RBEM
Revista Brasileira de Educação Médica

ORIGINAL ARTICLE

DOI: https://doi.org/10.1590/1981-5271v47.2-2022075.ING

The effects of humanization training comparing doctors and non-doctors

Os efeitos de um treinamento sobre humanização entre médicos comparados a não médicos

Clara Barbosa Martins[1] clara.martins@alumni.usp.br
Jouce Gabriela de Almeida[1] jouce.gabriela@hc.fm.usp.br
André Malbergier[1] andre.malbergier@hc.fm.usp.br

ABSTRACT

Introduction: The medical category has been considered of little competence regarding the attributes related to humanization. As such, changes have been made in the course curriculums of undergraduate medical courses in Brazil and worldwide to expand the Humanities disciplines. In addition to these initiatives, humanization training is needed for doctors who graduated under the aegis of old curriculums and for those who - even though they graduated with the new curricular guidelines - still need to be updated on the subject. There are few quantitative studies about humanization training, especially for medical doctors.

Objective: To evaluate the effects of humanization training on doctors in comparison with non-doctors.

Method: Humanization trainings lasting 135 minutes were conducted for doctors and non-doctors in a psychiatric university hospital in São Paulo (Brazil). The classes were conducted with the use of slides and included discussions and a role-playing activity. The research subjects answered a questionnaire with 34 items assessing their self-perceptions about the knowledge, skills and attitudes in humanization before and 15 days after the training. Nonparametric tests were used to compare the scores between the group of doctors and non-doctors. Moreover, multiple linear regressions were performed for the knowledge, skills and attitude dimensions aiming to evaluate whether there was a significant difference between genders, age ranges, marital status, number of children, jobs, religion, years of service.

Result: Medical professionals and those with six or more years of service had lower humanization scores at the pre-training moment. The training resulted in an increase in humanization scores in all professional categories, but physicians showed a greater increase and reached the same level as the other categories.

Conclusion: A fast and low-cost training resulted in an increase in the self-perception of humanization in doctors and non-doctors. The difference between the professional categories ceased to exist in the evaluation carried out 15 days after the training. The results suggest that doctors can increase their self-perception about humanization and reach the same level as other professionals.

Keywords: Training, Doctors, Humanization

RESUMO

Introdução: *A categoria médica vem sendo considerada pouco competente nos atributos relacionados à humanização. Por isso, mundialmente e no Brasil, mudanças têm sido realizadas nas grades dos cursos de graduação em Medicina para ampliar as disciplinas de humanidades. Além dessas iniciativas, há necessidade de treinamentos em humanização para médicos que se formaram com grades antigas e aqueles que, mesmo graduados a partir das novas diretrizes curriculares, ainda precisam se atualizar na temática. Há poucos estudos quantitativos sobre treinamentos em humanização, especialmente para médicos.*

Objetivo: *Este estudo teve como objetivo avaliar os efeitos de um treinamento sobre humanização para médicos em comparação a não médicos.*

Método: *Realizaram-se treinamentos de 135 minutos sobre humanização para médicos e não médicos em um hospital psiquiátrico universitário em São Paulo (Brasil). As aulas foram ministradas com o uso de slides e acompanhadas de discussão e dramatização. Os sujeitos da pesquisa responderam a um questionário com 34 itens que avaliavam as autopercepções sobre conhecimentos, habilidades e atitudes em humanização antes e 15 dias depois do treinamento. Utilizaram-se testes não paramétricos para comparar os escores entre o grupo de médicos e não médicos. Além disso, realizaram-se regressões lineares múltiplas para as dimensões de conhecimentos, habilidades e atitudes, com o objetivo de avaliar se houve diferença significativa entre gêneros, idades, estados civis, número de filhos, vínculos profissionais, religião, anos de serviço.*

Resultado: *Profissionais médicos e aqueles com seis ou mais anos de serviço apresentaram menores escores em humanização no pré-treinamento. O treinamento gerou aumento dos escores de humanização em todas as categorias profissionais, mas médicos apresentaram maior aumento e se igualaram às outras categorias.*

Conclusão: *Com um treinamento rápido e de baixo custo, verificou-se o aumento da autopercepção em humanização em médicos e não médicos. A diferença entre as categorias profissionais deixou de existir na avaliação realizada após 15 dias do treinamento. Os resultados indicam que médicos podem aumentar suas autopercepções sobre humanização e se igualar aos outros profissionais.*

Palavras-chave: *Treinamento; Médicos; Humanização.*

[1] Universidade de São Paulo Hospital das Clínicas, São Paulo, São Paulo, Brazil.

Chief Editor: Rosiane Viana Zuza Diniz.
Associate Editor: Roberto Esteves.

Received on 10/24/22; Accepted on 04/12/2023.

Evaluated by double blind review process.

DOI: https://doi.org/10.1590/1981-5271v47.2-2022075.ING

INTRODUCTION

Humanization in the health area encompasses several definitions, reflections and attitudes both in the attention to the health service user and in professional practice. The most frequently discussed concepts in this topic include respect, empathy, comprehensive care, embracement, care actions and practices, health education, arts and listening[1].

Therefore, from the viewpoint of humanization, there is an appreciation of the professional essence, highlighting the field of humanities and subjectivities, expanding the perspective of action in health beyond the biomedical-centered one[2,3].

Conceptually, the World Health Organization (WHO) defines the term health as a concept that goes beyond the biological model, comprising the individual's complete "physical, mental and social well-being"[4]. Based on this premise, it is possible to perceive that human dimensions must be present within the areas of medical scope.

In Brazil, humanization has been included in the National Humanization Policy (PNH, *Política Nacional de Humanização*) since 2003[5]. Historically, there seems to be an attempt to expand humanized professional practices with changes in curricula for the training of health professionals, through the incorporation of disciplines in the medical field that express this topic[6-9].

Sousa et al., when analyzing 34 articles on the world trend in medical education, mention that, from the 1950s onwards, medical humanities disciplines became part of the syllabi in medical undergraduate courses in the United Kingdom[10].

In our country, the Faculty of Medicine of Universidade de São Paulo has been integrating medical humanities disciplines into the curriculum since 1988[11,12].

Despite some advances, a low level of humanization still prevails in medical practice. A study carried out by Harvard and Northwestern universities (United States of America) characterizes medical practice as dehumanized and permeated by a lack of empathy and mechanization of the service[13].

A more recent systematic review, published in 2018, which analyzed articles on the teaching of humanization in medical schools, observed that the humanization approach in medicine is still small, considering the extent of the area. The article emphasizes the need to change the curricula to add and/or expand spaces for the presentation and discussion of humanism in medicine[14].

