

Social skills in the nursing specialty in oncology: qualitative study

Habilidades sociais na especialidade da enfermagem em oncologia: estudo qualitativo

Habilidades sociales en la especialidad de enfermería en oncología: estudio cualitativo

Maria da Conceição Albernaz Crespo^I, Nathália de Araújo Barbosa^I, Nair Caroline Cavalcanti de Mendonça Bittencourt^I,
Pedro Ricardo Martins Bernardes Lucas^{II,III}, Ítalo Rodolfo Silva^{IV}, Marcelle Miranda da Silva^{II}

^IUniversidade Federal do Rio de Janeiro. Rio de Janeiro, Brazil; ^{II}Centro de Investigação, Inovação e Desenvolvimento em Enfermagem de Lisboa. Lisbon, Portugal; ^{III}Escola Superior de Enfermagem de Lisboa, Lisbon, Portugal; ^{IV}Universidade Federal do Rio de Janeiro. Macaé, Brazil

ABSTRACT

Objective: to understand the meaning of social skills attributed by specialist nurses in oncology nursing. **Method:** a qualitative, exploratory study, which applied Grounded Theory and Symbolic Interactionism. The participants were 14 nurses from one of the sample groups, specialists in oncology, from an oncological hospital. We applied semi-structured interviews, online, from May 2021 to December 2022. The analysis followed open, axial, and integration coding, and the coding paradigm. **Results:** we present the paradigm condition category, given the semantic aspect and recognition of the application of social skills. The category Perceptions and meanings of social skills for oncology nurses was based on the subcategories: reacting to the term, and attributing meanings and values to social skills in the specialty of nursing in oncology. **Conclusion:** nurses recognize social skills and their importance in oncology. We reinforce the importance of theoretical-practical articulation to qualify the practice in oncology.

Descriptors: Oncology Nursing; Health Management; Education, Nursing; Social Skills.

RESUMO

Objetivo: compreender o significado das habilidades sociais atribuído por enfermeiros especialistas em enfermagem em oncologia. **Método:** estudo qualitativo, exploratório, que aplicou a Teoria Fundamentada nos Dados e o Interacionismo Simbólico. Participaram 14 enfermeiros de um dos grupos amostrais, especialistas em oncologia, de hospital oncológico. Aplicamos a entrevista semiestruturada, *on-line*, de maio de 2021 a dezembro de 2022. A análise seguiu a codificação aberta, axial e integração, e aplicamos o paradigma da codificação. **Resultados:** a categoria paradigmática 'condição do fenômeno' é apresentada face o aspecto semântico e de reconhecimento da aplicação das habilidades sociais. A categoria Percepções e significados das habilidades sociais para enfermeiros oncologistas alicerçou-se nas subcategorias: reagindo ao termo, e atribuindo significados e valores às habilidades sociais na especialidade da enfermagem em oncologia. **Conclusão:** os enfermeiros reconhecem as habilidades sociais e sua importância na oncologia. Desse modo, reitera-se a importância da articulação teórico-prático para qualificar a prática na oncologia.

Descritores: Enfermagem Oncológica; Gestão em Saúde; Educação em Enfermagem; Habilidades Sociais.

RESUMEN

Objetivo: comprender el significado de las habilidades sociales atribuido por enfermeros especialistas en enfermería oncológica. **Método:** estudio cualitativo, exploratorio, que aplicó la Teoría Fundamentada y el Interaccionismo Simbólico. 14 enfermeros, expertos en oncología, participaron en uno de los grupos de muestreo de un hospital oncológico. Aplicamos entrevistas semiestructuradas, en línea, de mayo de 2021 a diciembre de 2022. El análisis siguió la codificación abierta, axial y de integración, y aplicamos el paradigma de la codificación. **Resultados:** se presentó la categoría paradigmática 'condición del fenómeno' ante el aspecto semántico y de reconocimiento de la aplicación de habilidades sociales. La categoría 'Percepciones y significados de las habilidades sociales para enfermeros de oncología' se basó en las subcategorías: reaccionando al término y atribuyendo significados y valores a las habilidades sociales en la especialidad de enfermería en oncología. **Conclusión:** los enfermeros reconocen las habilidades sociales y su importancia en la oncología. Siendo así, reforzamos la importancia de la articulación teórico-práctica para cualificar la práctica en oncología.

