



Empathy and ethical values in medicine: a quantitative study

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Abstract

In health care, empathy is associated to several benefits; however, many studies have shown a decrease in empathy during medical education, which negatively impacts the humanization of care. This cross-sectional study analyzes the relation between sociodemographic factors and physicians' level of empathy, as well as medical ethical values. A total of 143 Brazilian physicians answered empathy and hospitality scales. Results point to a relation between empathy and hospitality, as well as that factors such as gender, specialty and history of suffering influence care humanization.

Keywords: Humanization of assistance. Empathy. User embracement. Bioethics. Medicine.

Resumo

Empatia médica e valores éticos da profissão: estudo quantitativo

Na assistência em saúde, a empatia tem sido associada a uma série de resultados benéficos. No entanto, diversos estudos evidenciam a diminuição de empatia no decorrer da formação médica, com reflexos negativos sobre a humanização do cuidado. O objetivo deste estudo é analisar a relação de fatores sociodemográficos com o nível de empatia de médicos, bem como sua relação com os valores éticos da profissão. Nesta pesquisa transversal e analítica, foram aplicadas escalas de empatia e de hospitalidade para 143 médicos brasileiros. Os resultados apontam uma relação entre empatia e hospitalidade, assim como a influência que fatores como sexo, área de atuação e histórico de situações de sofrimento exercem sobre a humanização do cuidado.

Palavras-chave: Humanização da assistência. Empatia. Acolhimento. Bioética. Medicina.

Resumen

Empatía médica y valores éticos de la profesión: estudio cuantitativo

La empatía se asocia a una serie de resultados beneficiosos en la asistencia sanitaria. Sin embargo, varios estudios reportan que la empatía disminuye a lo largo de la formación médica, con efectos negativos en la atención humanizada. El objetivo de este estudio es analizar la relación de los factores sociodemográficos con el nivel de empatía de los médicos, así como su relación con los valores éticos de la profesión. En esta investigación transversal y analítica, se aplicaron escalas de empatía y hospitalidad a 143 médicos brasileños. Los resultados apuntan a una relación entre la empatía y la hospitalidad, así como la influencia que tienen los factores como el género, el área de actividad y la historia de situaciones de sufrimiento en la atención más humanizada.

Palabras clave: Humanización de la atención. Empatía. Acogimiento. Bioética. Medicina.

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Today, the healthcare world is experiencing a profound care crisis. Indifference to the pain and suffering of the other is present in aseptic professionalism¹.

Empathy, one of the most prominent humanistic attitudes today, is the basis of ethical and humanized behavior and medical professionalism, essential in the physician-patient relationship. Despite this, there are numerous reports of patient neglect during care provided by healthcare professionals.

Empathy is considered a fundamental value in strategies to promote humanization in care². It is a personal skill necessary to understand patients' inner experiences and feelings for an effective communication process and a person-centered clinical practice^{3,4}.

Thus, empathy becomes imperative in decision-making situations of an ethical nature, in which it is essential to understand the patient's perspective⁵. However, studies that analyze the level of empathy during medical training show its decrease over graduation time^{6,7}, which may adversely affect the humanization of care.

Thus, it is essential to know the different dimensions of empathy and seek ways to develop sustainable medical empathy⁸, aiming to train professionals who are not only technically qualified but also involved with hospitality and the humanization of care. In this sense, the possibility of teaching this skill is discussed, considering that if it can decrease throughout medical training, it may also be developed, especially if considered in its cognitive domain⁹.

The humanization of care requires attention to the patient and their family based on hospitality and embracement. Thus, due consideration of ethical values related to hospitality represents advances in the humanization of healthcare¹⁰, and the ethics of care, as addressed by Corradi-Perini and Pessini¹¹, acts as an instrument for reflection on the actions of health services. In this sense, as highlighted by Oliveira and collaborators¹², healthcare professionals can direct their actions toward care focused on the quality of life of patients and families.

According to the National Humanization Policy (PNH), embracing is both a practice and an ethical posture, not just a space. Who embraces also takes on the responsibility of "sheltering and covering"

others in their demands, with the necessary resolution for the case in question¹³.

Considering such context, this research sought to answer the following question: What factors can influence the type and level of empathy among physicians, and how can this be related to estimating the profession's ethical values? Thus, the objective was to analyze the influence of sociodemographic factors and their relationship with the ethical values of the profession. The hypothesis is that, on the one hand, the most decisive factors are gender, age, length of clinical experience, and area of expertise, and, on the other hand, the level of empathy is associated with the level of hospitality.

Based on these findings, strategies can be developed to value empathy and hospitality/embracement, identifying weaknesses and improving training programs in professional values, with consequent advantages for the patient's dignity and humanization of care.

Method

This observational, cross-sectional, descriptive, and analytical study involved 143 medical professionals working in healthcare in different specialties and Brazilian states. The professionals agreed to respond to the online research instrument sent by WhatsApp groups from the researchers' contact networks.

