Revisão Integrativa EN

Júlia C. Vicário, Luciana R. F. Marion, Stefany A, Schumann, Marilene N. S. Bragagnolo Nurse's attributions in the early detection of childhood câncer

Nurse's attributions in the early detection of childhood câncer

Atribuições do enfermeiro na detecção precoce do câncer infantil Atribuciones del enfermero en la detección precoz del cáncer infantil

RESUMO

Objetivo: Identificar o grau de habilidade e conhecimento do profissional de enfermagem no diagnóstico precoce, tratamento e suporte familiar no contexto do câncer infantil. Método: Trata-se de um estudo de revisão integrativa de literatura com coleta de dados nas plataformas Scielo, BVS e Lilacs. Foram selecionados artigos publicados na íntegra entre os anos de 2014 e 2022. Resultados: Dentre os resultados encontrados, a falta de preparo do profissional de enfermagem é a maior dificuldade no diagnóstico do câncer infantil, pois são raros os cursos que disponibilizam informações sobre o assunto. Conclusão: A partir dos estudos incluídos nesta revisão integrativa fica evidente a necessidade de reformulação do sistema de preparo e educação dos profissionais para atuação nessa área e, revela a significante contribuição do profissional durante o processo de tratamento do paciente.

DESCRITORES: Câncer Infantil; Enfermagem; Diagnóstico precoce.

ABSTRACT

Objective: To identify the degree of skill and knowledge of nursing professionals in early diagnosis, treatment and family support in the context of childhood cancer. Method: This is an integrative literature review study with data collection on the Scielo, BVS and Lilacs platforms. Articles published in full between 2014 and 2022 were selected. Results: Among the results found, the lack of preparation of nursing professionals is the greatest difficulty in diagnosing childhood cancer, as courses that provide information on the subject are rare. Conclusion: From the studies included in this integrative review, the need to reformulate the system of preparation and education of professionals to work in this area is evident, and it reveals the significant contribution of the professional during the patient's treatment process. **DESCRIPTORS:** Childhood Cancer; Nursing; Early diagnosis

RESUMEN

Objetivo: Identificar el grado de habilidad y conocimiento de los profesionales de enfermería en el diagnóstico precoz, tratamiento y apoyo familiar en el contexto del cáncer infantil. Método: Se trata de un estudio integrador de revisión bibliográfica con recolección de datos en las plataformas Scielo, BVS y Lilacs. Se seleccionaron artículos publicados íntegramente entre 2014 y 2022. Resultados: Entre los resultados encontrados, la falta de preparación de los profesionales de enfermería es la mayor dificultad en el diagnóstico del cáncer infantil, siendo escasos los cursos que brindan información sobre el tema. Conclusión: A partir de los estudios incluidos en esta revisión integradora, se evidencia la necesidad de reformular el sistema de preparación y educación de los profesionales para actuar en esta área, y revela la contribución significativa del profesional durante el proceso de tratamiento del paciente.

DESCRIPTORES: Cáncer Infantil; Enfermería; Diagnóstico precoz.

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INTRODUCTION

ncogenesis is a process in which cancer formation occurs, in addition to being complex, it ends up involving multiple pathways. The process occurs when the normal function of living cells is altered, thus causing abnormal cell growth. The process itself occurs slowly, and it can take several years for a cancerous cell to manifest itself into a visible tumor.¹²

About 80% of cancer cases are developed by environmental factors, chemical and physical carcinogens, infectious agents and lifestyle. Among these factors, chemical carcinogens such as smoking; physical carcinogens such as ultraviolet radiation; infectious agents such as papilloma virus and helicobacter pylori.^{1,3}

Childhood cancer has its characteristics, being different from adult cancer. It usually occurs of an embryonic nature and is made up of undifferentiated cells. Male children have a higher incidence than female children. In children of white ethnicity it is almost 30% higher than in black children. ⁴

Among the types of childhood cancer, the following stand out: leukemia (white blood cells); tumors of the central nervous system; lymphomas (lymphatic tissue); Wilms tumor (Kidney tumor); neuroblastomas (tumor of cells of the peripheral nervous system, with a higher incidence in the abdominal region); germinative tumor (Tumor of the cells that will originate the gonads); osteosarcoma (bone tumor); sarcomas (soft tissue cancer); retinoblastoma (retinal tumor).⁴