Even with the recognition of the relevance of humanization disciplines in medicine and their still incipient progression in the curricula of faculties, the medical category remains a constant target of criticism regarding the dehumanization of care. It is even questioned whether doctors would be less sensitive to the subject than other health professionals[14-16].

Other professions in the health area express humanization in their curricula and/or praxis. In a study of undergraduate nursing courses in São Paulo, it was observed that 59% of them had some term associated to humanization in their disciplines[7].

Another study, carried out at Universidade Federal da Paraíba (UFPB), found that the nursing course offers 13 subjects involving humanization, while the medical course, also taught at the UFPB, does not specifically address the topic[17].

A study carried out in the state of Paraná, Brazil, found mandatory subjects on humanization in the nursing course, in at least 5 Higher Education Institutions. The psychology undergraduate course had an optional discipline at a University[18].

There are few studies that show advances in the humanization curriculum in courses such as psychology and social work, but some studies show that psychology actively participated in the foundation of humanization in Brazil, with the creation of the PNH[8]. In addition, nursing, social work and psychology tend to carry out humanization in their daily practices, often empirically, but lacking a theoretical basis[6,19-21].

As an example of an attempt to improve the practice of humanization in the psychology area, a protocol was tested with interns from this course to improve hospital care in this category, making it more humanized[22].

Despite such initiatives, in the area of mental health, the humanization scenario still lacks quantitative studies and it is necessary to develop training sessions, aiming to expand the knowledge and practice among professionals[11,12,14,23].

We found few reports of interventions aimed at implementing humanization in health services and achieving the immersion of previously trained professionals in the PNH[24-27]. Among these articles, one reported an improvement in the patients' perception of professionals after they had participated in a 15-minute intervention comprising a slide show for hospital employees. There was an improvement in the quality of the relationship between patients and the staff[27].

However, we did not find any quantitative studies that measured the results on humanization, before and after training, from the perspective of the health professionals themselves. Therefore, the present study is one of the first to evaluate the effectiveness, at least in the short term, of training in this area for doctors and non-doctors.

Therefore, this study was carried out aiming to evaluate the effectiveness of training in the area of humanization for medical professionals compared to non-medical ones who work in the mental health area.

DOI: https://doi.org/10.1590/1981-5271v47.2-2022075.ING

METHOD

Study location and participants

The study was carried out at Grupo de Estudos de Álcool e outras Drogas (GREA), located in Instituto de Psiquiatria do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (IPq-HCFMUSP). The group develops studies in the area of research, teaching, assistance and prevention of the use of alcohol, tobacco and other drugs since 1981.

Its method is characterized by a multidisciplinary approach, with a team comprising psychiatrists, psychologists, nurses, social workers, occupational therapists and physical educators. The group is currently considered a Center of Excellence for Drug Use Treatment and Prevention by the National Secretariat for Drug Policies – SENAD (*Secretaria Nacional de Políticas sobre Drogas*).

Quantitative educational research

The required criteria for a quantitative educational research were met. The sample consisted of 54 subjects who answered a self-assessment questionnaire, assigning scores to the proposed questions.

The Survey method was applied, which is one of the proposed methods for carrying out a quantitative research. It involves the use of a field survey, in which data collection is performed through the application of a questionnaire or form. We chose the longitudinal Survey because it allows investigating the evolution or transformations that occurred in certain variables throughout a period of time[28].

Inclusion criteria for subjects

The inclusion criteria for subjects to participate in this study were:

- Being health professionals working in the outpatient clinic and/or hospital wards of GREA.

Study implementation

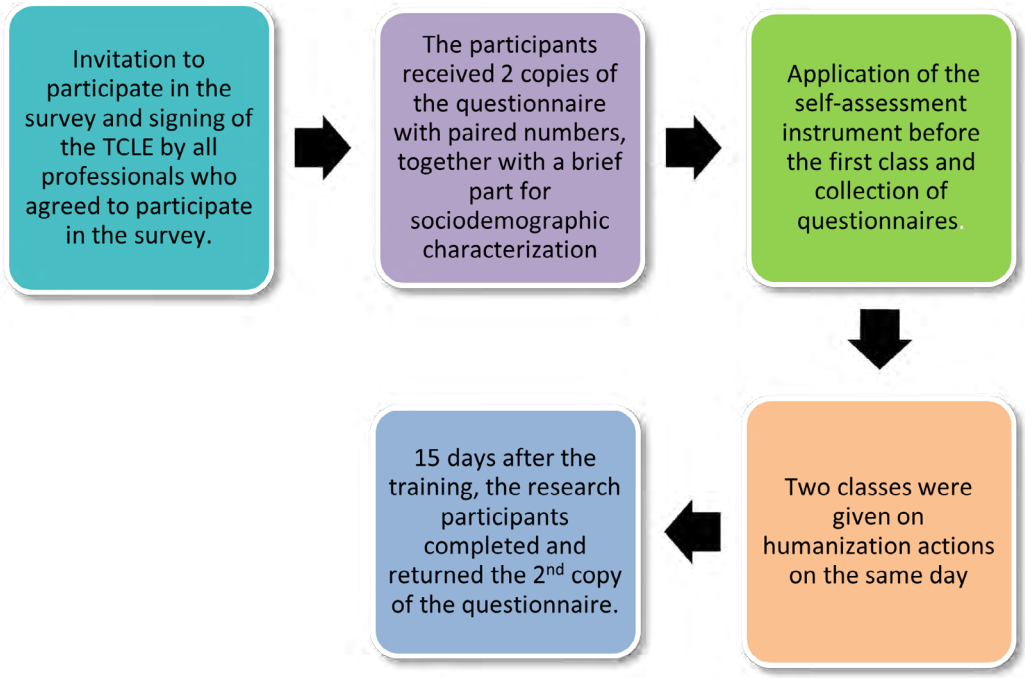
Before being included in the study, the Free and Informed Consent Form (TCLE, *Termo de Consentimento Livre e Esclarecido*) was read to the selected subjects. Those who agreed to participate in the study signed the TCLE and answered a questionnaire. There were no refusals to participate in the study. Subsequently, they underwent training related to humanization, consisting of two classes/discussions totaling 135 minutes with a 15- to 30-minute break. Fifteen days after this training, the subjects answered the questionnaire once again, containing the same questions.

Figure 1 shows the step-by-step process for the study implementation. Five trainings were carried out on humanization, three in November 2017 and two in July 2018. The classes took place on different days and times to encompass a larger number of professionals.

Instrument used in training (self-assessment)

The professionals assigned a score to the sentences contained in the instrument according to their perceptions' intensity regarding the importance (i), mastery (m) and amount of knowledge (a) they believe they have about humanization.

Figure 1. Step-by-step process for the study implementation.



