Different training models in health and student conceptions of humanized medical care

Abstract  Since 2009, there have been two training models promoting medical training at the Federal University of Bahia: the traditional and the cycle system. The curricular changes aimed to guide the professional profile for a better performance at the Brazilian Unified Health System and to develop a greater understanding of human diversity, illness and care. This study analyzed whether these models have produced different conceptions about what humanized care means to medical students. The similitude analysis was used, with the support of the Iramuteq software for data treatment. It was observed that both groups share conceptions centered on the patient; however, students graduating from the Interdisciplinary Bachelor Degree in Health demonstrated that they based their ideas on an expanded concept of health considering its various determinants. Students enrolled in the course through their grades at the National High School Examination, exposed perceptions of the topic considering necessary ethical and humanistic aspects but limited to the direct contact between doctor and patient. It is concluded that the previous training in the Interdisciplinary Bachelor’s Degree in Health could be responsible for the development of the students’ critical assessment of the concept of health and the importance of the Humanization of Care.

Key words  University, Medical education, Humanization, Medical students, Medical care

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Introduction

In the health field, dehumanization is not a new problem, but it is still a serious and current one, both regarding the training of professionals and their daily practice. The literature demonstrates that the reports and complaints of service users about the endured violence are frequent, either institutionally or in direct contact with workers in the area. In this context, the relationship between doctors and patients stands out as one of the main sources of this problem.

In Brazil, the health sector underwent transformations with the creation of the Unified Health System (SUS, Sistema Único de Saúde), since before the current health care model, medical work was strictly individual, biological and without regard for the historical-social dimension in the disease process. Therefore, with the implementation of SUS, a challenge arose, of adapting professionals to a new model that seeks to promote care in an equal, comprehensive and humanized manner, in the individual and collective scope.

Considering this fact, it is known that higher education is of great importance in building the profile of future professionals who will work in this scenario. Considering that, since the 1990s a series of initiatives started being developed aiming at discussing and promoting the necessary changes, and some of the main ones comprised the CINAEM (National Interinstitutional Commission for the Evaluation of Medical Education), the PNH (National Humanization Policy), the Pró-Saúde (National Program for the Reorientation of Professional Training in Health), the PROMED (Incentive Program for Curricular Changes in Medical Courses) and the DCN (National Curriculum Guidelines) for the medical courses, created in 2001 and reformulated in 2014.

Within this movement, the School of Medicine of the Federal University of Bahia (FAMEB/UFBA), with the support of Pró-Saúde, conceived a reform that added the Ethical-Humanistic Axis (EHA) to its curricular matrix. This would be a set of eight disciplines distributed over the first eight semesters of the course, aiming at promoting multiple discussions and reflections in the fields of ethics and humanities and thus, stimulate the development of ethical and human attitudes among students.

In the same period, a partial cycle schedule was implemented at UFBA with the support of the Support Program for the Restructuring and Expansion Plans of Federal Universities (REUNI, Programa de Apoio a Planos de Reestruturação e Expansão das Universidades Federais). According to this training model, university admission occurs through the Interdisciplinary Bachelor’s Degrees, divided into large areas of knowledge. One of these areas is health, and the Interdisciplinary Bachelor’s Degree in Health (BIS, Bacharelato Interdisciplinar em Saúde) was created. This course aims to avoid early professionalization and promote general training through an interdisciplinary curriculum, which leads students to have contact with other areas of knowledge, as well as encouraging their autonomy and free transit in the university through the optional Curricular Components (CC) at the end of the BIS, students must decide about their professionalization and undergo an internal selection process that reserves 20% of vacancies in traditional courses, called Linear Progression Courses (CPL, Cursos de Progressão Linear), so they can choose the course in which they will continue their studies based on their training trajectory and professional interest. By 2018, 291 students enrolled in the medical course after completing the BIS.

Therefore, the questions that guide this investigation are: what is the impact of the educational and curricular changes carried out at UFBA on the way students conceive the humanized medical care? Are there differences in perceptions due to the different types of admission?  