The message had a brief explanation about the research and an invitation to get to know it better through a Google Forms link, which also gave access to the informed consent form (ICF). The form ensured the confidentiality and anonymity of the data obtained and the voluntariness of its completion. Each participant was asked to forward the invitation to other physicians in their network of contacts using the data collection method known as the virtual snowball¹⁴.

After digitally accepting the ICF, the participants were directed to a window with the research instrument, with sociodemographic information and two scales. The first was the Davis Interpersonal Reactivity Index (IRI)¹⁵ (empathy scale), translated and validated in Brazil by Sampaio and collaborators¹⁶ under the name Multidimensional Scale of Interpersonal

Reactivity (EMRI). In a study by Corradi-Perini and collaborators¹⁷, this scale showed internal consistency and psychometric indicators of acceptable factor structure to evaluate empathy among healthcare professionals.

The second was the hospitality axiological scale (scale of ethical values related to professional practice) by González-Serna, Ferreras-Mencia, and Arribas-Marín¹⁸.

The Davis scale (IRI)¹⁵ was chosen because it allows evaluation of the cognitive aspect and the emotional reaction of the individual who adopts an empathetic attitude. It should be noted that this scale measures dispositional or trait-based empathy, that is, it assesses a person's chronic tendency towards empathy in any relational situation.

The IRI would not be appropriate for research on situational empathy, which involves immediate emotional responses to situations experienced by other people¹⁹. However, based on the understanding that empathy is essential in all interpersonal relationships—including the professional-patient relationship—it proved to be the right instrument.

The EMRI is an easy-to-apply scale consisting of 26 items that describe behaviors, feelings, and characteristics related to empathy. All responses are obtained on a Likert scale ranging from one (completely disagree) to five (completely agree) and divided into four independent subscales, one for each dimension: personal distress, empathic concern, perspective-taking, and fantasy. Personal distress and empathic concern are related to affective experiences while perspective-taking and fantasy are related to cognitive experiences.

The subscale of the personal distress dimension measures feelings of anxiety, apprehension, and discomfort in tense interpersonal contexts, assessing actual feelings of discomfort and displeasure directed at the self when the individual imagines the suffering of others and is composed of six items. The empathic concern subscale, consisting of seven items, measures the ability to experience feelings of compassion and concern for others. This dimension relates to feelings toward others and the motivation to help people in need, danger, or disadvantage.

The perspective-taking subscale, which comprises the cognitive aspect of empathy, measures the individual's cognitive ability to put

themselves in other people's shoes, recognizing and inferring what they think and feel, and comprises six items. The fantasy subscale, with seven items, evaluates the person's propensity to put themselves in fictional situations, such as the tendency to imaginatively transpose themselves, putting themselves in the place of characters.

Davis¹⁵ states that responses to all items should not usually be summed into a single score (total empathy), because it may obscure the influence each separate dimension can have on empathic behavior. Nevertheless, total empathy scores were used for correlation analyses in this study.

The hospitality axiological scale¹⁸, in turn, consists of 17 items that describe desirable ethical values for good professional practice. All responses are obtained on a Likert scale ranging from zero to seven, according to which zero represents a value that is not important for an excellent clinical practice. At the same time, seven implies a significant value, and the interval between one and six depicts different relative importance levels. The 17 items are divided into four independent subscales, one for each dimension (responsibility, respect, transpersonal care, and quality).

The subscale of the responsibility dimension assesses the ability to recognize and accept the consequences of a deliberately performed action, comprising values that represent acceptance by the professional of personalized and close service to the user. The subscale of the respect dimension is composed of values that represent respect for life, user autonomy, and fair treatment.

The subscale of the transpersonal care dimension assesses the effort to connect with others through care and treatment processes. It involves values representing the ability to project oneself concerning the user, with altruistic motivation and diligent care. Finally, the subscale of the quality dimension consists of the inherent properties that allow judging the value of something, composed of attributes that represent an action based on competence, professional autonomy, and structural or procedural elements.

The statistical program SPSS, version 20.0, was used for data storage, tabulation, and statistical analysis. Student's t-test was used to test the statistical differences between the mean scores of the empathy and hospitality scales and their comparisons according to gender, prior formation

of values, experience of stressful situations in the last year, and field of activity (pediatrics or adult care).

The one-way ANOVA test was performed in association with the Bonferroni *post hoc* test to evaluate the statistical differences in the average scores of the empathy and hospitality scales between the occupation areas: clinical and specialties, pediatrics, gynecology and obstetrics, surgery, among others. The two-tailed Pearson test was performed for the correlations between the scores of the empathy and hospitality scales. Results were considered statistically significant when $p<0.05$.

Results and discussion

The questionnaires were applied to 143 medical professionals working in different areas, specialties, and Brazilian states. The mean age of the professionals was 45.2 ± 11.73 years, ranging from 24 to 73 years, with a working time of three months to 47 years, with 18.2 ± 11.8 years as the mean. Table 1 shows the general characteristics of the interviewees.