Source: Prepared by the authors.

DOI: https://doi.org/10.1590/1981-5271v47.2-2022075.ING

The questionnaire distributed in two copies contained the same registration number in each one of them to be able to pair the research subjects. Thus, the absence of identification by name guaranteed the confidentiality of each participant. On the first sheet, there were some questions for the sociodemographic characterization. It was explained that one of the questionnaires would remain with them to be filled out 15 days after the training and handed to the researcher.

The applied instrument consists of 34 items: 11 items about knowledge (k), 15 about skills (s) and 8 about attitudes (a) of humanization. In the questionnaires, the scores for each item vary from 0 to 4. Zero means no importance, no mastery or no knowledge about the presented sentence and 4 means (maximum value for a sentence): full importance, full mastery and full knowledge, whereas 2 and 3 are intermediate scores.

Below are some examples of sentences that subjects self-rated regarding knowledge, skills and attitudes:

1- Knowledge: Knowing about the results of humanized care.

2- Skills: Explain to the patient what will be done.

3- Attitudes: Articulate effective means if you are not the one who can solve the question asked by the patient.

The questionnaire used in this project was based on a self-assessment study of a program developed in a company, published in a national scientific journal[29].

It is important to emphasize that, for this research, the original sentences of the questionnaire were changed to the topic of humanization, while maintaining the analysis parameters: knowledge, skills and attitudes. Given these dimensions, it is understood that this questionnaire allows the analysis of competence in humanization of different groups of health professionals. These variables are measured through importance, knowledge and mastery scores.

With the use of the self-evaluation model, the aim was to obtain impartiality in the study, preventing an external evaluator from influencing the responses, especially in the case of evaluations by a superior or service colleague. The professionals were asked to answer each question truthfully. The topics requested in the instrument were all worked on during the training and based on the PNH.

Training: step-by-step process for the creation and preparation of the lesson plan

We did not find any regulations or information about the number of hours required to complete a humanization training. Therefore, we chose to carry out the training in 135 minutes. It is understood that, being health professionals, the subjects would already have some idea about the subject, but that they are not often perceived in everyday practice. Hence, the need to grasp the topic through a theoretical framework to perceive themselves as having the mastery, importance and knowledge of the subject from the theoretical and practical perspectives.

To carry out the lesson plan, the following steps were followed:

1) **Preparation**: The researchers collected theoretical and practical materials on humanization: articles, videos, books, conferences, etc. After that, the content was created on slides based on training models. The result was sent for approval by members of the Grupo de Trabalho o de Humanização (GTH) before the implementation. The GTH is a group that acts in the promotion and development of humanization in the hospital and is coordinated by the Scientific-Technical Center of Humanization. The IPq-HCFMUSP has its GTH, as well as the other Institutes within the HCFMUSP[1].

2) **Pre-presentation:** There was a pre-presentation of the classes to some members of the GTH of IPq-HCFMUSP and some adaptations were made for the hospital. Initially, the reservation of rooms was made upon confirmation of professionals who would attend, paying attention to the physical resources of the room: projector, computer, chairs, tables and environment protected from external noise.

3) **Target Audience:** The target audience of this training consisted of professionals who were working in the GREA (doctors and non-doctors).

4) **Division and duration:** Not all professionals could attend he presentation on the same day and time of the study. Therefore, the same classes were held on five different days and times (1 in the morning, 3 in the afternoon and 1 between afternoon and evening). Each training consisted of two consecutive classes, all on the same day, lasting 135 minutes, with a 15- to 30-minute interval between them.

The dates were settled according to previous conversations with heads of each professional category. It was observed that 2 hours and fifteen minutes would be important, as they would allow the subjects not to be absent for a long time from each department. Another factor pre-established with the managers was the importance of carrying out the training on a normal working day, to prevent absences.

5) The main syllabus of the class contained humanization actions, based on the Technical and Political Guide used in the Institution itself[1]. This material facilitates the guidance of conducts and values of humanization adopted by Rede Humanização do Hospital das Clínicas (FMUSP).

6) The main objective of the training was to expand the competence of the research subjects on humanization.

7) The specific objectives of the training were:

- Exposing the subjects to the theoretical concept of humanization and show some practices that the IPq already carried out on humanization actions.
- Contributing to the professionals' awareness related to the practice of humanized care, reaffirming that care must occur in a holistic way.
- Valuing what the workers already did in terms of humanization with patients and among the professionals.
- Valuing health professionals and strengthening the concept of interprofessional humanization.
- Clarifying any doubts about the topic.

8) **Justification:** Many professionals already develop humanization actions but cannot see themselves in the process because they do not have the concept of PNH. These actions are sometimes not carried out in a systematic and structured way. Other professionals, on the other hand, do not perform humanized care, and they need to have the knowledge and grasp the content so they can develop practical attitudes of humanization. Considering these facts, the training and dissemination of knowledge in the area of humanization are necessary.

9) Teaching and learning strategies: The classes were conducted by a nurse (1st author of this manuscript) with experience in the area, together with members of the hospital humanization group. The teaching and learning strategies are shown in Figure 2.

