which their subjectivities were in evidence, since, without the usual limits of the social role of medical students, they had to deal with responses that are not so usual in medical training. In short, the activity provided students with self-knowledge and the development of relational skills for humanized care.

Humanistic training in Medicine benefits a lot from the arts in general, because it is a resource that allows emotional mobilization and reflection on subjective and intersubjective perspectives that are essential for humanization<sup>15,44</sup>. And exactly because subjectivity is the central element of humanization, the choice of the teaching method must take into account the differences in subjectivities, choices, desires and tastes of students and teachers involved in teaching. The medical school is expected to offer different teaching spaces and experiences that can be chosen by students for humanistic training. This study attests to how effective and remarkable the teaching of humanization is for students through activities that make sense for their learning and for their life. As this student stated:

*During undergraduate school, we spend a lot of time going to the hospital as students, mechanically looking at patients and trying to identify signs and symptoms that could indicate the correct diagnosis. Going to this same hospital to dance completely changes the perspective I had of that place.*

That said, in this study, dancing provided students with an expanded interpretation of medical care and practice in a way not yet experienced by them in the traditional curriculum. However, it is important to note that dancing was used as a tool for a group of students who showed interest in dancing and the arts.

## CONCLUSION

The students' involvement in educational dance activities in the hospital made them reflect on humanization, humanized care and the perception of empathy learning, suggesting that dance can be used as a teaching tool in humanistic training in Medicine. The limitations of this study comprise the fact that it is restricted to the investigation of its object during a short period of time, and that it only assessed students who had a previous affinity with dancing. Further studies are needed to deepen the investigation of dancing as an instrument for the teaching of humanization.

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## AUTHORS' CONTRIBUTION

Amanda Barbosa Lisboa: creation of the research project, field research performance, data analysis, and writing part of the manuscript. Marcela Rodrigues Ciccone: creation of the research project, field research performance, data analysis, and writing part of the manuscript. Marina Kadekaru: creation of the research project, field research performance, data analysis, writing part of manuscript. Izabel Cristina Rios: research



supervision from the planning and creation of the project to the completion of data analysis, writing part of the manuscript, final review of the article as a whole and making the suggested changes after peer review.

## CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

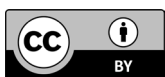
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