Thus, this study intends to analyze the conceptions of humanized medical care (AMH, Atendimento Médico Humanizado) of medical students admitted at the university through ENEM/SISU and the ones who graduated from the BIS, and, subsequently, compare their results.

Methods

The present article is the result of a cross-sectional, exploratory study with a qualitative approach. Therefore, we chose to carry out similarity analyses, with the support of the Iramuteq software (Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires) for data organization and processing. It is also necessary to point out that the data presented here are the result of a larger survey entitled “What do medical students think about the ethical-humanistic axis of the School of Medicine of Bahia (FAMEB/UFBA)?”.

The selection of subjects for this investigation considered as inclusion criteria being over
18 years old and actively enrolled in the course. A total of 344 participating students was identified, of which 171 had no previous degree and 107 had one or more than a previous degree, 68 of which were BIS graduates. The instrument chosen for data collection was the semi-open questionnaire, containing objective questions about the participants’ socioeconomic characteristics and two open questions aiming to analyze the students’ conceptions about the contributions of the Ethical-Humanistic Axis (EHA) to their education and about what they considered humanized medical care. The answers to this last question were used in this study, considering the modality of access to the medical course as a variable: admission through ENEM/SISU or via BIS/CPL migration.

To answer the objective of this analysis, the entire corpus of responses was reorganized between BIS graduates and non-graduates, resulting in 68 who had BIS as a prior degree and 276 who did not. Therefore, two new corpuses were created, one for each of these groups, so that it would be possible to carry out their analyses separately.

The questionnaire was applied in August 2018, during classes of the EHA disciplines. Participation was voluntary, and those who wanted to join the study signed the Free and Informed Consent Form. It is important to emphasize that the study was approved by the Research Ethics Committee of the UFBA School of Nursing (CAAE: 87862917.8.0000.5531 – Opinion n. 2.769,003).

Iramuteq is a free software based on the Python language, which allows the performance of several types of lexical analysis, with one of them being the Similitude Analysis, used in this investigation. The use of this tool to support data organization and processing in this study was of great importance, considering the number of participating subjects.

Therefore, the similarity analysis showed to be pertinent, since, being based on the theory of graphs, it allows the identification of co-occurrences between words and the visual representation generated as a result indicates the connections between the words. The size of each word indicates its importance in the corpus and the thickness of the lines connecting each term indicates the degree of association between them, so the thicker the line, the greater this degree. Another positive point is that this type of analysis also allows the identification of common parts and specificities between the texts, considering the descriptive variables verified in the analysis, and these similarities and specificities can be grouped into “halos” and “communities”, which are cluster circles.

Results and discussion

Taking into account that two corpuses were created, each one was submitted to a similarity analysis in the software, resulting in Figures 1 and 2, depicted below. Figure 1 represents the conceptions of students who entered the course directly through ENEM/SISU, and Figure 2 represents the conceptions of medical students who had the BIS as prior education. We chose to organize the presentation of these results and their discussion into two subtopics arranged in sequence.

Conceptions of students who entered directly through ENEM/SISU

Observing Figure 1, it is possible to observe that the central core is the word “patient” and that all other words are intrinsically related to it. Iramuteq allowed the organization in halos of those words present in the peripheral lexical system, grouping terms that had particular co-occurrences between them and which, therefore, differed from the others, thus creating subgroups albeit in the same semantic universe.

In halo 1, consisting of the “patient” nucleus, the words with the greatest connection were “physician, autonomy, empathy, disease, respect and medical practice”, with the last three being the originators of three other halos. This central position of the word patient in the image, and the way this larger circle encompasses the others, indicates that the students’ view commonly has this subject as its main character. Adding the consideration of the other words to that, the indication of a common sense in this group can be observed, which conceives the humanization of care from aspects of the doctor-patient relationship (DPR). At this point, it is important to emphasize the degree of connection between the words doctor and patient. The thickness of the line connecting them indicates a strong association, something that may reinforce the previous hypothesis, also highlighting the importance of the physician in this relationship. The following speech can illustrate this idea well:

[... it is the doctor who listens to the patient, does not interrupt, is not arrogant, cares beyond the disease, respects the autonomy, does not per-
form procedures without consent, does not treat the patient as a mere client and does not impose a relationship of superiority (Student 444, 5th semester).