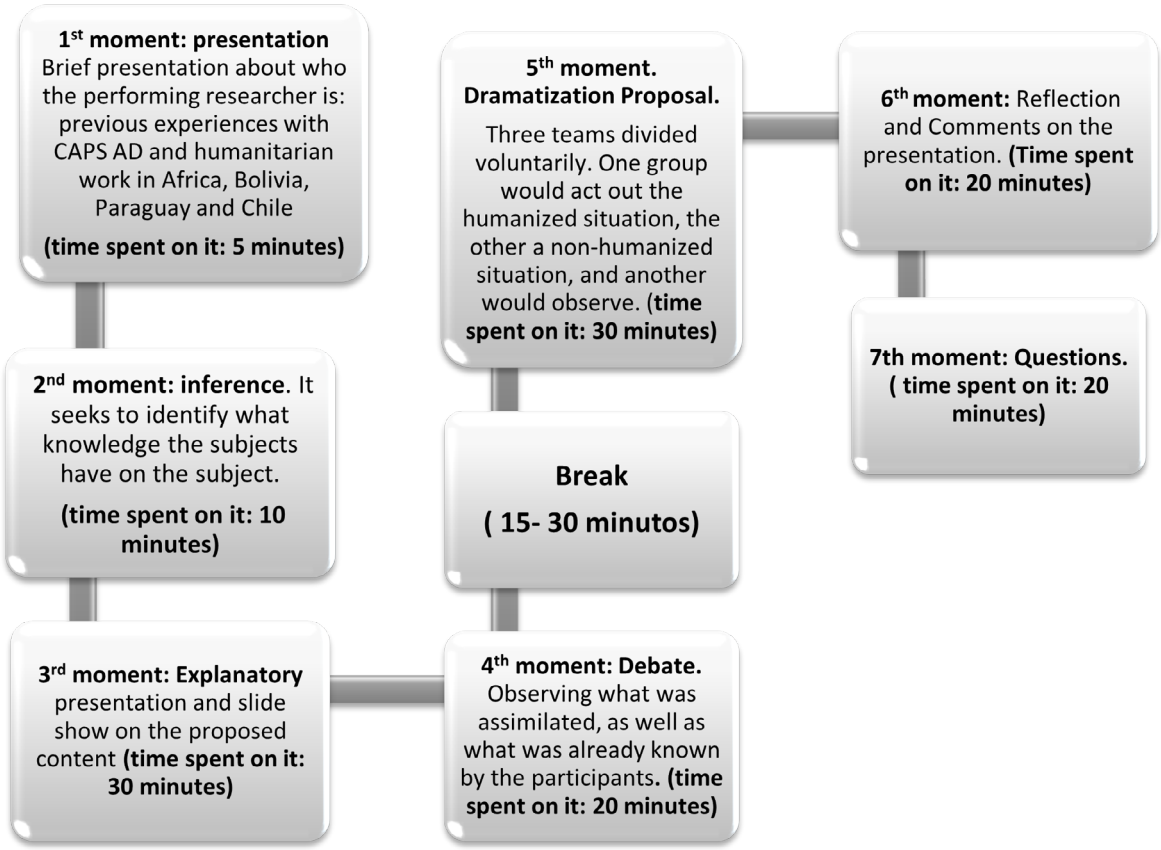
10) Learning **assessments** were carried out on an ongoing basis. During the dramatization, it was evaluated how much was absorbed from the training content. In the end, the doubts were revealed and clarified, also referring to the importance of role-playing to express themselves.

In addition, self-assessment was performed using the previously explained instrument.

Number of subjects

Using as a hypothesis for this type of proposal a possible result with an expected effect of 0.5, a significance of 5% and test power of 80%, the sample should have at least 34 subjects. To estimate the number of research subjects, the following formula was used:

Figure 2. Teaching and learning strategies for humanization training.



Source: Prepared by the authors.

$$n = (t\_\{n-1, alpha/2\} + t\_\{n-1, beta\}) /delta^2$$

Aiming to reach the largest possible number of professionals, this study selected 61 professionals from GREA.

Analyses

Of the 61 subjects, two left blank columns in the first phase of the research and, therefore, their questionnaires were excluded from the analysis. Five subjects who participated in the training did not return the questionnaires on the agreed dates 15 days after their training and were also excluded. Therefore, 54 professionals were evaluated.

Analyses according to sociodemographic characteristics

For the sociodemographic analyses, the following tests were used: Student's *t* test, Chi-Square test and Mann-Whitney test.

Analysis between professional categories

When assessing the professional categories of doctors and non-doctors, the scores of the questionnaires were obtained by the sum (S) of the k+s+a values assigned by each subject in each sub-item of the column described in the questionnaire and extracting the average. Subsequently, the average score of the S of doctors was compared with that of non-doctors for the pre-training, post-training and for the difference in results of post- minus the pre-training through non-parametric unpaired tests. The GraphPad Prism 8 software was used to carry out these analyses.

Multiple regression analyses

Multiple Linear Regression models were adjusted for the pre-training score and for the difference between post- vs. pre-training for the dimensions of knowledge, skills and attitudes, with the aim of assessing whether there is a significant difference between genders, age ranges, marital status, children, jobs, religion, years of professional activity and job categories.

The significance of the effects was verified using Wald Test and the variable selection process used was the forward-backward, considering a significance level of 0.05, using the R software, version 3.6.2.

Ethical aspects

The research project was analyzed by the Ethics Committee of HCFMUSP (CAPpesq) and approved (approval n. 2.169.168).

RESULTS

Table 1 shows the sociodemographic characteristics of the subjects of this research. The sample profile of this study was: female gender (72.2%), single (61.1%), without children (68.5%), having a religion (81.5%), with only job (57.4%) and with less than 6 years of professional activity (66.7%). The mean age was close to 35 years. There were differences in some sociodemographic variables between doctors and non-doctors. Females were more common among non-doctors ($p< 0.001$). Regarding jobs, the medical category had, for the most part, more than one job ($p=0.039$). Non-doctors more often declared having a religion ($p< 0.001$).

Univariate analyses at different moments

Table 2 discloses the averages of the sum of scores in humanization of k+s+a. These data characterize the self-assessed competence in humanization on the subject before and after training.

Results of the pre-training moment

At the pre-training moment, doctors had an average of their scores (k+s+a) 24.4 points lower than non-doctors ($p<0.0001$).

Results of the post-training

At the post-training moment, no difference was observed in the means of the k+s+a scores between doctors and non-doctors ($p=0.5702$).

Results of the post- vs. pre-training differences

Comparing the differences in the average scores of the post- less pre-training moments, it is observed that doctors showed an increase in the average of their scores k+s+a 21.65 points higher than non-doctors ($p=0.0002$).

Multiple Regressions: Variables involved with the difference in mean scores for doctors

Table 3 shows the results obtained through multiple linear regressions. Medical variables, gender, age, marital status, years of professional activity, children and religion were considered. In this analysis, we tried to assess which variables were associated with increased humanization scores among doctors. They were: a) marital status: married people showed a lower increase in scores compared to single individuals ($p=0.001$); b) Duration of professional activity: professionals with six or more years of professional activity increased their scores more than doctors with up to five years of activity ($p=0.043$); c) Children: doctors with children showed a greater increase in their scores when compared to doctors without children ($p=0.015$).

Table 1. Sociodemographic characteristics of the sample (n=54).