Table 1. General characteristics of 143 medical professionals participating in the research

Variables	N	%
Gender		
Female	95	66.43
Male	48	33.57
Occupation area		
Medical clinic and specialties*	49	34.27
Pediatrics	47	32.87
Obstetrics and gynecology	21	14.68
Surgery	17	11.88
Radiology and diagnostic imaging	6	4.20
Others (orthopedics and anesthesiology)	3	2.10
Field of action		
Adult	96	67.13
Pediatrics	47	32.87
Type of bond		
Public	30	20.98
Private	24	16.78
Public and private	89	62.24

* Homeopathy, neurology, psychiatry, oncology, rheumatology

For didactic reasons, the results and discussion of emotional and cognitive empathy dimensions will be analyzed separately, followed by a discussion of the factors that can influence empathy and hospitality.

Personal distress and empathic concern (emotional dimensions)

The personal distress dimension had the lowest empathy score, while empathic concern scored the highest. This result can be considered positive since personal distress can negatively interfere with how patients are treated and the care provided by professionals.

Often, anguish leads to distancing from the suffering experienced by the other, intending to relieve one's discomfort. At the same time, empathic concern (the highest-scoring dimension) is associated with prosocial behavior^{19,20}. Eisenberg²¹ states that this behavior aims to help or benefit another individual or group voluntarily.

Given these data, a question arises: Would such professionals' scores represent a significant difference compared to the general population? We searched the literature for references on applying EMRI to the Brazilian population to answer this question.

Formiga²² presents mean scores similar to this study in the dimensions of empathy, except for personal distress. The observed difference suggests lower scores among medical professionals than in the general Brazilian population in this dimension. Such evidence finds scientific support in a study by Decety²³ on neuroscience, which, when comparing medical professionals to a control group, demonstrates different patterns of neuronal response to pain stimuli in another person.

These findings suggest that experience and scientific knowledge are essential in how medical professionals perceive other people's pain and suffering. The correlation between the dimensions of personal distress and empathic concern is explained by Hoffman²⁴ and Batson, Fultz, and Schoenrade¹⁹. According to these authors, when one cannot distance themselves from the situation that causes them distress, the subject is impelled to help alleviate their feelings.

On the other hand, in the case of medical professionals, there is a dampening of personal distress that would have beneficial consequences for clinical reasoning and, consequently, for the expression of empathic concern. This reaction contrasts with that of the control group, in which the neuro-hemodynamic activity increase included activation of aversion and withdrawal mechanisms from danger and threat²⁵. This difference may explain the apparent tranquility or even "coldness" that medical professionals transmit when attending an emergency. At the same time, the patient and his companions are terrified, thinking about the seriousness of the accident.

It could be observed that there is a correlation between total empathy scores and its dimensions, except for personal distress and perspective-taking, which corroborates the data found by Davis²⁵. However, humanized care goes beyond technique, and developing empathetic concern and prosocial behavior is essential. Due to the patient's vulnerability and the obligation of care given to the physician²⁶, empathetic concern is configured as a desired ethical behavior in medical professionals.

It is noteworthy that medical professionals' ability to make personal distress a motivation for empathic concern is of great importance for patient care. This is an issue to be better explored in future studies.

Perspective-taking and fantasy (cognitive dimension)

On the other hand, we have the average score of cognitive aspect, perspective-taking, and fantasy scores also high. According to Davis²⁵, there is an association between a high score in perspective-taking and greater social competence, a desirable skill for medical professionals. It is a dimension with positive impacts on the physician-patient relationship, as advocated by Hojat and collaborators²⁷.

It is understood that understanding the patient's perspective is an essential factor in the physician-patient relationship. Failure to understand this can interfere with the clarity of communication, which, in addition to contributing to patient dissatisfaction, can lead, as discussed

by Beckman and collaborators²⁸, to increased judicialization in medicine.

Koeche and collaborators²⁹, when addressing the issue of the prevalence of medical error in the state of Santa Catarina, found that most complaints of negligence resulted in acquittal. This finding allowed inferring that inconsistent complaints were motivated by the fragility of the physician-patient relationship. The authors warn of the need to *improve the physician-patient relationship as a fundamental element of inhibiting avoidable and inconsistent complaints that lead to convictions*³⁰.

According to Riess³¹, there may be a lack of affective empathy in the physician-patient relationship due to racial, ethnic, and religious differences, among others. In this regard, cognitive empathy (perspective-taking) becomes essential to curb differences in care caused by prejudice. *There is no place for discrimination or unequal care afforded to patients who differ from the majority culture or the majority culture of healthcare providers*³².

For Derrida and Dufourmantelle³³, hospitality implies the challenge of accepting the unknown, considering that the stranger can threaten the safety of those who welcome them. On the other hand, upon being received, this stranger suffers the threat of being transformed into the one who received them, of not having preserved their culture, their bonds of belonging, their identity, and their difference. In this sense, perspective-taking is a mediating tool for building a more humane physician-patient relationship.