Descriptores: Enfermería Oncológica; Gestión en Salud; Educación en Enfermería; Habilidades Sociales.

INTRODUCTION

The complexity of nursing work lies in the practice of different skills to meet different needs, integrating scientific knowledge, the availability of resources, people's preferences, and professional expertise in technical and social skills. From these, we can highlight Social Skills (SS), which in an integrated way help to deal with the complexity of problems of a personal, family, community, continental and global nature in the field of health and its intersectorality^{1,2}.

Corresponding author: Marcelle Miranda da Silva. E-mail: marcellemisufjr@gmail.com

Editor in chief: Cristiane Helena Gallasch; Associate Editor: Helena Maria Scherlowski Leal David

SS can be defined as components of communication, problem solving, cooperation and interpersonal relationships in society. The possibility of evaluation and the applicability of SS differ in different knowledge areas, as their definition permeates multifactorial influences of the cultural context and the personal profile of those involved³.

SS performance can positively or negatively affect the quality of technical skills, including critical thinking skills and ethical attitudes, as well as the mental health of professionals. In the case of interpersonal relationships between professionals, good performance of SS is consistent with healthy interpersonal relationships, greater social support, quality of life and lower occurrence of depressive disorders and burnout¹.

The behavior of nurses who use the quality of human care skills is favorable for patients, considering that they are rewarded with a positive attitude about the experience of the disease and its acceptance. In turn, developing SS components must be encouraged in nurses' education in order to obtain positive results in people management and professional performance in care provision, thereby impacting satisfaction, institutional image, productivity, health and well-being, as well as making a difference in personal and professional life relationships^{1,4,5}.

Next, we highlight oncology among the different contexts of nurses' practice to develop this SS theme, as it is recognized as a highly complex specialization in this case due to the psycho-emotional and social issues of the process of becoming ill with cancer, the consequences of treatments, with repercussions for the person receiving care, caregiver and professional⁶. Communicating difficult news, dealing with feelings of vulnerability, suffering, pain, and the end of life are some of the difficulties in approaching the education of nurses in oncology for applying SS.

Furthermore, the patient and their family members who deal with a cancer diagnosis and its various challenges and sufferings, value communication in their experiences with nurses and in health education when receiving care. In this sense, communication is one of the main SS that nurses specializing in oncology nursing demonstrate knowledge of, and which can increase the quality of care with improvements in cancer management in terms of more favorable clinical responses, as well as in terms of organization and use of healthcare system resources, leading to more sustainable cost outcomes⁶.

However, despite the importance of SS in all dimensions of the work process in oncology nursing, with emphasis on the results of care and worker health, we identified gaps in the approach to this topic both from our experience in care and teaching, and in the search for current scientific evidence, especially in its semantic field and in the intuitive recognition of its daily application⁷.

We therefore start from a larger study object which encompasses the development of a theoretical matrix on SS applied in the specialization of oncology, and in this article we focus on the objective of understanding the meaning of SS attributed by nurses specializing in oncology nursing.

METHOD

We developed an exploratory, qualitative study which applied Grounded Theory (GT) and the conceptual basis of Symbolic Interactionism (SI)⁸. We followed the Consolidated Criteria for Reporting Qualitative Research (COREQ)⁹ editorial guide to describe the methodological path, which helped us to minimize the fragmentation bias, since we chose to present an excerpt from the doctoral thesis that emphasizes the meaning of SS in terms of recognizing its semantics and application in professional practice in oncology.

Data from interviews with 14 nurses who composed the first sample group of the thesis were covered in this study. These participants met the following inclusion criteria: being employed at the hospital for the care of people with cancer, located in Rio de Janeiro, Brazil, the study setting; hold a specialist degree in nursing in oncology through a *Lato Sensu* postgraduate degree, or a professionalizing *Stricto Sensu* postgraduate degree, or approved by the title test from the Brazilian Society of Oncological Nursing; and work in any clinical ward in the study setting.

