

Quality of Care as Perceived by Patients in a Brazilian Hospital: a Non-Randomized Interventional Study

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Abstract

Background: Intensive care units (ICUs) concentrate seriously ill patients, requiring professionals to strive to deliver high-quality care.

Objective: The objective of the study was to assess patients' perceptions of the quality of care delivered by staff who underwent training about humanized care in a private hospital in Rio de Janeiro, Brazil.

Methods: This was an exploratory study in a cardiac intensive unit of a private general hospital in Rio de Janeiro, Brazil. The convenience sample consisted of 30 patients. Dependent variables were analyzed using McNemar's nonparametric test for repeated measures, considered suitable because of the nominal scale. Percentage differences were calculated using the following equation: $\Delta\% = [(post\text{-}test - pre\text{-}test) * 100 / test]$ with significance set at <0.05 .

Results: Improvements were observed in quality of patient care ($\Delta\% = 38.1\%$, $p = 0.031$) and clarification of patients' clinical condition ($\Delta\% = 25\%$, $p = 0.021$), in addition to perceived room temperature ($\Delta\% = 40\%$, $p = 0.008$) and ambient noise ($\Delta\% = 52.6\%$, $p = 0.002$).

Conclusion: It was concluded that quality of care improved significantly after staff training, demonstrating the essential nature of ongoing education.

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Keywords

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Introduction

Intensive care units (ICUs) concentrate seriously ill patients, requiring professionals to strive to deliver high-quality care. Based on this statement, the care provided by these professionals should be as humanized as possible. To this end, considerable improvements to concrete actions aimed at promoting humanization of hospital care have been taking place. Throughout Brazil, only 30% of ICUs meet the minimum prerequisites that define the ideal model for humanization [1]. As institutions that offer services to the community, health units should provide quality care to the population. This requires considering a set of actions that encompass three dimensions: 1) humanizing patient care; 2) humanizing the working conditions of health professionals; and 3) meeting the basic administrative, fiscal, and human needs of hospital institutions [2].

The National Humanization of Hospital Care Program (PNHAH), implemented by the Brazilian Ministry of Health through ordinance no. 881 of June 19, 2001, within the scope of the Unified Health System (SUS), proposes broad discussion and implementation of projects to humanize health care and improve the quality of relationships between health workers, patients, and families [3]. Since then, humanization has advanced in other SUS institutions besides hospitals, and in 2003, what began as a program became the National Humanization Policy (PNH).

In March 2011, the Barra D'Or Hospital created a humanization working group with the objective of implementing an institutional care policy based on humanitarian values to benefit clients, family members, and collaborators. This effort included planning the first training session for staff members about humanized care.

The Barra D'Or Hospital is a large private general hospital located in the city of Rio de Janeiro, Brazil. It has received a QMentum Diamond seal, according to the international methodology of Accreditation

Canada, one of the most renowned accreditation companies in the world. QMentum certification is based on strict Canadian criteria for healthcare quality and has become a parameter worldwide. The model is constructed based on the philosophy of ongoing quality improvement, transferal of knowledge, and competency development within work teams.

The definition of humanized care adopted by the working group includes providing care with kindness, attentiveness, patience, and respect in an environment that provides comfortable temperatures, lighting, and noise levels [3]. The PNH emphasizes that the concept of ambience includes concerns about physical space, i.e., the space in which social, professional, and interpersonal relationships develop, which should enable embracing, effective, and humane care [4].

The state of the art has increasingly presented studies about care provision in humanized environments with the aim of reviewing instituted health practices [5]. With this in mind, the present study set out to answer the following question: Are there any differences in the care provided by health professionals after undergoing training about humanized care, according to the perception of hospitalized patients?

Method

Ethical aspects

This study was approved by the Research Ethics Committee of Barra D'Or Hospital, protocol no. 193/10. All patients signed free and informed consent forms, in accordance with Resolution 466/2012 of the National Health Council, Brazilian Ministry of Health. The research procedures conformed to the code of ethics established by the World Medical Association Declaration of Helsinki regarding medical research involving human subjects.

Study design, location and period

This was a quanti-qualitative nonrandomized interventional study conducted in a private general hospital in the West Zone of the city of Rio de Janeiro between July 2014 and May 2016.

Study protocol

The researchers created a questionnaire composed of closed-ended questions, according to PNH recommendations [3], divided into three sections. In the first section, patients were asked whether hospital staff, on entering their room/cubicle, met the minimum requisites of humanized care: conversation, touch, listening, and addressing patients by their names, followed by questions about the care and clarification provided by professionals to patients and their families. The second section included questions about the care environment in terms of: temperature, lighting, and noise. In the present study, noise included any ambient noise that bothered patients, whether produced by technology such as cardiac monitors or by health professionals when communicating loudly. In the third section, patients were asked patients what they understood by *humanized care*. The first and second parts of this section consisted of yes/no questions, while the third was open-ended. No electronic devices were used to record the interviews, and the same observer entered all the answers by hand directly on the questionnaire sheet.