Measure	Doctor	Multiprofessional	Total	p-value
age				
mean ± sD	33.4 ± 6.8	35.7 ± 9.7	34.9 ± 8.9	0.318[a]
median [quartiles]	32 [30; 33]	33 [28; 39]	32.5 [29; 38]	
gender				
female	5/17 (29.4%)	34/37 (91.9%)	39/54 (72.2%)	< 0.001 [b]
male	12/17 (70.6%)	3/37 (8.1%)	15/54 (27.8%)	
marital status				
married	7/17 (41.2%)	11/37 (29.7%)	18/54 (33.3%)	0.603 [b]
separated	0/17 (0%)	2/37 (5.4%)	2/54 (3.7%)	
single	10/17 (58.8%)	23/37 (62.2%)	33/54 (61.1%)	
widowed	0/17 (0%)	1/37 (2.7%)	1/54 (1.9%)	
children				
no	11/17 (64.7%)	26/37 (70.3%)	37/54 (68.5%)	0.757 [b]
yes	6/17 (35.3%)	11/37 (29.7%)	17/54 (31.5%)	
jobs				
one job	6/17 (35.3%)	25/37 (67.6%)	31/54 (57.4%)	0.039 [b]
more than one job	11/17 (64.7%)	12/37 (32.4%)	23/54 (42.6%)	
years of professional activity				
median [quartiles]	1 [1;1]	1 [1;3]	1 [1; 2]	0.311[c]
2 to 5 years	13/17 (76.5%)	23/37 (62.2%)	36/54 (66.7%)	0.364[b]
6 years or longer	4/17 (23.5%)	14/37 (37.8%)	18/54 (33.3%)	
religion				
no	10/17 (58.8%)	0/37 (0%)	10/54 (18.5%)	< 0.001[b]
yes	7/17 (41.2%)	37/37 (100%)	44/54 (81.5%)	

a – Student's *t* test, b – Chi-square test, c – Mann-Whitney test
Source: Prepared by the authors

Table 2. Scores for competence in humanization in the different moments of the study.

	Doctors	Non-doctors	p- value
Pre-Training			
Mean	195.2	219.6	
Median	196	225	
Confidence Interval	[190.4-200.1]	[208.8-230.5]	
Standard error	2.3	5.4	<0.0001
Post-Training			
Mean	240	242.8	
Median	240	243	
Confidence Interval	[234.2-245.8]	[237.4-248.2]	
Standard error	2.75	2.6	0.5702
Post- Pre-Training difference			
Mean	44.76	23.11	
Median	48	14	
Confidence Interval	[36.28-53.25]	[15.08-31.14]	
Standard error	4	3.9	0.0002

Source: Prepared by the authors

 DOI: https://doi.org/10.1590/1981-5271v47.2-2022075.ING

Table 3. Final results of multiple regressions for the different groups at different moments.

	Estimate	Lower Limit	Upper Limit	p-value
Final Model (Post-Pre training) Doctors				
Base Profile (Doctors)	35.86	21.89	49.84	0.011
Marital status (Married)	-50.98	-70.17	-31.79	0.001
Years of professional activity (6 or more years)	13.11	2.50	23.73	0.043
Children (Yes)	38.80	18.84	58.75	0.015
Final Model (Post- Pre Training) Non-doctors				
Base Profile (Non-doctors)	-3.91	-27.71	19.89	0.111
Years of professional activity (6 or more years)	24.06	5.47	42.64	0.003
Children (Yes)	-20.64	-40.36	-0.92	0.010
Total Final Model (Pre- Training) Doctors and Non- Doctors				
Base Profile (Non-doctors)	245.67	223.15	268.19	< 0.001
Years of professional activity (6 or more years)	-18.88	-34.00	-3.76	0.018
Doctors	-27.11	-42.46	-11.77	0.001
Total Final Model (Post- Pre Training) Doctors and Non-doctors				
Base Profile (Non-doctors)	-0.05	-18.13	18.04	0.996
Years of professional activity (6 or more years)	20.02	6.74	33.30	0.005
Children (yes)	-14.93	-28.30	-1.57	0.033
Doctors	25.35	13.31	37.40	< 0.001

Source: Prepared by the authors

Variables involved with the difference in mean scores for non-doctors

Among non-doctors, considering the variables: non-doctors, gender, age, marital status, years of professional activity, children and jobs, it was possible to observe that the variables involved in the differences (post vs. pre) were: duration of professional activity: the estimated increase for non-doctors with 6 or more years of professional activity was 24.06 points higher compared to those with up to 5 years (p=0.003); children: the total score of non-doctors with children showed a difference approximately 20.64 points lower than that of non-doctors without children (p=0.010)

Linear regressions involving doctors and non-doctors in the same adjustments

Table 3 shows the final models of the pre-training and post-training moments for all variables containing doctors and non-doctors in the same adjustments. It was observed that in the pre-training moment, the fact of having six or more years of professional activity influenced towards lower scores in humanization (p=0.018). In the post-training, however, we observed that having six or more years of professional activity contributed to higher humanization scores (p=0.005). It was also observed that the fact of being a doctors had a negative influence on the self-assessment about humanization when compared to non-doctors (p=0.001). After the training, the fact of being classified in the medical category became an aggregating factor to humanization (p<0.001). Having children hindered the self-perception of humanization among doctors and non-doctors when comparing the difference post- minus pre-training (p=0.033).

DISCUSSION

The results of the present study suggest that training on humanization was effective in expanding self-perception on knowledge, skills and attitudes in humanization among doctors (psychiatry residents and psychiatrists) in a specialized

service for the treatment of patients with disorders related to alcohol and drug use .

Before the training, non-doctors showed higher scores in humanization than doctors, reinforcing the idea that the latter perceive themselves as less "humanized" or have less knowledge on the subject than other health professionals[30,31]. This difference ceases to exist in the evaluation after the training.

The effect of the intervention was significant for the medical category, who was sensitive to the topic and showed scores similar to those of non-doctors in the second evaluation. Non-doctors also improved their self-perception of their humanization skills, but doctors increased their scores more than non-doctors. It should be said that there was no difficulty regarding the acceptance of training in humanization among doctors.

It can be observed that in the study sample, the number of jobs, gender and religion showed significant differences between doctors and non-doctors.

In the case of gender, possibly reflecting a process of feminization in the health area[32], this variable did not influence the increase in self-perceptions of humanization in the pre- and post-training moments among the professionals involved in this study when multivariate analyses were performed using multiple linear regressions.

A study carried out on health, spirituality and religiousness from the point of view of medical students observed that only 20.2% of the students associate the issue of spirituality with an ethical and humanistic attitude, and 39.9% associate humanization with medicine[33]. Studies and reviews have shown the relevance of spirituality in clinical practice and humanization. Some researchers point out that this factor broadens the viewpoint of health and quality of life[34-36].

Despite the data from the abovementioned studies, our results did not show an association between religion and humanization through multiple regression analyses.

Studies have shown that in order to increase monthly earnings, doctors work in different workplaces, implying a continuous need to move from one place to another. There is an excess demand of the profession, an insufficient number of physicians, work overload and a decrease in consultation time. This situation can intuitively be detrimental to the humanization of care provided to patients. Such a routine could impair the quality of life of physicians and, consequently, reflect on professional practice[37-39].

That is not what was observed in our research. Despite the difference in the number of jobs (higher number of jobs in the medical category) observed in the univariate analysis, this variable was not a significant factor related to the humanization scores in the multiple linear regressions.