Those who were absent due to vacation or leave of any nature during the data collection period were excluded from participation. None of the potential participants refused or withdrew from participating in the study. Participants were selected by convenience, and formally and individually invited via email obtained from the hospital's nursing division. Each participant received a link with the Informed Consent Form, signed it accordingly, and then answered questions related to their professional profile and provided the date and time for the online interview.

On the chosen day and time, the participant received a new link to access the Google Meet® platform to participate in the audio-recorded interview. All interviews were conducted by the first author, who was in her PhD and had recently completed her postgraduate residency in the hospital, having thus established a relationship with the participants before the study and presented her reasons for developing it. It is noteworthy that her experience during her residency was the main motivation for approaching SS in this nursing specialty.

The semi-structured interview was used as a data collection technique, conducted between May 2021 and December 2022. The interviews lasted an average of 20 minutes. Guiding questions were asked and circular questions were also asked depending on the need to deepen the meanings.

The following questions composed the interview script: what do you understand by SS? How important are they in your practice? How do you consider these skills help you in oncology? Is the application of SS different in the context of oncology compared to others? What is different? How do you think you can improve your SS? What do you do to improve your SS?

In addition to the interviews for data production, we can also highlight the construction of memos, mainly theoretical, throughout the data collection and analysis, which comprised the researcher's records of analyses, thoughts, interpretations, questions and directions for additional data collection⁸.

We performed a pilot interview which generated the need for prior clarification of the term SS. Therefore, a short text was designed before each new interview about what SS are in order to contribute to the participant's discourse based on each professional experience. This particularity guided deepening the first category in this article as it addresses the meaning of SS, given as the recognition of the conditions to which they are related in practice. Given this prior clarification and the sequence of questions in the script, the nurses valued this meaning; and the duality between knowing or not knowing the term resulted in this sample group of 14 participants, the largest in numbers, with a density of data which structured the thesis and resulted in hypotheses for composing the other sample groups.

In this case, we clarify that reaching the degree of saturation of this first sample group followed the conceptual models of theoretical and inductive thematic saturation, which was facilitated by the circularity between data collection and analysis in GT¹⁰.

The data were recorded digitally and later transcribed in full into a Microsoft Word® document. The interview transcription file was individually returned to each participant via email for any comments and/or corrections. No participant altered the content of the transcripts. However, two participants were approached more than once due to the circularity between data collection and analysis.

Data analysis was guided by the coding process in GT, which consists of comparative analysis at three levels, namely: open coding, axial coding and integration, according to the Straussian school⁸. The data coders at the three levels were the first and last author. We chose to develop the analysis manually because of the need for the first author to experience/learn the method.

The raw data from the transcriptions were analyzed in open coding line by line, sentence by sentence, or paragraph by paragraph, depending on the diversity of the content. Preliminary codes emerged at this stage based on the movement of comparison between them, according to their properties and dimensions, which consist of elements that can be identified in a code to compare it with others, and establish possible connections to group them into conceptual codes⁸.

Next, conceptual codes were grouped in axial coding to create categories and subcategories⁸. The final integration phase consisted of comparing and analyzing the categories and subcategories to develop, integrate and classify them based on applying the coding paradigm analysis tool structured in the condition, action-interaction and consequence components⁸. We identified that the category presented in this study with themes derived from both the data and in advance represented the condition, because it addressed the explanations and reasons surrounding the event centered on the recognition and application of SS.

The research protocol was approved by the Research Ethics Committees of the Anna Nery School of Nursing at the Federal University of Rio de Janeiro (EEAN/UFRJ) and by the Research Ethics Committee of the hospital where the study took place. The participants' involvement was voluntary. The participants were designated alphanumerically with the letter I for interviewee, sequenced by the interview number in the completion order to preserve their confidentiality.

RESULTS

The majority of the 14 participants in this study were female (71.4%) and were an average age of 39.5 years. Their average time since graduating in nursing was 16.7 years, and their average time spent working in oncology was 11.7 years. Regarding the work schedule, the majority of nurses (71.4%) worked on duty. In compliance with the inclusion criteria, all 14 nurses were specialists in oncology nursing, with the majority (57.1%) obtaining the title from the Oncology Nursing Residency, while 35.7% obtained it from the proof of title from the Brazilian Society of Oncology Nursing, and another 7.1% due to the professional Master's degree. Regarding the highest degree, 57.1% had a Master's degree, and 42.8% had a Doctorate degree. Moreover, 85.7% said they had not participated in SS training.

