Professional qualification and childhood cancer in primary care
Qualificação profissional e o câncer infantojuvenil na atenção básica
Cualificación profesional y cáncer infantojuvenil en la Atención Básica

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Abstract

Objective: To analyze the perception of professionals working in Primary Care about their professional training related to childhood cancer.

Methods: This is an exploratory study, with a qualitative approach, developed with professionals in Primary Care in the city of Campinas-SP. The study was conducted through focus groups, guided by semi-structured questions. Thematic modality of Content Analysis was adopted.

Results: Two categories were identified: “Experiences and professional training in the face of childhood cancer in Primary Care”, resulting in little contact with the theme, both through experiences and through professional training; and “Comprehensiveness of care for children and adolescents with cancer in Primary Care and professional qualification”, with little or no preparation being unveiled to ensure comprehensive care, with issues different from the biological aspects of the disease.

Conclusion: From professionals’ perceptions, there was little contact and insufficient preparation to list assertive actions related to childhood cancer in Primary Care, pointing out the need for future changes in the inclusion of the theme in this level of care and improvements in the quality of continuing education in the services.

Keywords
Professional training; Primary health care; Neoplasms; Child health; Adolescent health

Descritores
Capacitação profissional; Atenção primária à saúde; Neoplasias; Saúde da criança; Saúde do adolescente

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Professional training, as well as continuing education promotion for qualification of care, are references and goals of movements that aim to implement strategies that strengthen the promotion of effective care at different levels of healthcare. (1,2)

One of the possible ways to carry out the organization of services is the inclusion of proposals for articulated work, highlighting training for the health area, based on the junction between individual and institutional development, the role of services and sectoral management, and between healthcare and social control. (3)

In order to ensure comprehensive care, an interprofessional training is sought, aligned with the health needs of people and populations, being capable of impacting and influencing the formulation of policies to reorient training in health. (3)

Likewise, it is necessary that the structuring, organization, and execution of actions and services of the Brazilian Unified Health System (SUS - Sistema Único de Saúde) are ordered by Primary Care in all dimensions, constituting the main gateway to the system and the foundation of healthcare. (4)

It is essential that Primary Care has actions aimed at expanding access to other levels of complexity in SUS. (5) It is also necessary to establish adequate training, producing knowledge of the peculiarities and needs of the population, and taking into account the complexity of health-disease processes in different life cycles, and their dialogue with the territory issues. (6)

In this regard, in 2013, the Brazilian National Policy for Prevention and Control of Cancer in the Healthcare Network for People with Chronic Diseases (Politica Nacional para a Prevenção e Controle do Câncer na Rede de Atenção à Saúde das Pessoas com Doenças Crônicas) (2) was instituted, which describes the implementation of early diagnosis and identification actions signs and symptoms of cancers subject to this action as one of the competencies of Primary Care.

With this, the health team that works at this level of care becomes responsible for conducting actions to prevent and control cancer, as well as to ensure comprehensive care. Therefore, many specific activities have already been developed in Primary Care in relation to cancer prevention and control, notably when it comes to women’s and men’s health, with an expressive focus on the prevention and control of cervical cancer and breast and prostate cancer, even pointed out by the annual action agenda, represented by pink October and blue November. (7,8)

However, when it comes to actions aimed at cancer in the child-juvenile population, there are few initiatives to support the work of Primary Care professionals, being considered thematic and care specific to oncological specialties, often focused only on clinical aspects, disregarding the importance in also include professionals who do not perform the diagnosis. (9) Thus, it is important to establish models of care that reinforce health education, aiming to expand the intervention capacity of professionals and also of people in relation to childhood cancer. (3,9)
It is known that the occurrence of cancer in children and adolescents is considered rare when compared to adults, yet it is the leading cause of death from diseases in children aged 0 to 19 years. The specific aspects of childhood cancer, i.e., low incidence and unspecific signs and symptoms, can be considered conditions difficult to identify for professionals working in Primary Care, whose contact with similar events is infrequent.