Humanization in health has been constantly valued and encouraged, but little is discussed and published about how to train graduated professionals to act in a more humanized way. Thus, studies that evaluate training and teaching models are essential to promote the necessary changes, increasing the knowledge of professionals about humanization, improving mastery of the subject and implementing humanized actions in health care[40,41].

A 2016 review analyzed 23 articles on humanization published in Brazil from January 2000 to June 2012. Of these, 11 were reviews and 12 involved qualitative field research, and none were carried out in psychiatric hospitals, further reinforcing the need for studies such as the one we performed[41].

Another review carried out in 2019, published by researchers from the University of Verona and Johns Hopkins, states there is little quantitative research on humanization and that quantitative results in the psychosocial area would be interesting[23]. Thus, our research was groundbreaking and innovative regarding samples from a psychiatric hospital with mental health professionals.

Researcher Almeida states that, in an article on the scientific and humanized information and training of health professionals, psychiatry is among the areas that most frequently recognize the literary potential of the medical humanities[42]. Nonetheless, in Brazil, there have been few studies on humanization with mental health professionals and even fewer with psychiatrists.

In the present study, a short duration (135 minutes), low cost and easily replicable model was developed by the authors and showed to be effective for training in the area of humanization for doctors and also for non-doctors. The listed attributes are important, since the professionals have little time to undergo training and cost is also always a limiting factor[43].

The topic of training evaluated herein is also worth mentioning. Recently, humanization has been associated to medical professionalism and is increasingly being discussed in medical education[44]. Humanizing medical care is necessary to reduce the gap between doctors' and patients' expectations and viewpoints. Doctors tend to consider and overvalue the technical aspects, the pragmatism and the power of knowledge in the doctor-patient relationship, in contrast to patients, who expect doctors to be confident, empathetic, humane, personal, forthright and respectful[45-47].

New curricular models have gradually been introduced by medical schools[11,12,48,49]. We believe this may have influenced the pre-training results, showing that professionals with five or less years of professional activity have higher scores when compared to professionals with six or more years of activity. However, it was observed that this difference disappeared in

the post-training period, suggesting that doctors with more time since graduation can benefit from this type of training.

Several articles have addressed the relevance of humanization from an ethical point of view. When ethics is transgressed, humanization needs to be resumed so that human values can be vivified through attitudes that demonstrate empathy, respect and solidarity[50,51].

There are examples of published studies focusing on lawsuits against doctors due to breaches of the Code of Ethics[16,52]. In these findings, the difficulties reported in the relationships between doctors and patients are resumed, which could be interpreted as weaknesses in the exercise of humanization, considering that embracement, care practices, empathy and ethics encompass humanization. In one of these studies, an analysis was carried out in the context of psychiatry and it was verified that male professionals with more than 20 years of professional activity were among those who had received the most lawsuits[52]. Again, one can observe that the longer the time of professional activity, there seems to be more difficulty dealing with practices related to ethics and humanism, thus requiring training to resume these humanizing values.

A central issue of this study is the discussion whether the training time (135 minutes) and the methodology in general allow transmitting information or generating competence in humanization. Some researchers characterize competence through three fundamental elements: knowledge is "knowing", skills are "knowing how to do" and attitudes are "knowing how to act"[53].

Due to its brevity and the lack of long-term monitoring of the research subjects, it is difficult to assess the acquisition of competence through this research. One can observe, through the improvement of the scores after the training that, regarding the subjects' perception, the transmission of knowledge was effective. Our methodology also did not foresee an evaluation of the subject while doing or acting. Longitudinal studies would be better suited to assess competence acquisition.

FINAL CONSIDERATIONS

In addition to strengths, the present study also has limitations. 1- This study took place in a university hospital. Therefore, the target audience comprised professionals who may be more aware of teaching and research. Generalization to other service models may be hindered by our specificity. 2- We obtained favorable results after 15 days of training. We do not know whether these results would persist for longer periods. 3- There was no control group. 4- Our sample consisted of 54 subjects. Although obtained through statistical calculations, the results must be replicated in larger samples.

Finally, the present study promoted, through a quick, low-cost training that can be carried out in several contexts in the health area, a positive change in the self-perception of attributes (knowledge, skills and attitudes) associated with humanization in doctors and non-doctors. Doctors showed greater improvement in self-perception in the area of humanization than the other groups of professionals.

AUTHORS' CONTRIBUTION

Clara Barbosa Martins: First author; participated in the study design, performance, data analysis and writing of the manuscript. Jouce Gabriela de Almeida: Coauthor; participated in the study design, performance and assisted in the preparation of the manuscript. André Malbergier: Research advisor; participated in the study design, supervision of manuscript preparation and data analysis.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

SOURCES OF FUNDING

The authors declare no sources of funding.

REFERENCES

1. Núcleo Técnico e Científico de Humanização Rede Humaniza FMUSPHC. Guia técnico-político para o desenvolvimento da humanização das práticas de saúde. HCFMUSP; 2017 [acesso em 21 mar 2021]. Disponível em: https://www.fm.usp.br/humanizacao/conteudo/guia%20tecnico-politico%20humanizacao%20-%20com%20isbn%20-%20versao%20final.pdf
2. Ayres JRCM. Sujeito, intersubjetividade e práticas de saúde. Cien Saude Colet. 2001;6(1):63-72. doi: https://doi.org/10.1590/S1413-81232001000100005.
3. Ayres JRCM. O cuidado, os modos de ser (do) humano e as práticas de saúde. Saúde Soc. 2004;13(3):16-29. doi: https://doi.org/10.1590/S0104-12902004000300003.
4. Organização Mundial da Saúde. Constituição da Organização Mundial da Saúde (OMS/WHO) de 22 de julho de 1946 [acesso em 05 mai 2022]. Disponível em: https://edisciplinas.usp.br/pluginfile.php/5733496/mod_resource/content/0/Constitui%C3%A7%C3%A3o%20da%20Organiza%C3%A7%C3%A3o%20Mundial%20da%20Sa%C3%BAde%20%28WHO%29%20-%201946%20-%20OMS.pdf.
5. Brasil. Política Nacional de Humanização – HumanizaSUS: o que é, como implementar (uma síntese das diretrizes e dispositivos da PNH em perguntas e respostas). Brasília: Ministério da Saúde; 2010 [acesso em 04 abr 2022]. Disponível em: https://www.redehumanizasus.net/sites/default/files/diretrizes_e_dispositivos_da_pnh1.pdf.
6. Casate JC, Corrêa AK. A humanização do cuidado na formação dos profissionais de saúde nos cursos de graduação. Rev Esc Enferm USP. 2012;46(1):219-26. doi: https://doi.org/10.1590/S0080-62342012000100029.
7. Almeida DV, Chaves EC. O ensino da humanização nos currículos de graduação em Enfermagem. Einstein. 2009;7(3): 271-8 [acesso em 07 jul 2022]. Disponível em: https://www.academia.edu/9591992/O_ensino_da_humaniza%C3%A7%C3%A3o_nos_curr%C3%ADculos_de_gradua%C3%A7%C3%A3o_em_enfermagem_Teaching_humanization_in_undergraduate_nursing_education_programs.