We present the category: Perceptions and meanings of SS for oncology nurses based on two subcategories: reacting to the term SS, and attributing meanings and values to SS in the oncology nursing specialization.

The subcategory title reacting to the term SS derived from the data was justified by the duality between knowing or not knowing the term, as can be seen in the following statements, and in the record of one of the memos (Figure 1).

I didn't know that HS encompassed all of this. I found it interesting, because we do this every day, but we don't know what it's called. And as nurses, SS have been very focused on in practice since our training, and we especially see this very present in oncology. (I7)

I learned about this concept through your work, I had no knowledge of what it was (...). Nowadays I can see that I use SS a lot more than techniques. (I9)

Memo 01

Title: **Reflecting on the meaning of HS**

Having previously read about what social skills are before the interview began, I realized that the participant felt more comfortable, and that this explanation was essential for understanding the phenomenon, without causing bias, but providing opportunities for dialogue and sharing experiences on the part of the interviewee. The expressions of surprise when they began to understand that they apply these skills all the time, followed by statements and concrete examples throughout the interview, allowed me to understand both the issue regarding the definition and recognition of this term, and how important they are in the oncology specialization.

Figure 1: Memo generated from data collection from the third interview. Rio de Janeiro, RJ, Brazil, 2022.

In addition to the length of experience that helps in choosing strategies to deal with problems that require SS, and the range of actions that encompass its definition, the nurses highlighted the SS that they consider most evident in oncology; and they attribute particular significance to SS in the oncology specialization.

Communication is the pillar, especially between the oncologist nurse and the patient who is experiencing the disease. [...] there is no point in trying to exchange information when the patient cannot understand you with this robust language [...]. I think empathy is also extremely important, as is decision-making in oncology; we are great translators between scientific language and the language accessible to this patient. (I10)

Next, benefits such as positive results in people management and decision-making, better performance of technical skills, and self-knowledge stood out in the subcategory attributing meanings and values to SS in the oncology nursing specialization.

In oncology you learn to love your neighbor more, you learn that life is a thread, that here is a different world [...]. SS are much more functional in oncology than in any other sector of care. (I8)

In fact, these skills are essential for managing care, especially conflicts, which exist in all areas, but I place them in oncology as the most frequent [...]. I consider oncology to be different because they are patients who really affect the professional's psychology.. (I5)

DISCUSSION

The study of HS originated in the field of social psychology¹¹ and was later explored in the field of aviation and nuclear energy industries, where they began early to recognize its importance for safety, expanding to other areas of professional training, such as health. These industries have developed rating structures to evaluate crew performance based on observable behaviors such as: communication, situational awareness and decision making¹².

Adaptive skills in conflict management, emotional intelligence through the perspectives of leadership, compassion, people management and communication are anchored among the competencies related to SS in the health area, being fundamental for the safety and quality of nursing care¹³.

Despite the evidence that qualifies care practice, the topic of SS is still little discussed in professional training and is applied intuitively, and therefore the expected results are not always achieved. It must be considered that although SS are inherent to the individual, they need to be developed permanently, and their inadequate use can compromise the relationships that support care practice¹⁴.

SS are essential to the social performance of nurses, as they are important allies in establishing interactions between individuals involved in their professional practice, and in creating social support networks¹⁵. Thus, SS have been the object of research interest in various contexts, precisely because of their relevance in strengthening the skills and relational health of human beings, in addition to enabling professional improvement, as can be observed in oncology¹⁶.

It is noteworthy that the results of this study regarding the meaning of SS attributed by nurses specializing in oncology nursing indicated recognizing the benefits for people management, decision making, improved performance of technical skills, as well as for self-knowledge.

By identifying the factors that positively affect application of nurses' SS, there is the possibility of increasingly developing them, corroborating improvement in care performance. On the other hand, understanding what negatively interferes provides support for education and improvement of SS in order to favor care management based on more effective and healthy interpersonal interactions, especially throughout the course of a chronic disease such as cancer¹⁷.

