Original Article

# Perception of the professionals of radiologic techniques facing the humanization of care in radiotherapy

# Percepção dos profissionais das técnicas radiológicas frente à humanização da assistência na radioterapia

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**ABSTRACT | OBJECTIVE:** To describe the perception of professionals in radiological techniques regarding the humanization of care in a reference center for radiotherapy treatment. **METHOD:** This is a descriptive study with a qualitative approach that was developed from field research in a reference center in oncology in the South of Brazil. Seven professionals in radiological techniques participated in the study. The data collection instrument was developed with two open questions based on the National Humanization Policy. The data were analyzed based on the assumptions of Bardin's Thematic Content Analysis. **RESULTS:** Radiology professionals expressed empathy, interest in the health condition of others, and the bond between user and professional as factors that contribute to humanized care. Among the factors that hinder humanized care, the lack of a professional, a well-established routine, and the reduced time for treatment was listed. **CONCLUSION:** In radiotherapy care, radiology professionals must be attentive to the emotional and physical signs of the user. From this, a humanized and positive relationship of trust and recognition is built.

**KEYWORDS:** Humanization of Assistance. Radiotherapy. Medical Oncology. Health Personnel.

**RESUMO | OBJETIVO:** Descrever a percepção dos profissionais das técnicas radiológicas frente à humanização da assistência em um centro de referência em tratamento radioterápico. **MÉTODO:** Trata-se de um estudo descritivo com abordagem qualitativa que foi desenvolvido a partir de uma pesquisa de campo em um centro de referência em oncologia no Sul do Brasil. Participaram da pesquisa sete profissionais das técnicas radiológicas. O instrumento de coleta de dados foi elaborado com duas questões abertas balizadas na Política Nacional de Humanização. Os dados foram analisados a partir dos pressupostos da Análise Temática de Conteúdo de Bardin. **RESULTADOS:** Os profissionais da radiologia manifestaram a empatia, o interesse pelo estado de saúde do próximo e o vínculo entre usuário e profissional como fatores que contribuem para o atendimento humanizado. Entre os fatores que dificultam a assistência humanizada foram listados a falta de profissional, de uma rotina bem estabelecida e o tempo reduzido para execução do tratamento. **CONCLUSÃO:** No atendimento em radioterapia, os profissionais das técnicas radiológicas devem estar atentos aos sinais emocionais e físicos do usuário. A partir disto é construída uma relação humanizada e positiva de confiança e reconhecimento.

**PALAVRAS-CHAVE:** Humanização da assistência. Radioterapia. Oncologia. Pessoal de Saúde.

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## Introduction

The Ministry of Health institutionalized the Política Nacional de Humanização - PNH (National Humanization Policy), which aims at valuing the various subjects in the health production process: users, workers, and managers.[1] The PNH applied to the Brazilian Sistema Único de Saúde - SUS (Unified Health System) proposes the construction of work practices with the objective of humanized care in the various environments of the network, considering the subjective, sociocultural dimensions of the user.[2]

Among the health services, one can find radiotherapy, a modality that employs ionizing radiation for cancer-curing purposes or the relief of symptoms caused by the disease.[3] Users undergoing cancer treatment experience stressful episodes that can cause suffering and anguish.[4] Considering this problem, it is necessary that the professionals who work in oncologic assistance use the precepts of humanization when facing the emotional and physical fragility that the user and his family find themselves.[5]

In the care during radiotherapy, the professional who shows competence in his actions and is attentive to the signs of the user ensures the strengthening of the bond between those involved.[6] The established bond allows us to go beyond productive work and encompasses the expression of empathy, which is fundamental to humanized care.[6] On the other hand, the advance of technologies related to health care can distance the professional from the user. Therefore, humanization in radiotherapy seeks to provide expressions of care, valuing the interaction between the professional, the user, and the technology, to reproduce a more humane care.[7]

Considering direct assistance in the daily routine of a radiotherapy service, there are professionals in radiological techniques who work the assistance to users. It is understood that radiological technologists are the individuals who are closer to the users due to their attributions and competence in the working environment. The National Council of Technicians in Radiology[8] determines the following attributions for this professional: to receive and guide the user according to the protocol of each treatment performed to answer questions and reassure him/her. Among the attributions of the professionals of radiological techniques, it is understood that it goes beyond the applied technique and ethics, but also corresponds to the interaction with the multi-professional team as well as with the user and his family members.[9]

A recent literature review[10] evidences few scientific publications that discuss the specificity of humanized care by professionals of radiological techniques in the radiotherapy sector. Even though, in general, the users of this service are physically and mentally fragile. Therefore, the discussion proposed in this study about the humanized care practices for radiology professionals is fundamental since they are the protagonists in the user's therapeutic process.

Based on the aforementioned discussion, this research aims to describe the perception of professionals in radiological techniques regarding the humanization of care in a reference center for radiotherapy treatment.