We observed that the students indicate characteristics of physicians and patients that they consider important when providing humanized care. These qualities, such as respect, empathy, autonomy, knowing how to listen, are moral values and attitudes that, even though they represent personal attributes, are very important in this service. In this regard, one reflects that thinking about Humanization presupposes that it is necessary in contexts in which human values are shown to be scarce. In discussions on this subject in the health field, there is a consensus that this scarcity is a reality in the interactions between health professionals and service users. In Medicine, the exhaustion of the biomedical model has highlighted the need to rethink medical training, considering reinforcing the importance of humanistic aspects aiming to reduce the asymmetry of the DPR. A likely contribution to the UFBA students’ awareness about the need for these values in future professional practice is the presence of the EHA in their training, considering that these disciplines are intended to encourage discussions and reflections among students in the fields of ethics and the humanities.

Figure 1. Similitude tree of the humanized care concepts of medical students who were admitted directly through ENEM/SISU.

Source: Authors, with support of the Iramuteq software.
In general context, the speech analysis indicates that there is a perception of medical protagonism, concomitant to the passiveness of the one who is being assisted. It is a fact that a good DPR needs to be built on the physician’s sensibility to the suffering of others. However, for the humanization of care to materialize, this relationship needs to be horizontal, without the overlapping of one of its characters.

Halo 2, on the other hand, originated from the word “disease”, also grouping the words “need, problem and subject”. One of the particularities present in the speeches concerns the importance of seeing individuals beyond their pathologies, as beings with multiple needs that must be taken into account during the medical practice, which in turn demands multiple skills from the professionals. This can be seen in the following excerpts:

 [...] it is what is able to fully meet the needs of the patient as a whole and not just understand certain disease processes, giving them attention and trying to meet the demands they bring in the best way (Student 98, 1st semester).

 [...] it is to consider the subject as a whole, to see beyond the disease (Student 206, 3rd semester).

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Figure 2. Similar tree of the concepts of humanized care of medical students graduated from the Interdisciplinary Bachelor’s Degree in Health.

Source: Authors, with support from the Iramuteq software.
Veras RM et al. considered essential to the practice of the profession by medical students, pointed out "respect" as the word most often used by them, with different interpretations. The author states that one of the possible reasons for this would be the fact that, on a daily basis, students deal with episodes involving ethical issues, in which most of them would result from the “objectification” of the human being, the disregarding of the patient as a person. And, when witnessing such situations, students realized the great need for this value in their professional practice.

In the same study, it was also observed that some individuals had an understanding of professional ethics based on the maxim of Christianity: “Do to others what you would like to be done to yourself” (p. 135). Rego explains that in this ideal, there is a genuine concern for the other. However, he reflects that in the idea of “putting oneself in the other’s shoes”, implicitly, there is also the denial of the patient’s condition as a moral subject. This is because, in this situation, the physician considers their own values and perception of the situation to make decisions about the other, and the latter assumes a passive position, only the object of action for such decisions. Based on this understanding, it is possible that there are also such perceptions among the subjects of this investigation, justifying the emphasis on the word respect and the idea of putting yourself in the other’s shoes, in their speeches.