The questionnaire was administered to patients before and after a training session about humanized care that was conducted with 44 cardiac ICU staff members and consisted of a 15-minute slide show. The slides presented information about the Ministry of Health's National Humanization Policy [3]. At the end of the presentation, the researchers and participants had the opportunity to discuss the topic.

Study population and sample

The study population consisted of patients admitted into the cardiac ICU at the Barra D'Or hospital located in the West Zone of the city of Rio de Janeiro,

Brazil, a large private hospital with a cardiac intensive care unit that can accommodate 12 patients. The study sample was selected by convenience and included 30 patients with a mean age of 61 ± 17.39 years, of which 19 (63%) were men and 11 (37%) were women. The inclusion criteria were: being over the age of 21, diagnosed with cardiovascular disease, lucid and oriented in time and space during data collection, and having been hospitalized in the ICU for at least two days.

Study variables

- Care provided by professionals: Care provided by health professionals to their patients.
- Lighting: Artificial lighting in the intensive care unit.
- Temperature: Room temperature
- Noise: Noise caused by health professionals or electronic devices in the sector.
- Clarification about clinical condition: Information that patients receive about their health condition.
- Addressing patients by their names: When patients are addressed by their name by the health professionals dispensing care.
- Listening: Whether the health team listens to patient complaints
- Touch: Whether patients are touched by the health team during clinical tests, for example.
- Conversation: Whether the health team talks with patients
- Humanized care: How patients perceive the care received.

Analysis of results and statistics

The data were analyzed using IBM® SPSS® 20.0 for Windows, with the significance level set at $p < 0.05$. Dependent variables were analyzed using McNemar's nonparametric test for repeated measures, considered adequate because of the nominal scale. Percentage differences were calculated using the following equation: $\Delta\% = [(post-test - pre-test) * 100 / test]$.

Results

Table 1 presents the results of the first question regarding the minimum requisites for humanized care, showing that there was no statistically significant difference ($p < 0.05$) post-intervention.

Table 1. Minimum requisites for humanized care, $n = 30$.

Dependent variables	Tests	Yes		No		p value
		F	%	F	%	
Addresses client by their name?	Pre	28	93.3	2	6.7	0.500
	Post	30	100	0	0	
Listens to the client?	Pre	26	86.7	4	13.3	0.125
	Post	30	100	0	0	
Talks with the client?	Pre	27	90	3	10	0.250
	Post	30	100	0	0	
Touches client?	Pre	28	93.3	2	6.7	0.500
	Post	30	100	0	0	

The p-value was calculated using McNemar's test. F: Frequency.

Table 2 presents the results of variables regarding the environment, with statistical improvement ($p < 0.05$) in adequate temperature ($\Delta\% = 40\%$) and noise level (human and technological such as cardiac monitors) ($\Delta\% = 52,6\%$) post-intervention.

Table 2. Variables related to the environment, $n = 30$.

Dependent variables	Tests	Yes		No		p value
		F	%	F	%	
Temperature	Pre	20	66.7	10	33.3	0.008
	Post	28	93.3	2	6.7	
Lighting	Pre	29	96.7	1	3.3	0.998
	Post	30	100	0	0	
Noise	Pre	19	63.3	11	36.7	0.002
	Post	29	96.7	1	3.3	

The p-value was calculated using McNemar's test. The numbers in bold indicate $p < 0.05$. F: Frequency.

Table 3 illustrates the results for care provided to patients and their family members, showing significant improvement ($p < 0.05$) in attentiveness ($\Delta\% = 38.1\%$) and clarification provided to clients ($\Delta\% = 25\%$) about their clinical condition.

In the third part of the questionnaire, patients were asked to indicate their understanding of "humanized care." The main key words extracted from the subjects' answers were: kindness, 24 (80%); patience, 16 (53%); attentiveness, 15 (50%); and respect, 10 (33.3%).

Table 3. Attentiveness and clarification provided to patients and family members, $n = 30$.

Dependent variables	Tests	Yes		No		p value
		F	%	F	%	
Clarification about clinical condition	Pre	24	80	6	20	0.500
	Post	30	100	0	0	
Attentiveness	Pre	21	70	9	30	0.125
	Post	29	96.7	1	3.3	

The p-value was calculated using McNemar's test. The numbers in bold indicate $p < 0.05$. F: Frequency.

Discussion

Regarding the minimum requisites of humanized care (touch, conversation, listening, and addressing patients by name) presented in **Table 1**, the p-values were not significant for any of the items because the pre-intervention answers were already considered satisfactory. In other words, they were already higher than 85%; after the intervention, they presented clinically, but not statistically significant improvements.

Humanization is a polysemic concept. Its possible interpretations range from those of older, more traditional concepts related to the common-sense definition of being kind to those who suffer found in the older literature, to humanism revisited, which includes openness to the singularity of the experiences and needs of each person, anchored in ethical principles [6].

Intensive care units usually evoke images of a nest of wires that monitor patients 24 hours a day. However, when the study participants were first interviewed about noise in the unit, 63.3% (n=19) reported that they were most bothered by loud conversations between professionals in the hallway, not the beeping of the heart monitors (**Table 2**).