Among the ways found to minimize the harms resulting from the disease and the impact caused by it, there are suspicion and early diagnosis and, in this sense, Primary Care has a fundamental role, both in the performance of qualified listening, and in care based on a bond with the whole family, thus allowing a continuous articulation in the Healthcare Network (RAS - Rede de Atenção à Saúde), making assertive referrals to specialized centers, expanding the possibility of quick start of treatment, which, in turn, lead to a better prognosis and the reduction of mortality from these causes.

Therefore, this investigation is part of a larger project entitled “Crianças com câncer é difícil diagnosticar? um estudo sobre a temática na Atenção Básica”, and aims to analyze the perception of professionals working in this sphere about their professional training related to childhood cancer.

**Methods**

This is an exploratory study, with a qualitative approach, guided by social research developed with Primary Care professionals in the city of Campinas, state of São Paulo, Brazil.

Campinas has approximately 1,182,429 inhabitants, assisted by 63 health centers (HC), distributed in 05 health districts (HD): North, South, Southwest, Northwest, and East. These HC, organized from the expanded model of Family Health Strategy (FHS), assisting around 20,000 inhabitants each.

It is noteworthy that the municipality’s Primary Care adopts the Paidéia support model, with territorialization, teamwork, matrix support, expanded clinic and unique therapeutic project with distinct professionals, adapted according to the local specifics.

The study setting consisted of 04 HC that had a similar population, physical facilities, demand for care and human resources, with the characteristic of being distant from each other. In this way, each HC selected was located in a different HD.

Before carrying out the data collection, the researchers visited the HC, with the aim of presenting the study in team meetings, allowing professionals to get to know the research. This moment of initial approximation allowed taking note of participants’ professional categories, as well as their working time in the unit.

Workers who make up the FHS were included in the study, comprising professional categories of secondary and higher education. After the invitation, professionals who expressed interest participated, and the sample was defined by convenience. Those who worked for less than 06 months in the unit were excluded, as shown in Figure 1.

The study was conducted through focus groups (FG) carried out in the HC’s own rooms and at times agreed with the management of the health units, so that there was no prejudice in the service provided. No interferences were experienced during the FG.

The records were made through audio recordings, and to identify the participants, at the beginning of each speech, they presented themselves saying their professional category.
All FG were conducted from the same semi-structured script, containing the following themes: Children’s cancer in professional training and experiences in Primary Care.

Each FG had an average duration of 35 minutes, and before the end of each one, a validation was carried out, which brought together a synthesis of the discussions held. All FG were moderated by a master nurse in collective health with experience in conducting FG, favoring a punctual approach, obtaining 02 hours and 19 minutes of recorded content, from which 34 pages of manually transcribed material were produced. There was no saturation criterion.

Transcription, internal validation and analysis steps were carried out independently by three researchers involved in the research, including a researcher who participated in the collection, a doctor holding a PhD in Public Health and a dentist holding a PhD in social dentistry, all with experience in the subject. The researchers did not adopt software to support the analysis of qualitative data. It is noteworthy that there was no loss in recordings or problems during collection.

The material produced was based on the full transcription of the FG, which were later analyzed by the thematic modality of Content Analysis by Bardin, according to the following path: meeting of the corpus of analysis, carrying out text skimming of the findings, in-depth reading, constitution and interpretative analysis of categories and discussion with relevant literature. From analysis, two central categories emerged: “Experiences and professional training regarding childhood cancer in Primary Care” and “Comprehensiveness of care and professional qualification”. Participants had access to the research results through the final research report, discussed in the unit’s team meetings and made available to local and municipal management.

To conduct this study, ethical precepts of Resolution 466/2012 of the Brazilian National Health Council (Conselho Nacional de Saúde) were followed, and the research project was approved by the Institutional Review Board of Universidade Federal de São Paulo - UNIFESP/EPM (CAAE (Certificado de Apresentação para Apreciação Ética - Certificate of Presentation for Ethical Consideration) 22920213.5.0000.5505).