The positive correlation between the dimensions of perspective-taking and empathic concern is justified in studies by Batson and collaborators³⁴ and Hoffman²⁴, which suggest that perspective-taking can lead to affective empathy and, consequently, to prosocial behavior. Batson, Fultz, and Schoenrade¹⁹ point out that prosocial behavior is triggered not by cognitive empathy, which is emotionally neutral, but by affective empathy.

Hoffman²⁴ proposed a sequence of empathic development in young children and found that perspective-taking skills, associated with the distinction between the self and the other, lead to empathic concern. The ability to

differentiate the self from the other and to whom the simulated state is attributed is fundamental for a mature form of affective empathy³⁵. Thus, when drawing a parallel with Stein, there is a certain similarity between the third level of empathy, defined by her as *the comprehensive objectification of the explicit experience*³⁶, and mature empathy (empathic concern), described by Hoffman³⁵.

According to Stein³⁶, in medical care, the diagnosis of a particular disease is related to knowledge, to the medical professional's technique, and not to empathy, as this concerns the perception of feelings that the sick person manifests. The recognition of these feelings corresponds to the first level of empathy. However, providing better care requires advancing in the empathic process and understanding feelings and relationships, going beyond attention to the disease.

While Lévinas³⁷ does not aim to deal with empathy but with otherness, he recognizes that it is through empathy that one can embrace the other in their otherness. Recognizing the patient's otherness is fundamental for the humanization of care.

If suffering does not affect healthcare professionals, it is because it is reduced to the totality, a fact that prevents them from seeing the face and recognizing the otherness and suffering of the patient and implies action without

empathy and not humanized. According to Carbonara, in Levinasian humanism, *the face of the other that appeals to me, and to which I respond responsibly, establishes humanity in me*³⁸.

The fantasy dimension also scored high, as the tendency to fantasize about fictional situations, according to Stotland and collaborators³⁹, influences emotional reactions toward others and, subsequently, helping behavior. This fact allows us to infer that medium or high scores in the fantasy dimension, such as those found in this study, may be related to a greater disposition for emotional reactivity and sensitivity toward others, as observed by Davis²⁵, which is desirable in the case of medical professionals.

Factors that interfere with empathy and hospitality

One of the sociodemographic factors that showed a significant difference, with $p < 0.01$, was gender. Differences were found in almost all dimensions of empathy, with women scoring substantially higher than men on the personal distress and fantasy measures. There is, however, no difference in the perspective-taking dimension (Table 2), which correlates with the findings of Davis¹⁵.

Table 2. Comparison of total empathy scores and their dimensions between females and males, based on the application of the empathy scale to medical professionals

Empathy dimensions	Gender	N	Mean	Standard deviation	p-value
Total empathy	Female	95	96.17	12.847	<0.001*
	Male	48	86.75	13.021	
Personal distress	Female	95	17.21	4.929	<0.001*
	Male	48	14.17	4.493	
Empathic concern	Female	95	29.79	3.856	<0.001*
	Male	48	27.27	4.129	
Perspective-taking	Female	95	24.60	3.372	0.121
	Male	48	23.67	3.379	
Fantasy	Female	95	24.57	5.666	<0.001*
	Male	48	21.65	5.707	

* Student's t test significant for $p < 0.01$

Several studies point to gender differences in care provision and empathetic attitudes. Higher scores among women on the empathy

scale, according to Hojat and collaborators⁴⁰, suggest that female medical professionals may process a different type of care based on a better

understanding of the patient's experiences and feelings. This difference is even reflected in the already-mentioned legal issues, with female professionals not being as sued as males²⁹.

Another interpretation of this fact is based on studies by Gilligan⁴¹ on the differences in the moral development of women and men. The author points out that women tend to think morally about relationships and care for those with whom they are connected. Conversely, according to studies on developmental stages and sequences by Kohlberg, Levine, and Hewer⁴², men tend to think more about general principles of justice and individual rights (or individual autonomy) of other people.

According to Sampaio, Camino, and Roazzi⁴³, these gender-attributed differences may be related to using self-assessment instruments, which tend to be influenced by social expectations and the representations of participants regarding the social roles attributed to men and women. As is widely known, self-reports can be influenced by various factors not to indicate how the person feels but to reflect how others expect them to feel. They can also vary according to the individual's ability to verbalize their thoughts⁴⁴.

In terms of experiencing a painful or stressful situation in the last year, there was a significant difference in the dimensions of empathic concern ($p=0.007$) and total empathy ($p=0.038$). Medical professionals who responded positively to this question had a higher empathic concern score.

This result supports Hoffman's thesis³⁵, according to which empathy, in the light of a variety of distress signals from another person, stems from modes of arousal. Among these are imitation, classical conditioning, and direct association—in which one sympathizes because the situation of the other resembles a painful experience of their own⁴⁴. This could justify a higher empathic concern score among those who went through a stressful situation in the previous year.