Halo 4 highlights the term “medical practice”, which is also the one with the greatest connection with the word patient in the entire corpus, something noticeable due to the thickness of the connection between them. The other associated words are “health, respected, condition and technique”. The strong relationship of this group with the central halo may be related to the fact that the term medical practice is indirectly connected to all the answers in the tree due to the research question of this study: “What is humanized medical practice for you?”. Thus, the lines that represent this halo, in general, are very similar to those of the other halos, reinforcing some of their conceptions, such as: the centrality of the patient, the importance given to respect in the DPR, and the curative view about the purpose of the medical practice. Something particular about this grouping, however, is the presence of the word ‘health’ and the prominence of the word ‘technique’. As can be seen below:

[... ] it is the practice in which the patient is well treated, actively listened to and have their autonomy respected, so they can participate in decisions about their health (Student 329, 7th semester).

[... ] it is focused on respecting the individual and their human condition, taking into account their opinions in the health-disease process, in the therapy, in the diagnosis (Student 52, 8th semester).
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Furthermore, it can be observed that there is, among the subjects, an idea of opposition between the need for the technique and the humanization of the medical practice. In this regard, it is known that the humanization of health can also be understood from different perspectives2,26. Concerning medical practice, these understandings are related to the principles of humanistic and ethical professional conduct and institutional incentives for the development of such principles. However, it is important to highlight that this model of practice does not disregard the importance of the technique for its quality. On the contrary, it is understood that relational skills can also be based on theories and techniques that are important for professional practice15,26.

Through careful observation of each grouping of the tree, associated with the integral analysis of the speeches of the participating subjects, the understanding is reiterated that the conceptions of students who entered directly through ENEM/SISU, as a rule, have many similarities to each other, despite its particularities. Furthermore, it is acceptable to reaffirm that such conceptions address the relational aspects of interactions between doctors and patients, such as emotional skills such as empathy and other essential requirements such as moral values and technical competence. Added to that, conceptions of health and disease that are in opposition. This scenario helps to reinforce the pertinence of the tree by presenting few subgroups and these are partially included in the central nucleus.

It is important to emphasize, however, that the discussion about DPR must consider much more than the subjective aspects of this interaction. Fernandes27 considers that affectivity inevitably exists in the relationship between people, and this is no different between doctor and patient, despite having its specific aspects. Feelings will always be present, in positive and negative ways. And that does not mean that this is not an important aspect of the DPR. However, it is important to go beyond this understanding and reflect on the other forces that permeate the health care models in societies, such as the medical corporation, the interests of the State and the hegemonic social classes.

Conceptions of BIS graduates

Figure 2 shows that the word “patient” constitutes the central core of the tree, represented by halo 1, having as main ramifications the terms “medical practice, aspect, autonomy, health, respect, life, care, empathy and social”. These last four words, in turn, originate the four other peripheral halos. When visually comparing the two figures, in addition to the difference in the amount of halos, it is already possible to see that in this group, the word communities that make up their concepts are well defined and, therefore, are more independent from each other. As in the previous tree, in halo 1 the students indicate that the focus of the medical practice should be the patient. Regarding this halo, the speech of student 327 is quite representative:

[...] it is when the professional respects and under-
stands the different spheres of the patient’s life and tries to adapt their care and assistance to the pa-
tient and not try to adapt the patient to the care (Student 327, 7th semester).

The student states that the physician’s concern must be to produce care while respecting the patient’s autonomy and that the care must not be a product of the physician’s choices alone.

According to Ribeiro and Amaral28, the patient-centered medicine must be in opposition to the doctor- and disease-centered medicine, and only then it will it be possible to produce humanized medical practice, in which patients will be co-participants in the production of their health status. Therefore, when associating the word pa-
tient with autonomy, health and respect, it seems to us that students in this halo are in tune with patient-centered Medicine.

In turn, halo 2 starts with the word “life” and, in addition to that, it also includes the words
“history and diverse”. The students in this group understand that each life has a different story from the others, which is essential for the construction of care plans. In this regard, students 91 and 94 state:

 [...] it is the one in which I can combine technical and ethical knowledge, without disregarding that I am dealing, first of all, with a human being, and this presupposes that they carry with them a life history and several sociocultural influences that impact on their state of health and my role is to embrace them all and manage them in the best possible way within my skills and possibilities (Student 91, 1st semester).