Results

04 FG were carried out with the participation of 27 professionals from high school and college who work in Primary Care: 03 nurses, 06 doctors, 01 dentist, 06 nursing assistants, 01 popular educator and 10 Community Health Workers (CHW).

After the steps of transcribing the speeches from the FG, organizing the corpus of analysis, floating reading followed by in-depth reading, two categories of analysis emerged, as shown in Figure 2.

![Figure 2](https://via.placeholder.com/150)

**Figure 2.** Emerging themes from the focus groups that contributed to training the analysis categories

Experiences and professional training regarding childhood cancer in Primary Care

High school and college-educated professionals were investigated and, in their statements, it is clear that, in relation to the diagnosis and treatment/care of cancer in childhood and adolescence, there was little contact with the subject, both in relation to experiences and through of professional training. The following excerpts exemplify this inference:

- *I had absolutely nothing, at most a few slides in college (Nurse)* (FG 3).
- *No, we never had anything* (CHW) (FG 2).
- *I had nothing* (CHW) (FG 4).
Primary Care professionals report having little knowledge about childhood cancer, summarized in a few classes during graduation, and when the topic was presented, it was based on quick cases, not allowing for real learning:

*I had a very small approach to general oncology. Even though I studied at a very good place in the area of oncology, I saw very few cases with children... even so, it was very limited* (Family Doctor) (FG 4).

*My training in nursing technicians was very superficial, as I didn’t even have contact in the internships, in fact, with the technician I didn’t even go to pediatrics itself* (Nursing Technician) (FG 4).

*I also had very little know-how, in fact I didn’t! In our undergraduate classes, in pediatrics, we only had one case, and in only one case, you don’t see anything* (Preceptor of Internal Medicine) (FG 4).

In Primary Care, the professional nurse follows the longitudinality of individual and family care, in addition to acting in the management of health services. However, in their perceptions, they feel unprepared to deal with cases of childhood cancer, including the implementation of actions for early diagnosis and identification of signs and symptoms.

*My training as a nurse focused on care, but it was very superficial in terms of childhood cancer, almost nothing. I think that the health professional, as a whole, is not prepared yet.* (Nurse) (FG 4).

Regarding CHW, it is clear that information about reality is not problematized with health organizations, and the construction of meanings for their practices is carried out without institutional support, bringing together knowledge that comes from their personal experiences, and little contextualized with the organization of policies and the RAS itself.

*In my CHW training, we didn’t see anything, there’s nothing about cancer in children, nor about death. Nothing! What we have experience is living as a human being, relatives and neighbors. But to say that I learned that... studying it... no! (CHW) (FG 4).*

In some cases, professionals emphasized that learning related to the approach to childhood cancer occurred as a result of personal experiences, as shown in the following excerpts:

*When I helped this child that I told, I knew I needed to do that because of my experience with my daughter, but nothing was given here, for example: how we should approach it or how we [should] do it... (CHW) (FG 2).*

*I never had... I learned from life* (Nursing Assistant) (FG 4).

*Then you learn to diagnose, YOU have to get by* (Family Doctor) (FG 3).

The professionals expressed, during the FG, the importance of training activities related to the approach to childhood cancer after entering the world of work:

*But I think that there is always a need for recycling because it is a need we have. This is a complicated topic, even pediatricians do not like to make this diagnosis. In the past, we had some large, very good recycling... I think this is important, you have to relive this topic, there are no pediatricians who are easy with this, I've always had good training, it was discussed, but not enough* (Pediatrician) (FG 1).

*In my area (dentistry), it is very rare indeed, the emphasis is on adults and elderly people. Every year we have recycling, but it is always related to adults, for example: smokers, alcoholics* (dentist surgeon) (FG 1).