It is also possible to see this relationship in different reports of medical professionals who, after being in the shoes of patients themselves, changed how they treated their patients. The change in values was based on lived experiences, which leads to the inference that the experiences influence the dimension of empathic concern and prosocial behavior.

In the evaluation of empathy scores between occupation areas and between medical professionals working with pediatric and adult patients, there was a significant difference in the scores of the personal distress dimension. Pediatricians scored higher when compared to surgeons and physicians of adult patients. These data suggest that empathy can vary in level and type according to the medical specialty.

In addition, professionals with "people-oriented" and "technology-oriented" specialties showed different levels of empathy, supporting the results of Suartz and collaborators⁴⁵ and Hojat and collaborators⁴⁰. The latter study reveals that psychiatrists obtained the highest average empathy score. At the same time, anesthesiologists, orthopedists, neurosurgeons, and radiologists had a lower score⁴⁰. The low score of a group does not imply empathy deficiency, but the type of empathic relationship established is likely different.

In this study, data on ethical values for professional practice were considered high in all dimensions of hospitality. These data allow us to infer that such ethical values are essential for medical professionals.

The evaluation of the difference in hospitality between males and females was verified only in the transpersonal care dimension, with women presenting a significantly higher score than men. The transpersonal care dimension evaluates the presence of a specific type of care: the one that tries to embrace the souls of others through care and treatment processes related to values that represent the capacity for personal projection concerning the user, such as altruism and diligence.

The difference in this dimension can be explained by the relationship of moral attributions related to gender in a patriarchal society, as discussed by Gilligan⁴¹. Koeche and collaborators²⁹ demonstrate that these female professionals have better interpersonal relationships, reducing the chances, for example, of being sued.

In assessing the relationship between total empathy and its dimensions with total hospitality and its dimensions as ethical values for professional practice (Table 3), there was a correlation between total empathy and all dimensions of hospitality, except quality. This dimension would encompass more technical characteristics, such as competence, scientific

knowledge, and professional autonomy, which concern the qualities of professionals and the related service, not directly related to the patient. On the other hand, empathic concern

correlated with all dimensions of hospitality, including quality, demonstrating that, for medical professionals, this dimension is ethically essential and is associated with quality of care.

Table 3. Correlation between total empathy scores and its dimensions with total hospitality and its dimensions based on the application of their scales to 143 medical professionals

Hospitality dimensions	Total hospitality	Responsibility	Respect	Transpersonal care	Quality
Empathy dimensions					
Total empathy	0.340**	0.338**	0.241**	0.371**	0.070
Personal distress	0.106	0.194*	0.023	0.142	-0.048
Empathic concern	0.455**	0.403**	0.291**	0.474**	0.212*
Perspective-taking	0.299**	0.286**	0.301**	0.286**	0.031
Fantasy	0.207*	0.174*	0.163	0.245**	0.038

Pearson correlation, two-tailed, significant at: **level <0.01; * level <0.05

Personal distress is correlated only with responsibility, consisting of values representing the recognition of personalized and close service to the user. Such a dimension can shift the empathic process to the self instead of focusing on the patient, resulting in a higher level of personal distress. However, as discussed above, this personal distress does not imply withdrawal; on the contrary, it can increase commitment to care.

The comparison of hospitality dimensions between occupation areas or type of care (pediatric, adult) showed no significant difference. This fact led to the conclusion that these characteristics do not influence the level of hospitality for the sample in question. In all dimensions, the hospitality scores are considered high and consistent with the ethical values assumed for professional practice.

Based on the data presented, empathy is related to hospitality and practices of humanization and care. However, a question remains: How do we minimize some potentially dangerous characteristics that seem to be associated with establishing an empathetic relationship?

It refers to factors morally incompatible with professional practice, which influence the perception of the social world and allow social divisions, such as the tendency to sympathize more readily with attractive or close people. Such factors, after all, could lead to inequality in the treatment provided by medical professionals.

It may not be possible to stop empathizing more easily with close or attractive people. However, the practice of virtues, as discussed by Pellegrino and Thomasma²⁶, and Lévinas's ethics of otherness³⁷, can foster cognitive empathy (perspective-taking) and, therefore, curb the interference of the empathic act in the priority of medical care in the provision of assistance, and in the privilege of treatment to the detriment of other patients.

In health, *responsibility is the indeclinable response by the "other" and an inexorable giving of oneself*⁴⁶. As in the biblical parable of the good Samaritan, the medical professional, touched by the patient's suffering, must welcome and take responsibility for their care. The face of the other, of the patient, in its vulnerability, intimates the ethical action of the medical professional.

However, there must be empathy for this patient to be welcomed in his otherness and receive humane care. While the level of empathy declines during medical graduation, it is noted that its maintenance is possible and effective through the promotion of training sessions on empathic communication skills that use different interventions such as videos and role-playing carried out during course⁴⁷. Without empathy, there is no humanized embracement.