Therefore, in this study we highlight the context of oncology where the pressing and permanent need to improve SS is precisely related to conditioning factors of becoming ill with cancer, along with its repercussions on the professional; in addition to experiencing negative feelings and their own vulnerability related to dealing with the disease, it is also necessary for them to articulate knowledge and practices for comprehensiveness in care management, whether intra or interprofessionally, in the development of collaborative skills¹⁸⁻²⁰.

Specialized nursing interventions in oncology not only contribute to care management by nurses, meaning to the organization of their entire work process, but also to self-management of cancer, as assertive communications and healthy interpersonal relationships, for example, help in the ability of the patient and family to make better decisions. In this sense, patients value communication when being cared for by oncologist nurses⁶.

With the increase in the incidence of cancer and consequently greater demand for treatments, it is urgent that oncologist nurses are skilled communicators capable of promoting health education to reduce injuries and improve patients' functional capacity²¹⁻²³. However, the high demand of patients is an unfavorable indicator for the nurse's communication capacity²⁴, which highlights the performance of other SS, with emphasis on leadership and teamwork in order to make the actions in the different care environments viable.

Professionals in oncology manage complications related to the disease, monitor patients' responses to interventions performed and coordinate patient care. Therefore, care must be based on these SS so that communication failures, for example, are not factors associated with greater suffering²⁵.

Specialist oncology nurses who had education in advanced communication skills reported feeling prepared and confident when communicating difficult news to patients and families^{26,27}. The need for education to communicate well, among other skills, must be based on institutional policy and a care model for patient-centered communication²⁸. Thus, nurses' SS in nursing care must facilitate shared management, identify the patient's desires and the ability to promote self-management^{29,30}.

Nurses must be the link in the communication chain to achieve managerial success in healthcare institutions, considering that they are constantly in contact with the entire healthcare team, patients and family members. Communication is a tool for interfering in the institution's performance dynamics, as through it there are possibilities for nurses to sensitize the team about the importance of improvements in care practices³¹.

The communication domain is also intertwined with issues focused on the interpersonal relationships between the different members of the multidisciplinary team and the role of nurses in managing conflicts and developing resilience³². It is expected that the practical experience of nurses will contribute to improve this skill. It is extremely important that nurses develop the ability to communicate, listen, observe, and critically understand all sides of a conflict³³, which, in terms of practice based on the best evidence, also involves managing nursing care and healthcare based on the availability of resources.

Symbolic Interactionism helps us understand the impact of SS on the behavior of nurses' professional practice in the oncology specialization, as it highlights the meanings of these skills in an action and reaction cycle. In other words, the meanings provided by the elements during professional practice are intrinsically based for the professional to reflect on their way of caring in the oncology field. In turn, it is impossible to think of SS while ignoring the meanings that relate to the main cause of what is being experienced³⁴.

Symbolic Interactionism is anchored in a centered conception of the "self", despite being produced through social interactions. Thus, understanding that Symbolic Interactionism reflects meaning as the product of the human interaction process, the meaning of an element arises from how other people act in relation to themselves regarding the element, which is directly related to the actions and reactions, and the emotional intelligence to be professional in relationships. Therefore, Symbolic Interactionism accepts meanings as social products, creations drawn from human activities that are decision-making in their interactive process and which need to be intentional for the safety and quality of care³⁴.

Study limitations

The present study makes it impossible to generalize the results, since the inherent perceptions were specifically associated with the information collected in a unique scenario, plus the fact that it was a public hospital. The online interview strategy was used due to the COVID-19 pandemic, which may have made it difficult to perceive some particularities of non-verbal communication, and its interpretation based on Symbolic Interactionism. We emphasize the need for future research with expanded coverage not only in the field of oncology, but also in other nursing specializations.

Furthermore, another limitation of this study is based on the fact that the studied phenomenon is fragmented as we chose to present only one category of the theoretical matrix generated by GT in this article.

CONCLUSION

Although some nurses expressed little familiarity with the meaning of SS, it became clearer after clarifying that nurses' perception of these skills is quite notable, with much empirical evidence in professional practice, especially with the complex involvement in nursing management in the oncology specialization.