*What I know is what I’ve learned here, in our continuing education, I even see it that way* (Preceptor of Internal Medicine) (FG 4).
Comprehensive care for children and adolescents with cancer in Primary Care and professional training

Ensuring comprehensive healthcare comes from an articulated process of organization of services and implies the need for care that combines collaborative work, as a team, and at different levels of complexity.

Study participants pointed out difficulties in the approach of childhood cancer that are beyond the diagnosis. In the excerpts recorded below, little or no preparation is unveiled to ensure comprehensive care, with issues different from the biological aspects of the disease:

How to deal with this, to deal with the parents, to deal with the child, to deal with ourselves, and to deal with your own anguish? So, when we think about dealing with a child with cancer, that's something to be desired... (Family Doctor) (FG 3).

Today, this issue of working the tact of the patient's feeling is very lacking, as it all depends on the diagnosis, the exams, and what this will trigger. But how are we going to work? Deal with it? And how will the family live with it? These questions are a little out of the curriculum (Family Doctor) (FG 3).

The biggest load in our training focuses on clinical aspects... the technologies of how the person deals with the problem they have, or, how the family deals with, in my opinion, this is relatively new here in Brazil. In general, he is disabled (Family Doctor) (FG 1).

In the practical [classes] we had, it was just [debated] the diagnosis and nothing more. (Family Doctor) (FG 4).

The difficulty perceived by the professionals is clearly expressed in relation to how they deal with situations related to childhood cancer, as well as the lack of humanization in the practices aimed at this group, because there was not proper preparation, forcing the completion of a treatment entirely focused on the examination and medications, not looking at the child as a whole.

I didn't learn in college how to deal with finitude, with palliative care, with acceptance of death... even more with the child. We have this difficulty in doing this even for the elderly, and with children it is kind of unacceptable. We are not prepared for death, even that health professional who deals with it all the time. I think we have difficulty, because we, as professionals, know the natural progression of the disease, and we suffer in advance. Now the family, it clings to the speck of hope that it will cure, that it will work [...] the health professional has to be more prepared to prepare the family to deal with this issue of death and disease, resilience (Nurse) (FG 4).

What we don't have is citizen training, because with our capitalist society, the issue of spirituality is rarely discussed. Not the religion itself, such as the Catholic religion, etc., but the question of spirituality. Thinking about death and life are things that with palliative conditions are starting to enter the curriculum. Internationally, there are courses that deal with spirituality, and I think that because we don't have it, we are not prepared to think about these things (Preceptor of Internal Medicine) (FG 4).

In training, we are not very concerned about this doctor-patient relationship, in the human relationship (Family Doctor) (FG 3).

Discussion

The speeches revealed gaps in the training of professionals in Primary Care, and, in general, perceptions turn to little or no contact with the theme of childhood cancer. The professional training process should favor collaborative teamwork, establishing learning strategies that encourage dialogue, exchange, transdisciplinarity between different formal and non-formal knowledge that contribute to health promotion actions at individual and collective levels.19,21
The findings of this study corroborate some examples already mentioned in the literature, observing a considerable gap related to the training of professionals in Primary Care, with intense shortages on the subject, including nursing, who declare that qualification strategies are necessary so that they can consequently identify early childhood cancer. As an example, the work of Rosa is cited, which revealed a deficit of qualification related to the oncology theme in Primary Care.

It is noteworthy that the experience has great potential for training and transformation. It is essential to recognize that there is a relationship of complementarity and recomposition between what is learned in institutionalized training and learning derived from experience. However, the initial contact with topics of great relevance, such as childhood cancer, in formal education should be made possible.

Allied to this conception, comes the concept of Continuing Education in Health, which aims to promote learning from problems faced in daily work, in order to find answers and transform practices. It is hoped that professionals improve cancer care, especially aimed at patients children and adolescents, from the development of technical knowledge in the biological, psychological and emotional sphere.