Furthermore, the quality of embracement and hospitality should be based on Derrida and Dufourmantelle's deconstruction theory³³,

thus promoting a critical view of care. This implies the need for changes or implementation of health policies aiming to humanize care.

Study limitations

The fact that it was developed based on self-report questionnaires may result in bias in the subscale scores and a one-sided view (only by the professional) of the perception of empathy. In a complementary way, it would be essential to carry out new studies involving the patient's perception of empathy and hospitality in the physician-patient relationship.

There are also limitations related to the cross-sectional design, which does not allow assessing whether there was a difference in levels of empathy over the years, and the sample, which, although sufficient for an exploratory study, may not be representative of the group of Brazilian medical professionals.

Final considerations

We sought to analyze the relationship between empathy and hospitality in the humanization of healthcare, focusing on medical professionals and their different occupation areas based on the bioethics of care.

The data obtained for the analyzed sample allow us to conclude that there was a correlation between the dimensions of empathy and the ethical values of the profession (hospitality scale), considered high for professional practice, which reflects in better embracement practices and, consequently, in more humanized care.

Factors such as gender, occupation area, and experience of stressful factors can interfere

with empathy, while only the gender factor interfered with the hospitality dimension. Working time or training in values did not influence the values of hospitality or empathy in the analyzed sample. Furthermore, the data on this training need to be further studied since medical professionals are part of a community, and moral training occurs "indirectly" at different times in life. Additionally, few studies on the relationship between moral emotions and values exist.

The difference between the genders, that is, women scoring more than men on the different empathy subscales, is well documented in different studies. However, there is a caveat: Men also obtained high empathy values. This is important when considering the mechanisms of attention, benevolence, and compassion necessary for humanizing care.

There may be a path to be explored in professional training if we consider the influence that the experience of stressful or painful situations had on medical professionals, producing empathetic responses to the pain of others. Also relevant are the data that point to a decrease in the score of the personal distress dimension in the career of medical professionals when compared with the values found in the general population. This difference, which portrays medical practice positively, leads us to infer that working on other dimensions of empathy may be possible during academic training. Thus, improving the quality of the empathetic relationship, hospitality, and, consequently, the humanization of care would be possible.

The analysis of the correlation between the dimensions of empathy and medical hospitality is expected to indicate ways for the bioethical issues of the humanization of care based on empathy and hospitality.

References

- Pessini L, Bertachini L. Ética no cuidado e humanização no mundo da saúde, em especial em fim de vida. In: Pessini L, Bertachini L, Barchifontaine CDP, editores. Bioética, cuidado e humanização: sobre o cuidado respeitoso. São Paulo: Centro Universitário São Camilo; 2014. p. 283-308.
- Costa SC, Figueiredo MRB, Schaurich D. Humanization within adult intensive care units (ICUs): comprehension among the nursing team. Interface (Botucatu) [Internet]. 2009 [acesso 17 jul 2020];13(supl 1):571-80. DOI: 10.1590/S1414-32832009000500009