The results reinforce a lack of theoretical-practical articulation, even though SS are often learned from their own experiences and those of their colleagues. The importance of health institutions providing education to employees is reinforced so that they not only develop the framework of theoretical knowledge, but also SS essentially in practice in order to reduce work stress, assist in interpersonal relationships, and achieve care goals (among other positive results), contributing to the self-management of chronic diseases such as cancer.

Furthermore, although SS are essential for professional practice, their term in the theoretical field is still unknown, which may compromise development in the practical field. On the other hand, we observed that recognition of the practical application of these skills was significant for the sample of this study, despite the need to explain the definition before conducting the interviews. This corroborates the need to improve the topic regarding the importance of SS by nurses who work in the oncology specialization, requiring a targeted approach in continuing education. Thus, these results may support proposals for planning continuing education strategies, in addition to educational strategies in the nurse's training process, whether at undergraduate or postgraduate level.

REFERENCES

1. Chrzan-Rodak A, Ślusarska B, Niedorys-Karczmarczyk B, Nowicki GJ. Level of social competencies of nurses in primary health care and their selected work-related determinants—a cross-sectional study. *J Nurs Manag.* 2022 [cited 2023 Apr 23]; 30:3273–85. DOI: <https://doi.org/10.1111/jonm.13762>.
2. Ernawati E, Bratajaya CNA. Senior nurses' perceptions of essential soft skills for novice nurses in a private hospital in Jakarta, Indonesia: a phenomenological study. *Belitung Nurs J.* 2021 [cited 2023 Apr 23]; 7(4):320–8. DOI: <https://doi.org/10.33546/bnj.1549>.
3. Hank C, Huber C. Soziale Kompetenzen im Selbstbericht bei Kindern der Primarstufe. *Diagnostica.* 2023 [cited 2023 July 27]; 69(4): 218–28. DOI: <https://doi.org/10.1026/0012-1924/a000318>.
4. Melis MTV, Apolônio ALM, Santos LDC, Ferrari DV, Abramides DVM. Social skills training in speech-language pathology and audiology: students' perception. *Rev CEFAC.* 2022 [cited 2023 Apr 23]; 24:e8822. DOI: <https://doi.org/10.1590/1982-0216/20222438822>.
5. Oviedo AD, Delgado IAV, Licon JFM. Social skills communication in humanized nursing care: a diagnosis for a socio-educational intervention. *Esc Anna Nery.* 2020 [cited 2023 Apr 23]; 24:e20190238. DOI: <https://doi.org/10.1590/2177-9465-ean-2019-0238>.
6. O'Mahony C, Murphy KD, O'Brien GL, Aherne J, Hanan T, Mullen L, et al. A cost comparison study to review community versus acute hospital models of nursing care delivered to oncology patients. *Eur J Oncol Nurs.* 2020 [cited 2023 July 25]; 49:101842. DOI: <https://doi.org/10.1016/j.ejon.2020.101842>.
7. Sanchis-Giménez L, Lacomba-Trejo L, Prado-Gascó V, Giménez-Espert MC. Attitudes towards communication in nursing students and nurses: are social skills and emotional intelligence important? *Healthcare.* 2023 [cited 2023 July 27]; 11(8):1119. DOI: <https://doi.org/10.3390/healthcare11081119>.
8. Strauss A, Corbin J. Basics of qualitative research: techniques and procedures for developing Grounded Theory. 2 ed. Porto Alegre: Artmed; 2008 [cited 2023 Apr 23]. DOI: <https://doi.org/10.21225/D5G01T>.
9. Souza VR dos S, Marziale MHP, Silva GTR, Nascimento PL. Translation and validation into Brazilian Portuguese and assessment of the COREQ checklist. *Acta Paul Enferm.* 2021 [cited 2023 Apr 23]; 34:eAPE02631. DOI: <https://doi.org/10.37689/acta-ape/2021AO02631>.