 [...] it is to understand the patient as a product of the environment, their needs, weaknesses, acting in an equitable manner according to the life history of those who need medical practice, realizing that, above all, there is a human being there (Student 94, 1st semester).

The students emphasize the importance of life histories in the medical practice, demonstrating that the physician, when meeting with the patient, must not only identify biological signs and symptoms but also listen to the patient’s needs, their conceptions about being ill, and thus understand how the disease it is permeated by people’s social history17. Similarly in halo 3, the word that originates the group is “care” and along with it the words “subject, individual and human” are distributed. The responses by students 385 and 355 point to the recognition of the biomedical model limits objectifies and homogenizes the experiences of falling ill, and that, on the contrary, the physician’s role is to be the one who provides care and recognizes the subjects’ individualities.

 [...] it is what aims to understand the other as a plural being, not only because of their pathology, but one that has aspirations, feelings, experiences and deserves all the respect and individual care within their plurality (Student 385, 5th semester).

 [...] it is one that contemplates the human being as a complex, individual being and does not treat them as an object of study (Student 355, 5th semester).

Ayres29 emphasizes that the discussion about care has become increasingly relevant in different disciplines and that this concept is fundamentally based on social solidarity in order to overcome individualism, as well as on the construction of actions that take into account the other, that care about the intersubjectivity that involves human relations. Grossman and Patrício30, in turn, state that academic training in medicine neglects the subjective aspects of both the patient and the student, and that this affects the physicians’ capacity to establish a good DPR. However, with the restructuring of the health sector in Brazil, as a result of SUS implantation in the 1990s, the DCN has demanded more humanistic physicians, who can understand the cultural and emotional aspects of patients, which involves a review of the curricula of educational institutions as well as the teachers’ practice3.

Halo 4, on the other hand, contains the words “empathy and bond”, the first being the originator of the group. The establishment of bonds is a central aspect in building relationships between users and health teams, as it means that there is an openness and trust between the parties, contributing to greater resolution of health problems. However, the construction of bonds requires sensitivity and empathy, that is, affective competence by the professionals31. About this, student 22 stated:

 [...] it is acting in a certain way to establish a bond of trust, empathy, good communication and respect for the patient’s autonomy (Student 22, 4th semester).

The development of affective and emotional aspects in health professionals has been a challenge. The teachers’ difficulty regarding the thinking of teaching strategies for the development and measurement of the success of these competencies in the initial training can be perceived; additionally, when it comes to this field, the limits of university education are extrapolated, as it also involves personality and individual values18.

Finally, halo 5, originated from the word “social”, shows ramifications with the words “biological, economic, cultural and context”. This halo shows a holistic conception of medical practice, just as these words are also connected to the theoretical models of the Social Determinants of Health (SDoH). The speeches of students 86 and 28 illustrate this understanding:

 [...] it is a well-done anamnesis, seeking to learn about the social, cultural, religious, economic context and understand the existing inequalities, knowing the Unified Health System and its forms of access and that the therapy be discussed, fair and beneficently, using ethics (Student 86, 1st semester).

 [...] is to treat with respect, respect the autonomy, in order to value human dignity, foreseeing the ethical values and human values, comprising all the constitutive dimensions of the subject, namely, biological, psychological, social, cultural, economic and spiritual (Student 28, 4th semester).
Students in this group describe the importance of different factors that can interfere in the health situation of an individual or group, which allows us to infer that they are mobilizing the SDoH approach, theories that point out that the health and disease process is determined by living conditions of populations and not simply reduced to the pathological causality. Even though it is an explanatory gain to consider these factors and realize that students came up with that in their answers, there is a persistent separation between the biological and the social being, which can create difficulties for professionals regarding how to perceive and act in health services, since in real life, these factors will appear together in the patients’ life histories and disease processes.