This data indicates the importance of training to change the behaviors of ICU professionals. After the intervention, 96.7% of the patients reported improvements in this item, in agreement with PNH recommendations about health care and improving the quality of the relationships between health workers, patients, and family members [3].

Another problem encountered in hospitals relates to the maintenance of equipment and internal ambience, such as room lighting and noise. It's not that caring for machines is undesirable; they can only help keep clients alive because they receive direct or indirect care. Programming machines, adjusting their parameters and alarms, and supervising their functioning are all part of caring for the clients, who benefit from them [7].

Ideally, cardiac ICUs should be some of the quietest places in hospitals. Humanization needs to be recovered, because patients/clients have a number of important rights: dignity and respect for their needs, values, and ethical and moral principles; relief for pain and suffering through all the available technological and psychological resources; privacy being preserved as much as possible; and environmental conditions that facilitate recovery, maintenance, and improvement of healthcare conditions [8].

A positive finding was the statistically significant difference in terms of room temperature, which was called thermal comfort, and ambient noise, which can boost the effects of treatment of patients. This type of care is incentivized and corroborated by the PNH.

It can be said that understanding the meaning of the humanization policy includes understanding, not only the technical attributes of professionals,

but also their capacity to view patients as human beings. It also involves constructing a new ethical framework for relationships in which differences between people do not necessarily imply power asymmetry, but are the result of constructed relationships and experiences with others [9].

Focusing on the humanization of patients requires health professionals to provide comprehensive and committed care, starting with hospital admission, i.e., they must recognize the material and organizational conditions required to welcome patients. Professionals should be aware of the moral, spiritual, technical, and relational conditions required for hospital stays [6, 7, 10].

The third section of the questionnaire included the patients' understanding of humanized care. The patients' answers referred to kindness, attentiveness, patience and respect. Humanized care must constitute a path that allows patients to express their feelings, giving them value and using them to identifying potential problem areas, thus enabling their solution [11].

To go beyond the traditional model of care implies the consideration that even with the many scientific and technological advances, professionals should search for new approaches to guide their work toward commitment to patient care [12]. **Table 3** illustrates this point, with statistically significant ($p<0.05$) improvements in attentiveness and clarification of patients' clinical condition, in the aspects related to humanized care.

Humanizing hospital care requires changing values, behaviors, concepts, and practices, requiring that professionals adopt a new stance toward patient care [12, 3, 13]. An important criterion to advance in the implementation of the PNH is to ensure the quality and continuity of its precepts, which involves an ongoing process of institutional evaluation, stimulating the creation of effective strategies that humanize and add quality to nursing care [4].

In one study, 20 professionals were interviewed in the state of São Paulo, Brazil. They presented

a comprehensive definition of humanization that included ethics and ability to access care, and touched on difficulties related to shortages of qualified professionals, excessive demands, and flaws in system organization. The participants indicated that training and qualifications could improve the role of professionals and service organizations [14].

According to the results of the present study (shown in **Tables 2** and **3**), training, qualification, and the observation of humanization in ICU environments corroborate what was suggested in the above study [14], emphasizing that the organization of services and professional qualification result in patient and family satisfaction.

The quality of encounters between nurses and patients can make the difference between humanized practice and other forms of instrumental practice. Thus, in addition to the implementation of procedures and techniques, interpersonal relationships are opportunities for growth and maturation of both patients and nurses. The theory of interpersonal relationships can serve as a pillar of nursing actions, giving meaning to their relationships with patients [15].

Humanizing hospital care requires that teams be aware of, and prepared to carry out, differences in care. Furthermore, teams must understand that they are responsible for providing orientation and answering questions about procedures, thus bringing greater tranquility and sense of security to patients [16, 17].

The present study highlights the need for further research that addresses the issue of humanized care in ICUs in public and private Brazilian hospitals as a strategy for gathering data on the perception of patients and in so doing, enable ongoing improvement of care.

Study limitations

One important limitation of the present study was the sample size, which was limited due to the number of beds available in a specialized unit like

a cardiac ICU, which had only 12 beds. Another difficulty was refusal of patients to participate in the study. This was understandable, since they had just experienced great distress, such as in the case of one diagnosis of acute myocardial infarction, and were not comfortable answering the researcher's questions.

Contributions to the area of nursing and health

The present study contributes not only to nursing, but also to all health professionals who care for ICU patients, in terms of humanization of care. It indicates a path for improving humanized care within ICUs, which represents advancement in care that respects patients and peers. Researchers have shown that the representations of hospitalized clients focus on good treatment, and that this relates to the instrumental side of care without dismissing the expressive side, which is essential to professional-client relationships and permeates social issues (communication/dialogue, empathy, professional/user relationship). Thus, the human factor of interpersonal relationships represents an important indicator of the quality of humanized nursing care [18,19] aspects that were demonstrated in the present study.

Conclusion

The present study showed significant improvement in patient care provided by health professionals in terms of clarification provided to patients about their clinical condition, in addition to improvements related to the environment, such as adequate temperature and reduced noise levels, as perceived by the patients. This indicates that the training session about humanization implemented in the ICU of the studied hospital was effective in improving quality of care

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