The need for a permanent training process can be translated into a vision of greater awareness by incorporating new responsibilities, directly relating to the decision-making process in professional practice. These aspects are essential for professionals to be engaged and committed to the health of the population, hence the important task of identifying knowledge gaps and training focused on cancer care. Unlike adults, cancer in children and youth presents a multiplicity of signs and symptoms that are similar to countless events typical of childhood, i.e., the first symptoms of childhood cancer are considered non-specific. This fact, associated with the low prevalence of this condition in relation to other diseases with which it shares signs and symptoms, makes the positive predictive value of these symptoms for childhood cancer to be low and, consequently, makes early diagnosis difficult.

When thinking about comprehensive care for children and adolescents with cancer in Primary Care, collaborative teamwork becomes essential, with emphasis on training focused on healthcare, which requires the collective construction of knowledge. Interprofessional Education (IPE) emerges as a desirable horizon in the sense of providing the development of common and collaborative skills that qualify health work, especially in the context of chronic diseases.

However, with Flexner report influences and its consequences for courses in the health area, the knowledge offered to students is predominantly based on uniprofessional training and on the understanding of illness restricted to the biological body, disfunctionalizing it in relation to normality. A body fragmented into organs, understood by isolated disciplines and seen from organic lesions only.

Furthermore, the technical-scientific imagination of health encourages the understanding of the natural history of diseases, not valuing the singularities of living and feeling. This historical constitution explains why most health professionals have insufficient training to develop work based on the SUS principles.

Deficiencies in training to address childhood cancer, even though this is a problem marked by being the leading cause of death from diseases in this age group, reinforce how far training is from social needs. Taking into account that early diagnosis is essential to minimize the impacts caused by the disease, it is essential that health professionals build knowledge, skills and competences aimed at this problem during training.

Thus, the approach consistent with this understanding is focused on the technical and biological sphere, with excessive use of hard technologies, to the detriment of light-relational care technologies. It is noted that training in health has not been focused on teaching care practices, since it does not prioritize the understanding of the living, subjectivated and unique body that demands more than diagnosis and technique. Living with the patient requires qualified listening and sensitive and delicate attention, linked to their historical, social and family context, especially when it comes to childhood cancer.
The current Brazilian National Policy on Continuing Education in Health (Política Nacional de Educação Permanente em Saúde)\(^{(1)}\) emphasizes the need for workers’ qualification to adhere to local needs and realities in order to contribute to the transformation of work practices and organization. From the analyzed categories, the relevance of continuing education to qualify care practices in Primary Care is reinforced, pointing to the need to also establish an agenda with a specific focus on the signs and symptoms of cancer in this life cycle.

In this context, there is an appreciation of pedagogical practices centered on problematization and health work processes, with an emphasis on collaborative teamwork without underestimating the specific importance that each profession has.\(^{(35)}\)

When considering the specificities of childhood cancer, professionals’ knowledge gaps can be even greater, as evidenced by participants’ speeches. The commitment of each professional must be seen in an active way of praxis-action and reflection on reality, demanding an improvement, overcoming specialization, including the expansion of their knowledge about man, and his way of being in the world.\(^{(29)}\)

A limitation present in the study was the way in which the FG were carried out, both because they were conducted only by one researcher, and also because of the reduced time taken to carry out each one of them. This fact occurred because the FG could only be held at times when the health service was not harmed, which made the participation of all researchers unfeasible. However, this limitation was alleviated with the effective participation of three researchers in the steps of transcription, analysis and interpretation of results.

### Conclusion

From professionals’ perceptions, there was little contact and insufficient preparation to list assertive actions related to childhood cancer in Primary Care. Moreover, professional qualification was often based on personal experiences, with the presence of difficulties in dealing with situations related to childhood cancer, with little in-depth analysis of the problems identified in the practice of services. The findings of the study point to the need for future changes in the inclusion of the theme childhood cancer in Primary Care; improvements in the quality of continuing education in services; and implementation of early diagnosis actions, in order to promote comprehensive health for children, adolescents, and their families.

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### Collaborations

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