10. Moura COD, Silva IR, Silva TPD, Santos KA, Crespo MDCA, Silva MMD. Methodological path to reach the degree of saturation in qualitative research: grounded theory. *Rev Bras Enferm.* 2022 [cited 2023 Apr 23]; 75:e20201379. DOI: <https://doi.org/10.1590/0034-7167-2020-1379>.
11. Del Prette ZAP, Del Prette A. Inventário de Habilidades Sociais: manual de aplicação, apuração e interpretação. 4.ed. São Paulo: Casa do Psicólogo; 2012.
12. Hardie JA, Oepfen RS, Shaw G, Holden C, Tayler N, Brennan PA. You Have Control: aviation communication application for safety-critical times in surgery. *Br J Oral Maxillofac Surg.* 2020 [cited 2023 July 27]; 58(9):1073–7. DOI: <https://doi.org/10.1016/j.bjoms.2020.08.104>.
13. Lu YL, Shorey S. Nurses' perceptions of emotional intelligence in the clinical setting: A qualitative systematic review. *J Nurs Manag.* 2021 [cited 2023 Apr 23]; 29(8):2453–60. DOI: <https://doi.org/10.1111/jonm.13406>.
14. Carneiro MF, Braga MSL, Moreira JM. Habilidades sociais de estudantes de enfermagem e psicologia. *Ciências Psi.* 2020 [cited 2023 Apr 23]; 14(1):e-2131. Available from: <https://revistas.uca.edu.uy/index.php/cienciaspsicologicas/article/view/2131>.
15. Santos ROJFL, Teixeira ER, Cursino EG. Estudo sobre as relações humanas interpessoais de trabalho entre os profissionais de enfermagem: revisão integrativa. *Rev Enferm UERJ.* 2017 [cited 2023 Apr 23]; 25:e26393. DOI: <http://dx.doi.org/10.12957/reuerj.2017.26393>.
16. Pires SMP, Monteiro SOM, Pereira AMS, Stocker JNM, Chaló DM, Melo EMOP. Non-technical skills assessment scale in nursing: construction, development and validation. *Rev Lat Am Enfermagem.* 2018 [cited 2023 Apr 23]; 26:e3042. DOI: <http://dx.doi.org/10.1590/1518-8345.2383.3042>.
17. Montezeli JH, Almeida KP, Haddad MCFL. Nurses' perceptions about social skills in care management from the perspective of complexity. *Rev Esc Enferm USP.* 2019 [cited 2023 Apr 23]; 52:e03391. DOI: <http://dx.doi.org/10.1590/S1980-220X2017048103391>.
18. Peduzzi M, Agreli HLF, Silva JAM da, Souza HS de. Trabalho em equipe: uma revisita ao conceito e a seus desdobramentos no trabalho interprofissional. *Trab Educ Saúde.* 2020 [cited 2023 Apr 23]; 18:e0024678. DOI: <https://doi.org/10.1590/1981-7746-sol00246>.
19. Agreli HF, Peduzzi M, Silva MC, Mascarelle RCV, Espinoza P. Effect of interprofessional education on teamwork and on knowledge of chronic conditions management. *Rev Lat Am Enfermagem.* 2019 [cited 2023 Apr 23]; 27:e3203. DOI: <https://doi.org/10.1590/1518-8345.3095.3203>.
20. Gonçalves JRSN, Gonçalves RN, Rosa SV, Orsi JSR, Paula KMS, Moysés SJ, et al. Potentialities and limitations of Interprofessional Education during graduation: a systematic review and thematic synthesis of qualitative studies. *BMC Med Educ.* 2023 [cited 2023 July 27]; 23:236. DOI: <https://doi.org/10.1186/s12909-023-04211-6>.
21. Nevidjon B. Member Input: The challenge of staffing in ambulatory infusion settings. *Clin J Oncol Nurs.* 2018 [cited 2023 Apr 23]; 22(2):225–8. DOI: <https://doi.org/10.1188/18.CJON.225-227>.
22. Schneider F, Giolo SR, Kempfer SS. Core competencies for the training of advanced practice nurses in oncology: a Delphi study. *Rev Bras Enferm.* 2022 [cited July 30]; 75(5):e20210573. DOI: <https://doi.org/10.1590/0034-7167-2021-0573>.
23. Sheldon LK. The Need for Identification Cards in Immuno-Oncology. *Clin J Oncol Nurs.* 2017 [cited 2023 Apr 23]; 21(3):279. DOI: <https://doi.org/10.1188/17.CJON.279>.
24. McFarland DC, Shen MJ, Holcombe RF. Predictors of satisfaction with doctor and nurse communication: a national study. *Health Commun.* 2017 [cited 2023 Apr 23]; 32(10):1217–24. DOI: <https://doi.org/10.1080/10410236.2016.1215001>.
25. Beal R, Sbolli K, Ribeiro ER, Prado MRM. Os desafios da oncologia: da formação à ação profissional do enfermeiro. *Res Soc Dev.* 2021 [cited 2023 Apr 23]; 10(7):e16410716332. DOI: <https://doi.org/10.33448/rsd-v10i7.16332>.