3. Derkzen F, Bensing J, Lagro-Janssen A. Effectiveness of empathy in general practice: a systematic review. *Br J Gen Pract [Internet]*. 2013 [acesso 4 jan 2022];63(606):76-84. DOI: 10.3399/bjgp13X660814
4. Finset A, Ørnes K. Empathy in the clinician-patient relationship. *J Patient Exp [Internet]*. 2017 [acesso 4 jan 2022];4(2):64-8. DOI: 10.1177/2374373517699271
5. Adams SB. Empathy as an ethical imperative. *Creat Nurs [Internet]*. 2018 [acesso 17 jul 2020];24(3):166-72. DOI: 10.1891/1946-6560.24.3.166
6. Hojat M, Vergare MJ, Maxwell K, Brainard G, Herrine SK, Isenberg GA et al. The devil is in the third year: a longitudinal study of erosion of empathy in medical school. *Acad Med [Internet]*. 2009 [acesso 14 mar 2019];84(9):1182-91. DOI: 10.1097/ACM.0b013e3181b17e55
7. Neumann M, Edelhäuser F, Tauschel D, Fischer MR, Wirtz M, Woopen C et al. Empathy decline and its reasons: a systematic review of studies with medical students and residents. *Acad Med [Internet]*. 2011 [acesso 20 jul 2020];86(8):996-1009. DOI: 10.1097/ACM.0b013e318221e615
8. Zaki J. The caregiver's dilemma: in search of sustainable medical empathy. *Lancet [Internet]*. 2020 [acesso 4 jan 2022];396(15):458-9. DOI: 10.1016/S0140-6736(20)31685-8
9. De Benedetto MAC, Moreto G, Janaudis MA, Levites MR, Blasco PG. Educando as emoções para uma atuação ética: construindo o profissionalismo médico. *Rev Bras Med [Internet]*. 2014 [acesso 17 jul 2020];71(2 esp):15-24. Disponível: <https://bit.ly/3P7pXgZ>
10. Kelly R, Losekoot E, Wright-StClair VA. Hospitality in hospitals: the importance of caring about the patient. *Hosp Soc [Internet]*. 2016 [acesso 17 jul 2020];6(2):113-29. DOI: 10.1386/hosp.6.2.113_1
11. Corradi-Perini C, Pessini L. Prólogo. In: Corradi-Perini C, Pessini L, Souza W, editores. Bioética, humanização e fim de vida: novos olhares. Curitiba: Editora CRV; 2018. p. 13-20.
12. Oliveira LA, Ayres JRCM, Zoboli ELCP. Conflitos morais e atenção à saúde em Aids: aportes conceituais para uma ética discursiva do cuidado. *Interface (Botucatu) [Internet]*. 2011 [acesso 21 ago 2023];15(37):363-75. DOI: 10.1590/S1414-32832011000200004
13. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Núcleo Técnico da Política Nacional de Humanização. Acolhimento nas práticas de produção de saúde. 2^a ed. Brasília: Ministério da Saúde; 2010. p. 19.
14. Costa BRL. Bola de neve virtual: o uso das redes sociais virtuais no processo de coleta de dados de uma pesquisa científica. *Rev Interdiscip Gestão Soc [Internet]*. 2018 [acesso 4 jan 2022];7(1):15-37. DOI: 10.9771/23172428rigs.v7i1.24649
15. Davis MH. A multidimensional approach to individual differences in empathy. *J Pers Soc Psychol [Internet]*. 1980 [acesso 20 jun 2021];10:85. Disponível: <https://bit.ly/44futyc>
16. Sampaio LR, Guimarães PRB, Camino CPS, Formiga NS, Menezes IG. Estudos sobre a dimensionalidade da empatia tradução e adaptação do Interpersonal Reactivity Index (IRI). *Psico (Porto Alegre) [Internet]*. 2011 [acesso 17 jul 2020];42(1):67-76. Disponível: <https://bit.ly/44liY8n>
17. Corradi-Perini C, Paris ESC, Beltrão MR, Corradi MI, Martín-Martín R, González-Serna JMG. Empatía em estudiantes e profesionales de salud: análisis factorial de la Escala Multidimensional de Reatividad Interpersonal. *Res Soc Dev [Internet]*. 2022 [acesso 17 jul 2022];11(3):e42511326816. DOI: 10.33448/rsd-v11i3.26816
18. González-Serna JMG, Ferreras-Mencia S, Arribas-Marín JM. Desarrollo y validación de la Escala Axiológica de Hospitalidad para la Humanización de la Enfermería. *Rev Latinoam Enferm [Internet]*. 2017 [acesso 15 mar 2019];25:e2919. DOI: 10.1590/1518-8345.1767.2919
19. Batson CD, Fultz J, Schoenrade PA. Adults' emotional reactions to the distress of others. In: Eisenberg N, Strayer J, editors. *Empathy and its development*. Cambridge: Cambridge University Press; 1988. p. 163-84.
20. Eisenberg N, Eggum ND, Di Giunta L. Empathy-related responding: associations with prosocial Behavior, aggression, and intergroup relations. *Soc Issues Policy Rev [Internet]*. 2010 [acesso 17 jul 2020];4(1):143-80. DOI: 10.1111/j.1751-2409.2010.01020.x
21. Eisenberg N. *Altruistic emotion, cognition, and behavior*. Hillsdale: Erlbaum; 1986.
22. Formiga NS, Rocha MCO, Souza MA, Stevam ID, Fleury LFO. Confabilidade da escala multidimensional de reatividade interpessoal (EMRI) no contexto brasileiro. *Revista de Psicología Gepu [Internet]*. 2014 [acesso 17 jul 2020];5(2):32-43. Disponível: <https://bit.ly/3qJTrbq>