8. Romero NS, Pereira-Silva NL. O psicólogo no processo de intervenção da Política Nacional de Humanização. Psicol Soc. 2011;23(2):332-9. doi: https://doi.org/10.1590/S0102-71822011000200014.

9. Alves FL, Mioto RCT, Gerber LML. A Política Nacional de Humanização e o serviço social: elementos para o debate. Serviço Social e Saúde (Campinas). 2015; 6(1):35-52. doi: https://doi.org/10.20396/sss.v6i1.8634944.

10. Sousa MSA, Gallian DMC, Maciel RMB. Humanidades médicas no Reino Unido: uma tendência mundial em educação médica hoje. Rev Med. (São Paulo). 2012;91(3):163-7 [acesso em 03 fev 2022]. Disponível em: https://www.revistas.usp.br/revistadc/article/view/58978.

11. Rios IC, Sirino CB. A humanização no ensino de graduação em Medicina: o olhar dos estudantes. Rev Bras Educ Med. 2015;39(3):401-9. doi: https://doi.org/10.1590/1981-52712015v39n3e00092015.

12. Rios IC, Lopes Junior A, Kaufman A, Vieira JE, Scanavino MT, Oliveira RA. A integração das disciplinas de humanidades médicas na Faculdade de Medicina da USP: um caminho para o ensino. Rev Bras Educ Med. 2008;32(1):112-21. doi: https://doi.org/10.1590/S0100-55022008000100015.

13. Haque OS, Waytz A. Dehumanization in medicine: causes, solutions, and functions. Perspect Psychol Sci. 2012 Mar;7(2):176-86. doi: https://doi.org/10.1177/1745691611429706.

14. Amore Filho ED, Dias RB, Toledo Jr ACC. Ações para a retomada do ensino da humanização nas escolas de medicina. Rev Bras Educ Med. 2018;42(4):14-28. doi: https://doi.org/10.1590/1981-52712015v42n4RB20180056.

15. Craice BMA, Moreto G. Narratives and humanization in health: the learning of medical students in clinical settings. Arch Med Fam. 2019;21(3):111-23 [acesso em 27 jun 2022]. Disponível em: https://www.medigraphic.com/pdfs/medfam/amf-2019/amf193e.pdf.

16. Gracindo GCL, Gallo JHS, Nunes R. Threats to bioethical principles in medical practice in Brazil: new medical ethics code period. Braz J Med Biol Res. 2018;51(5):e6988. doi: http://dx.doi.org/10.1590/1414-431X20176988.

17. Mélo CB, Rocha LNF de C, Costa TEL da, Gondim FML, Farias GD, Araújo EGO de, et al. Humanização nos cursos de graduação de saúde: desafios para implantação das diretrizes nacionais. Res Soc Dev. 2022 May 2;11(6):e42311629325. doi: http://dx.doi.org/10.33448/rsd-v11i6.29325.

18. Corsino DLM, Sei MB. A humanização nas grades curriculares de cursos da saúde de universidades públicas paranaenses. Revista Psicologia e Saúde. 2019;11(1):43-52. doi: http://dx.doi.org/10.20435/pssa.v0i0.579.

19. Silva EF, Trajano AS, Nascimento AC, Ferreira ACG, Carneiro CBCM, Santos AN. Estágio curricular de graduação em Serviço Social: experiência em um hospital na região metropolitana do Recife. Res Soc Dev. 2021;10(12):e448101220648-e448101220648 [acesso em 08 mai 2022]. Disponível em: https://rsdjournal.org/index.php/rsd/article/view/20648/18419.

20. Damasceno DR. Humanização na saúde e a prática profissional do assistente social. Res Soc Dev. 2022 Mar 7;11(3):e54211326828. doi: http://dx.doi.org/10.33448/rsd-v11i3.26828.

21. Lacerda N, Senra L. A psicologia da saúde e hospitalar no processo de humanização da assistência às vítimas de acidentes. Psicologia.pt; 2015 [acesso em 15 mar 2023]. Disponível em: https://www.psicologia.pt/artigos/textos/A0925.pdf

22. Silva LA, Vergara AP, Santos Avelar KE, Cardoso FT. Protocolo de avalialiação psicológica em hospitais: humanização do atendimento. Semioses. 2016;10(3). doi: https://doi.org/10.15202/1981996x.2016v10n3p13.

23. Busch IM, Moretti F, Travaini G, Wu AW, Rimondini M. Humanization of care: key elements identified by patients, caregivers, and healthcare providers. A systematic review. Patient. 2019 Oct;12(5):461-74. doi: https://doi.org/10.1007/s40271-019-00370-1.

24. Prefeitura Municipal do Alegrete. Plano Municipal de Saúde 2014-2017. Alegrete: Secretaria Municipal de Saúde; 2013.

25. Mello VRC. Estratégias de humanização do cuidado em saúde mental: cartografando as intervenções de apoiadores institucionais [dissertação]. Porto Alegre: Universidade Federal do Rio Grande do Sul; 2009 [acesso em 14 jan 2022]. Disponível em: https://lume.ufrgs.br/handle/10183/17608.

26. Barros MEB, Mori ME, Bastos SS. O desafio da PNH nos processos de trabalho: o instrumento do programa de formação em saúde do trabalho. Cad Saude Colet. 2006;14(1):31-48 [acesso em 05 mar 2022]. Disponível em: https://docplayer.com.br/6565463-O-desafio-da-politica-nacional-de-humanizacao-nos-processos-de-trabalho.html.

27. Taets GGDC, Lopes CMM, Borba-Pinheiro CJ, Dantas EHM. Quality of care as perceived b y patients in a Brazilian hospital: a non-randmized interventional study. Int Arch Med. 2017 Sept 15;10(250):1-7. doi: https://doi.org/10.3823/2520.

28. Machado LM, Maia GZA, Labegalini ACFB, organizadores. Pesquisa em educação: passo a passo. Marília: Edições M3T Tecnologia e Educação; 2007. v. 2.

29. Magalhães ML, Borges-Andrade JE. Auto e hetero-avaliação no diagnóstico de necessidades de treinamento. Estud Psicol. 2001;6(1):33-50. doi: https://doi.org/10.1590/S1413-294X2001000100005.