About this, Fernandes states that doctors often feel unable to resolve the issues addressed by patients in primary health care, since they are not reduced to the biological issues. That is, professionals feel limited when the other dimensions of the disease process appear, which allows us to infer that more than pointing out or verifying the existence of social, cultural and economic dimensions, it is important to know how to deal with them. Therefore, educational institutions need to produce, during the initial training, intervention instruments that allow future professionals to feel more capable of solving problems regarding the aspects of being ill that go beyond the biomedical field as, therefore, these meetings will be even more humanized.

Furthermore, the respondents also brought the users’ rights into their speeches, that is, the need to respect the ethical principles and self-determination of the subjects in the therapeutic projects that will be adopted. It is not possible to talk about the humanization of health practices without recognizing that there is an asymmetry in the relationship between physicians and patients and that this must be rebalanced based on a different performance by the physicians.

Overall, it was possible to understand that the students who graduated from the BIS mobilized the expanded concept of health in their explanations, that is, not reducing health to non-disease. The halos that were produced from the students’ answers indicate that they understand that the AMH must take into account the listening to the life history, the patient’s autonomy and the socioemotional aspects that involve the doctor-patient relationship. In addition, the view that humanized medical practice should pay attention to the different aspects (economic, social and cultural) of life that generate the need for care also emerged.

It is possible to infer that this group has these understandings about the health, disease and care process as they entered the university through the cycles model, with the BIS as their first cycle. This general and interdisciplinary course is anchored on theoretical positions that criticize the individualization and medicalization of health. The BIS has two mandatory subjects (introduction to the field of health and the field of health, knowledges and practices) that introduce students to the historicity of the concept of health, health care models, different medical systems, in order to disseminate the understanding that biomedicine is a product of human history, a rationalization that must be questioned and improved. Moreover, the BIS student body needs to attend artistic and humanistic classes, which allows a cognitive expansion in relation to human diversity and their ways of life, which we declare is fundamental to be able to understand health beyond the techniques.

In contrast, tree 1 elucidates that subjects that entered the course directly through the ENEM/SISU have views about humanized medical practice that are more related to values, attitudes and skills that the physician must have as a professional for a good DPR. It emphasizes the concern with respect for the other and the resolution of problems/needs/diseases/conditions presented to the physician by those seeking the medical practice. We realize that these conceptions, when compared to those of students that graduated from the BIS, are more restrictive regarding the amplitude of the Humanization concept.

However, it is important to highlight the relevance of the fact that these students understand that the patient is the focus of humanized practice and how they should be heard and respected. In a context of precarization of medical work and the hegemony of the industrial-pharmaceutical complex, having this concept reinforces the importance of interdisciplinarity in medical education and of initiatives such as the EHA to contribute to the proposal of the Humanization of health care.

**Final considerations**

This study allowed us to analyze the conceptions of medical students in relation to humanized medical care. The difference from other studies previously carried out related to this topic is that
the present one analyzed two groups: those who experienced the cycles model and those who entered medical school directly from High School. It was demonstrated that there are differences in these concepts depending on the type of admission. The students that graduated from the BIS defined the AMH, indicating a broad concept of health, which was not limited to the meeting between the doctor and the patient. On the other hand, students enrolled via ENEM/SISU showed a tendency to associate the humanization of the medical practice to the context of the immediate meeting.

We must also pay attention to the limits of the curriculum; although this is a powerful power-knowledge device that selects knowledge considered to be formative aiming to building an ideal graduate profile, it is always inconclusive. The conceptions and actions of a student and future professional overflow this device, as they are intersected by other relationships. However, we must not give up the scientific and social responsibility of the university, which is to train people capable of meeting the needs and challenges of the communities.

Collaborations

RM Veras and VBC Passos worked at all stages, from the study design, data production, methodology, analysis development and interpretation, and final writing of the manuscript. CCM Feitosa worked on the study design, data production, analysis interpretation and final writing of the manuscript. SCS Fernandes worked on the development and interpretation of the analysis and final writing of the manuscript.
Acknowledgements

To Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for the productivity scholarship to first author and to Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) for the master’s degree scholarship to the second and third authors.

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