## Method

This is a descriptive study with a qualitative approach based on the guidelines of the Consolidated criteria for reporting qualitative research (COREQ). Data collection was carried out from February to April 2021 in a reference public service in oncological treatment, located in southern Brazil, that has specialty radiotherapy. The service serves exclusively the SUS, with about 306 attendances in the radiotherapy sector in 2021, according to data from the Departamento de Informática do Sistema Único de Saúde - DATASUS (Department of Informatics of the Unified Health System). For such, it counts on 14 professionals in radiological techniques.

The invitation to participate in the research was made through information and communication technologies, such as the use of a multi-platform instant messaging application or electronic mail. Non-probability convenience sampling was defined, in which the entire finite population (14 individuals) was invited to participate in the study. The inclusion criterion was professionals of radiological techniques working in the radiotherapy service at the time of the survey application. From the finite population, only seven (7) professionals in radiological techniques accepted to participate in the study and comprised the final sample. For the presentation of the results, they were identified by the letter "X" followed by a number.

The participants who agreed to participate in the study answered the online questionnaire only once, without the intervention of the researchers at the time of collection. The data collection instrument was developed with two open questions based on the PNH to identify aspects reported by professionals in radiological techniques, namely: "which aspects contribute to the performance of humanized care to cancer users undergoing radiotherapy treatment?" and "which aspects hinder the performance of humanized care to health users undergoing radiotherapy treatment?".

The data was analyzed based on the assumptions of Bardin's Thematic Content Analysis.[11] For this, the following steps were followed: pre-analysis, with the reading and organization of data; exploration of the material, through the analytical description of the data and categorization; and, finally, treatment of the results that correspond to the moment of critical and reflective analysis of the results found. For the categorization and analysis of the data obtained, the Atlas TI 9.0 software was used.

The study was conducted by the normative acts of Resolution No. 466/2012 and 510/16 of the Conselho Nacional de Saúde - CNS (National Health Council) and approved by the Research Ethics Committee under CAAE number: 39475320.7.0000.5564 under opinion 4.822.821. Data collection began after the electronic signature of the informed consent form.

## Results

For the organization of the results obtained, the categorization of the information was defined in two categories: "Perception of the professionals of radiological techniques about the aspects that contribute to humanized care" and "Perception of the professionals of radiological techniques about the aspects that hinder humanized care".

### Perception of radiology professionals about the aspects that contribute to humanized care

According to the participant's speech, empathy and positivity are present when the professional shows interest in the routine and well-being of the user. In addition, the importance of individualized care for each patient based on their experiences and, at the same time, the provision of assistance with a professional attitude is emphasized.

*"Attention to their complaints, comfort in positioning, a good welcome, show interest in their well-being [...] bring a friendly word or a joke, when the occasion arises [...] positively reinforce minimal actions they have done again, to serve as a stimulus". (X1)*

*"It is simply looking at the user as a unique human being, special, who has a history, a family, anxieties, fears, preferences, etc. And knowing that we can be a light in their lives beyond someone who will perform a technical position". (X6)*

From another perspective, the professionals' statements show that direct contact with the user allows the construction of a relationship, in which the professional must be attentive not only to their technical performance, such as positioning, but also to the signs indicated by the user.

*"Conversations with the patient by getting involved in their routine, and building a relationship of trust with them. Empathy on the part of professionals, besides proactivity". (X2)*

*"The constancy that the patient will frequent the sector. That in most cases and, we end up having more opportunities to get to know the patient better and create bonds". (X7)*

*"Attention to the user, both in hearing and seeing if they are well". (X4)*

### Perception of professionals of radiological techniques about the aspects that hinder humanized care

The professionals in radiological techniques listed three topics that hinder humanized care: the lack of professionals in radiological techniques, the lack of routine in the service, and the short time of care for each user.

The speeches of some participants point out the lack of professionals in the radiotherapy service.

*"Another aspect that hinders is the lack of professionals in some shifts and some institutions where I work and have worked [...]". (X1)*

*"Little time to perform the procedures, lack of professionals in radiological techniques, lack of other professionals in the team [...]". (X2)*

Another aspect visible in the reports is time as a limiting factor in the execution of a humanized treatment.

*"In my opinion, the time (12 minutes) that the technician has with the user is not enough to be informed about all the difficulties and to 'get the hang of' each user so that they can receive in an individualized and concentrated way the attention they need". (X1)*

*"Attendance time for each user is too short". (X3)*

*"I believe that the lack of organization of the time left for the patients is too short". (X6)*

*"The main aspect is the lack of time. The radiotherapy service usually has a very tight schedule, and often the need for agility does not allow us to give the 'extra' attention we would like [...], when a schedule is delayed, automatically we are already leaving ourselves wanting the sense of excellence in care [...]". (X5)*

In the subjects' testimonies, it is noticeable that the lack of a routine is in the participants' work routine.