30. Rodrigues JRS, Soares FJP, Alcântara RC. Perspectivas para a educação interprofissional em um hospital de trauma. Atas – investigação qualitativa em saúde. 2018 [acesso em 09 ago 2021]. Disponível em: https://proceedings.ciaiq.org/index.php/ciaiq2018/article/view/1765.

31. Sarmento IP, Sarmento RP, Lisboa KO, Manso GG, Bernardes VRM, Cardoso HC. A humanização na assistência à saúde: uma revisão histórica da literatura. Rev Educ Saúde. 2021;9(2):78-87. doi: https://doi.org/10.37951/2358-9868.2021v9i2.p78-87.

32. Matos IB, Toassi RFC, Oliveira MC. Profissões e ocupações de saúde e o processo de feminização: tendências e implicações. Athenea Digital. 2013;13(2):239-44 [acesso em]. Disponível em: https://lume.ufrgs.br/handle/10183/118035.

33. Borges DC, Anjos GL, Oliveira LR, Leite J, Lucchetti G. Saúde, espiritualidade e religiosidade na visão dos estudantes de medicina. Rev Bras Clin Med. São Paulo. 2013;11(1):6-11 [acesso em]. Disponível em: http://files.bvs.br/upload/S/1679-1010/2013/v11n1/a3380.pdf.

34. Sá AC, Pereira LL. Espiritualidade na enfermagem brasileira: retrospectiva histórica. Mundo Saúde. 2007;31(2):225-37. doi: https://doi.org/10.15343/0104-7809.200731.2.10.

35. Reginato V, Benedetto MAC, Gallian DMC. Espiritualidade e saúde: uma experiência na graduação em Medicina e Enfermagem. Trab Educ Saúde. 2016;14(1):237-55. doi: http://dx.doi.org/10.1590/1981-7746-sip00100.

36. Dezorzi LW, Crossetti MGO. A espiritualidade no cuidado de si para profissionais de enfermagem em terapia intensiva. Rev Lat Am Enfermagem. 2008;16(2):212-7. doi: https://doi.org/10.1590/S0104-11692008000200007.

37. Maciel RH, Santos JBF, Sales TB, Alves MAA, Luna AP, Feitosa LB. Multiplicidade de vínculos de médicos no estado do Ceará. Rev Saude Publica 2010;44(5):950-6. doi: https://doi.org/10.1590/S0034-89102010005000030.

38. Cabana MCFL, Ludermir AB, Silva ER, Ferreira MLL, Pinto MER. Transtornos mentais comuns em médicos e seu cotidiano de trabalho. J Bras Psiquiatr. 2007;56(1): 33-40. doi: https://doi.org/10.1590/S0047-20852007000100009.

39. Gomes AMA, Caprara A, Landim LOP, Vasconcelos MGF. Relação médico-paciente: entre o desejável e o possível na atenção primária à saúde. Physis. 2012;22(3):1101-19. doi: https://doi.org/10.1590/S0103-73312012000300014.

40. Albuquerque ES, Costa MT, Araújo JBS, Vasconcelos IPS, Souza EL de. A Política Nacional de Humanização e a formação dos profissionais de saúde. Saúde Colet. 2020;10(59):4172-83. doi: https://doi.org/10.36489/saudecoletiva.2020v10i59p4172-4183.

41. Medeiros LMOPM, Batista SHSS. Humanization in training and work in health: a review of the literature. Trab Educ Saúde. 2016;14:925-51. doi: https://doi.org/10.1590/1981-7746-sol00022.

42. Almeida P. A (in)formação científica e humanizada dos profissionais da área de saúde: a literatura nas humanidades médicas. RECIIS. 2018;12(3). doi: https://doi.org/10.29397/reciis.v12i3.1521

43. Blasco PG. The medical humanism: the pursuit of sustainable medical humanization. Rev Bras Med. 2011;68(n esp) [acesso em 03 out 2021]. Disponível em: https://sobramfa.com.br/wp-content/uploads/2014/10/2011_mai_o_humanismo_medico_humanizacao_sustentavel_da_medicina.pdf.

44. Hafferty FW. Academic medicine and medical professionalism: a legacy and a portal into an evolving field of educational scholarship. Acad Med. 2018;93(4):532-6. doi: https://doi.org/10.1097/ACM.0000000000001899.

45. Berger R, Bulmash B, Drori N, Ben-Assuli O, Herstein R. The patient-physician relationship: an account of the physician's perspective. Isr J Health Policy Res. 2020;9(1):33. doi: https://doi.org/10.1186/s13584-020-00375-4.

46. Bendapudi NM, Berry LL, Frey KA, Parish JT, Rayburn WL. Patients' perspectives on ideal physician behaviors. Mayo Clin Proc. 2006;81(3):338-44. doi: https://doi.org/10.4065/81.3.338.

47. Mustika R, Soemantri D. Unveiling the hurdles in cultivating humanistic physicians in the clinical setting: an exploratory study. Malays J Med Sci. 2020;27(3):117-24. doi: https://doi.org/10.21315/mjms2020.27.3.12.

48. Alves Silva L, Muhl C, Marce Moliani M. Ensino médico e humanização: análise a partir dos currículos de cursos de Medicina. Psicol Argum. 2015;33(80). doi: https://doi.org/10.7213/psicol.argum.33.080.AO06.

49. Takahagui FM, Moraes ENS, Beraldi GH, Akamine GK, Basile MA, Scivoletto S. Estudantes de Medicina atuando como doutores-palhaços: estratégia útil para humanização do ensino médico? Rev Bras Educ Med. 2014;38(1):120-6. doi: https://doi.org/10.1590/S0100-55022014000100016.

50. Verdi M, Finkler M, Matias MCS, Fornasieri N, Castro DD. Em foco a dimensão ético-estético-política da humanização do SUS: efeitos dos processos de formação de apoiadores da PNH nos territórios do Rio Grande do Sul, Santa Catarina e São Paulo. Saúde Transform Soc. 2014;5(2):29-38 [acesso em 03 jun 2022]. Disponível em: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S2178-70852014000200005&lng=pt&tlng=pt.

51. Rios IC. Humanização: a essência da ação técnica e ética nas práticas de saúde. Rev Bras Educ Med. 2009;33(2):253-61. doi: https://doi.org/10.1590/S0100-55022009000200013.

52. Gracindo GC, moreno LV. Medical ethics code: an analysis from ethical-disciplinary cases against medical professionals within the specialty of psychiatry. Int Arch Med. 2018;11. doi: https://doi.org/10.3823/2552.

53. Ruas R. Mestrado modalidade profissional: em busca da identidade. Revista de Administração de Empresas. 2003;43(2):55-63. doi: https://doi.org/10.1590/S0034-75902003000200004.