- 23.** Decety J. Empathy in medicine: what it is, and how much we really need it. *Am J Med* [Internet]. 2020 [acesso 20 jul 2020];133(5):561-6. DOI: 10.1016/j.amjmed.2019.12.012
- 24.** Hoffman ML. *Empathy and moral development: implications for caring and Justice*. Cambridge: Cambridge University Press; 2000.
- 25.** Davis MH. Measuring individual differences in empathy: evidence for a multidimensional approach. *J Pers Soc Psychol*. 1983 [acesso 14 mar 2019];44(1):113-26. DOI:10.1037/0022-3514.44.1.113
- 26.** Pellegrino ED, Thomasma DC. *Para o bem do paciente: a restauração da beneficência nos cuidados da saúde*. São Paulo: Loyola; 2018.
- 27.** Hojat M, Louis DZ, Markham FW, Wender R, Rabinowitz C, Gonnella JS. Physicians' empathy and clinical outcomes for diabetic patients. *Acad Med* [Internet]. 2011 [acesso 14 mar 2019];86(3):359-64. DOI: 10.1097/ACM.0b013e3182086fe1
- 28.** Beckman HB, Markakis KM, Suchman AL, Frankel RM. The doctor-patient relationship and malpractice: lessons from plaintiff depositions. *Arch Intern Med* [Internet]. 1994 [acesso 4 jan 2022];154(12):1365-70. DOI: 10.1001/archinte.1994.00420120093010
- 29.** Koeche LG, Censi I, Bortoluzzi MC, Bonamigo EL. Prevalência do erro médico entre as especialidades médicas nos processos julgados pelo Conselho Regional de Medicina do Estado de Santa Catarina. *ACM Arq Catarin Med* [Internet]. 2013 [acesso 26 jan 2022];42(4):45-53. Disponível: <https://bit.ly/3KQXERq>
- 30.** Koeche LG, Censi I, Bortoluzzi MC, Bonamigo EL. Op. cit. p. 51.
- 31.** Riess H. The Science of Empathy. *J Patient Exp* [Internet]. 2017 [acesso 17 jul 2020];4(2):74-77. DOI: 10.1177/2374373517699267
- 32.** Riess H. Op. cit. p. 74. Tradução livre.
- 33.** Derrida J, Dufourmantelle A. Anne Dufourmantelle convida Jacques Derrida a falar da hospitalidade. São Paulo: Escuta; 2003.
- 34.** Batson CD, Eklund JH, Chermok VL, Hoyt JL, Ortiz BG. An additional antecedent of empathic concern: valuing the welfare of the person in need. *J Pers Soc Psychol* [Internet]. 2007 [acesso 4 jan 2022];93(1):65-74. DOI: 10.1037/0022-3514.93.1.65.
- 35.** Hoffman ML. Empathy, role-taking, guilt, and development of altruistic motives [Internet]. Ann Arbor: University of Michigan; 1973 [acesso 17 jul 2020]. Disponível: <https://bit.ly/3sg3ncS>
- 36.** Stein E. Sobre el problema de la empatía. Madri: Trotta; 2004. p. 27.
- 37.** Lévinas E. Entre nós: ensaios sobre alteridade. 3^a ed. Petrópolis: Vozes; 2004.
- 38.** Carbonara V. Humanismo do outro homem: perspectivas de uma formação a partir da sensibilidade e da ética com Emmanuel Levinas. *Educação e Filosofia* [Internet]. 2021 [acesso 26 jan 2022];34(70):307-32. p. 321 DOI: 10.14393/REVEDFIL.v34n70a2020-46884
- 39.** Stotland E, Mathews KE Jr, Sherman SE, Hansson RO, Richardson BZ. *Empathy, fantasy, and helping*. Beverly Hills: Sage; 1978.
- 40.** Hojat M, Erdmann JB, Veloski JJ, Gonnella JS, Mangione S, Nasca TJ *et al*. Empathy in medical students as related to academic performance, clinical competence and gender. *Med Educ* [Internet]. 2002 [acesso 28 jun 2021];36(6):522-7. DOI: 10.1046/j.1365-2923.2002.01234.x
- 41.** Gilligan C. *Uma voz diferente: teoria psicológica e o desenvolvimento feminino*. Rio de Janeiro: Rosa dos Tempos; 1982.
- 42.** Kohlberg L, Levine C, Hewer A. Moral stages: a current formulation and a response to critics: contributions to human development. Chicago: Karger; 1983.
- 43.** Sampaio LR, Camino CPS, Roazzi A. Revisão de aspectos conceituais, teóricos e metodológicos da empatia. *Psicol Ciênc Prof* [Internet]. 2009 [acesso 17 jul 2020];29(2):212-27. DOI: 10.1590/S1414-98932009000200002
- 44.** Stueber K. Empathy. In: Zalta EN, editor. *The Stanford encyclopedia of philosophy* [Internet]. Stanford: Stanford University; 2019 [acesso 9 jul 2020]. Disponível: <https://stanford.io/3P3axdv>

45. Suartz CV, Quintana MI, Lucchese AC, De Marco MA. Avaliação de empatia em residentes de especialidades clínicas e cirúrgicas da Universidade Federal de São Paulo. *Rev Bras Educ Med [Internet]*. 2013 [acesso 17 jul 2020];37(3):320-5. DOI: 10.1590/S0100-55022013000300003
46. Meneses RDB. Da hospitalidade em Derrida ao acolhimento em saúde [tese] [Internet]. Braga: Universidade Católica Portuguesa; 2012 [acesso 20 jun 2021]. p. 46. Disponível: <http://hdl.handle.net/10400.14/10282>
47. D'souza PC, Rasquinho SL, D'souza TL, Jain A, Kulkarni V, Pai K. Effect of a single-session communication skills training on empathy in medical students. *Acad Psychiatry [Internet]*. 2020 [acesso 4 jan 2022];44(3):289-94. Tradução livre. DOI: 10.1007/s40596-019-01158-z

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