26. Banerjee SC, Manna R, Coyle N, Penn S, Gallegos TE, Zaider T, et al. The implementation and evaluation of a communication skills training program for oncology nurses. *Transl Behav Med.* 2017 [cited 2023 Apr 23]; 7(3):615-23. DOI: <https://doi.org/10.1007/s13142-017-0473-5>.
27. Zhu N, Yang L, Wang X, Tuo J, Chen L, Deng R, et al. Experiences and perspectives of healthcare professionals implementing advance care planning for people suffering from life-limiting illness: a systematic review and meta-synthesis of qualitative studies. *BMC Palliat Care.* 2023 [cited 2023 July 27]; 22:55. DOI: <https://doi.org/10.1186/s12904-023-01176-7>.
28. Wittenberg E, Goldsmith J, Buller H, Ragan SL, Ferrell B. communication training: needs among oncology nurses across the cancer continuum. *Clin J Oncol Nurs.* 2019 [cited 2023 Apr 23]; 23(1):82-91. DOI: <https://doi.org/10.1188/19.CJON.82-91>.
29. Oliveira PP, Santos VEP, Bezerril MS, Andrade FB, Paiva RM, Silveira EAA. Patient safety in the administration of antineoplastic chemotherapy and of immunotherapies for oncological treatment: scoping review. *Texto Contexto Enferm.* 2019 [cited 2023 Apr 23]; 28:e20180312. DOI: <https://doi.org/10.1590/1980-265X-TCE-2018-0312>.
30. Oliveira MM, França RAP, Silva ER. Contribuições para a assistência ao paciente com câncer de tireoide submetido à radioiodoterapia. *Revista Recien.* 2018 [cited 2023 Apr 23]; 8(23):68-81. Available from: <https://www.recien.com.br/index.php/Recien/article/view/167>.
31. Li X, Ding L, Ning P, Li Y, Wei H, Meng Q. Construction of a nurses' interpersonal communication knowledge system: a Delphi study. *Nurse Educ Today.* 2023 [cited 2023 July 27]; 120: 105630. DOI: <https://doi.org/10.1016/j.nedt.2022.105630>.
32. Han P, Duan X, Jiang J, Zeng L, Zhang P, Zhao S. Experience in the development of nurses' personal resilience: A meta-synthesis. *Nurs Open.* 2023 [cited 2023 July 27]; 10:2780-92. DOI: <https://doi.org/10.1002/nop2.1556>.
33. Teixeira LN, Silva MM, Draganov PB. Desafios do enfermeiro no gerenciamento de conflitos dentro da equipe de enfermagem. *Rev Adm Saúde.* 2018 [cited 2023 Apr 23]; 18(73). DOI: <http://dx.doi.org/10.23973/ras.73.138>.
34. Blumer H. Symbolic interactionism: perspective and method. Englewood Cliffs (NJ): Prentice-Hall; 1969.

Authors' contributions

Conceptualization, MCAC e MMS; methodology, MCAC e MMS; validation, MCAC e MMS; formal analysis, MCAC, NAB, NCCMB, PRMBL, IRS e MMS; investigation, MCAC; data curation, MCAC e MMS; manuscript writing, MCAC, NAB, NCCMB, PRMBL, IRS e MMS; manuscript review and editing, MCAC, NAB, NCCMB, PRMBL, IRS e MMS; visualization, MCAC, NAB, NCCMB, PRMBL, IRS e MMS; supervision, MMS; project administration, MCAC e MMS. All authors have read and agreed to the published version of the manuscript.