*"Reduced time to service, routines not established". (X4)*

*"The intercurrences of certain treatments cause many delays: corrections in positioning, users who feel ill, and loss of marks of origin". (X5)*

## Discussion

During the daily sessions, the dialog between the radiological techniques professional and the user is essential to explain the therapeutic process and answer questions before and after the session to avoid fears and insecurity inherent to the therapeutic process.[12] In assisting, the radiological technician creates bonds that go beyond his job function of executing techniques and includes the recognition of the patient as a unique human being experiencing a difficult moment in his life.[13]

As seen in the speeches, this relationship is strengthened by daily interaction, individualized care, and empathetic assistance. Such actions are in accordance with the implementation practices of the PNH, HumanizaSUS, which guides the creation of mechanisms for welcoming and qualified to listen to users of the system.[1]

The humanization practices extend to the entire multidisciplinary team in the care of cancer patients. As for the professionals of radiological techniques, some aspects are similar to nursing in the promotion of humanized care, such as the welcoming and respect for individuality, the appreciation, and attention to global needs, the creation of bonds from a good relationship, and active listening.[14] Despite these practices, communication problems are observed that hinder the user's understanding, especially in the communicational interaction between doctors and patients.[15] Sometimes, the user does not understand the radiotherapy treatment, nor the appearance of adverse effects. In this sense, the role of the professional is fundamental to promote health education and self-care.[16]

From another perspective, one of the obstacles that can hinder humanized care is the reduced number of professionals working in the radiotherapy sector. For example, the number of professionals versus the work schedule and the time spent for care, since there is considerable variation among available professionals and the distribution of the workload among the team about the functions performed.[17] This problem also affects other sectors of high-complexity health care, such as urgency and emergency care, in which the dissatisfaction of professionals with their work practices is related to the high demand for work and lack of professionals, which influences the delay in providing care to users.[18]

It is noteworthy that the agreement on the service hours with the user is a parameter determined by the PNH.[1] In radiotherapy sectors, the standardization in the number of professionals is determined by the National Commission of Nuclear Energy[19], which determines the mandatory minimum of two professionals in charge of one service per shift and machine. Regularly the demand for radiotherapy is assigned with a focus on equipment; however, the

lack of investments in infrastructure and qualified professionals can hinder this process. In the management of the radiotherapy service, one must consider both the time spent on staff training and professional qualification to equalize the financial availability of the institution.[20]

The participants of the study highlight the need for the implementation of a routine, ensuring user safety to reduce the likelihood of errors and, consequently, improve the quality of the processes of the user in treatment.[21] In this sense, the idea is that each service has a manual of routine practices, a document known as a standard operating procedure (SOP), which describes the approach and provides protocols to reduce errors and improve practices.[22]

A limiting factor of the study was the local scope; thus, the results reflect the scenario of the oncology service researched. However, it is believed that the problems listed may be similar to other institutions with the same characteristics. Another point to highlight was the reduced number of participants, which can be explained by the period when data collection occurred – during the pandemic – which made adherence difficult. Despite this, it can be seen that the research subjects converged on the themes that contribute to and that hinder the humanization of care.

## Conclusion

The professionals of radiological techniques at a reference center for radiotherapy treatment perceived that the factors contributing to the provision of assistance in a humanized manner were empathy, interest in the user's health condition, and the bond established between them. On the other hand, the reasons indicated by the participants that hinder humanized care were the lack of professionals, the lack of a well-established routine, and the reduced time for treatment.

In this sense, in radiotherapy care, humanized practices are indispensable. The study showed that professionals must consider the degree of sensitivity that the user is, to perceive the emotional and physical signs that the user transmits. In another aspect, the professionals' communication with the user results in a better understanding of the daily treatment steps, so that the user does not feel insecure or afraid. From this, a humanized and positive relationship of trust and recognition is built between the professional and the user.

The practicability of humanization practices determined by the PNH in the radiotherapy sector is conditioned to the decision of the manager of the health service, which consequently should be supported by the Ministry of Health through the National Health Plan in the municipal and state axes. Based on this assumption, the manager may have financing that enables the restructuring of human resources, a problem highlighted in this study. In addition, actions that include the worker as the protagonist in discussions and decisions about their work process, as well as the provision of continuing education, are considered fundamental.

### Authors' contributions

Avila MLR carried out the research design, the definition of the research topic and question, and the planning of the data collection and analysis. Silva C participated in defining and outlining the method, planning the data collection and analysis, reviewing the content, and conforming to the journal's standards. Müller JS contributed to the data analysis and content review, as well as to the adaptation to the journal standards. Avila MLR, Silva C, and Müller JS worked on the manuscript writing. Coelho LS participated in the content review, and data interpretation, and performed the review of the standards of the references. All authors approved the submitted version.

### Competing interests

No financial, legal, or political conflicts involving third parties (government, private companies and foundations, etc.) have been declared for any aspect of the submitted work (including but not limited to grants and funding, advisory board participation, study design, manuscript preparation, statistical analysis, etc.).

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