Early diagnosis is related to a high cure rate, therefore it is a goal to be achieved, as the symptoms easily merge with the initial symptoms of several common diseases at this stage of life. Symptoms and aggressive signs of cancer are rarely observed at this stage. Therefore, the need to develop the skills of nursing professionals is essential for pointing out these diagnostic hypotheses. ⁴

The pediatric nursing consultation is a fundamental tool for a possible early diagnosis of childhood cancer, it is an extremely important process that allows the nurse to identify physical and mental changes and anomalies that may mean health problems for the child. The consultation must be carried out in an environment suitable for the child, according to their age group, always with the presence of parents or legal guardians. ⁵

The National Cancer Institute (INCA - Instituto Nacional de Câncer) advocates greater attention to the appearance of some symptoms such as: vomiting accompanied by headaches; imbalance when walking; irritability; difficulty moving; bone or joint pain; sudden change in skin color, usually pale; fever; weight loss; weakness; bleeding in general; frequent pains in the belly; swellings or nodules with rapid growth and no pain; excessive night sweat; toothaches without having cavities; purple spots on the body or eyelids; nodules or spots on the skin; altered pressure; frequent discharge from the ear; early adult sexual characteristics; difficulty seeing or double vision; in the eyes: white pupil or cat's eye reflex.⁶

Treatments are usually carried out in centers specialized in children with cancer, since they need special care, such as the involvement of a multidisciplinary team. It encompasses not only drug therapy, chemotherapy or surgeries, but a set of factors involving the child's family, their emotional, cognitive, educational and social conditions.⁷

Although discoveries and improvements in the treatment of the disease are in progressive evolution, mainly in technological advances, such as more effective drugs and surgical techniques, the discovery of cancer in the family environment exposes its members to difficult situations that require precise decision-making. ⁸

Families are fundamental in the process of diagnosing the disease and, even more so, in supporting the patient, especially when it comes to children. The better they are oriented, the better the assistance to the patient, the better use of adaptation resources, respecting their individual possibilities and limitations. It is important to surround yourself with a well-qualified team to offer the patient and his family the welcome they need, authentic care, which must be considered from the diagnosis to the outcome of the prognosis. ⁸ Júlia C. Vicário, Luciana R. F. Marion, Stefany A, Schumann, Marilene N. S. Bragagnolo Nurse's attributions in the early detection of childhood câncer

This study is justified as it certifies that childhood cancer is considered a public health problem, both in developed and developing countries. It is considered rare compared to cancer in adults, but about 80% of childhood cancers occur in countries under the human development index (HDI).¹

The main point of childhood cancer is early detection and initiation of treatment, which is of fundamental importance for lower mortality and morbidity. Therefore, there are many factors that are associated with delayed diagnosis and initiation of treatment.⁴

The family and the nurse have a main role in the diagnosis of the patient, proximity and monitoring of the family are essential for identifying the signs and symptoms of the disease. The nurse must be sure to make the necessary approach and referral when the first symptoms of childhood cancer are noticed, so that the treatment does not start in an advanced condition.⁴

This study seeks to identify the degree of skill and knowledge of the nursing professional in the early diagnosis, treatment and family support in the context of childhood cancer.

METHOD

An integrative literature review was carried out on the duties of nurses in the early detection of childhood cancer with data collection on the Scielo, BVS and Lilacs platforms according to the PICO strategy. The description of the PICO strategy is composed of four components, which are P- Patient or Problem, which can be a single patient or a group with a particular condition, I- Intervention of interest which may be therapeutic, preventive, diagnostic, prognostic, administrative or related to economic matters, C- Control or Comparison which is defined as a standard intervention, being the most used or having none, and O-Outcome/ outcome represents the expected results. Thus, the PICO strategy guides the construction of the question and helps in the bibliographic search, allowing the researcher to quickly and easily locate the best available scientific information.9

Articles published in full between the years 2014 and 2022 were selected. In the search strategy, the following terms were used according to the Health Sciences Descriptors (DeCS - Descritores em Ciências da Saúde): Childhood Cancer, Nursing, Early diagnosis. To perform the crossing between the terms, the Boolean logic AND and OR were used in order to obtain the greatest possible number of results.

Articles selected from the provided databases were established as inclusion criteria, using the descriptors considered for the study; articles were included that address the theme "Attributions of nurses in the early detection of childhood cancer"; in Portuguese, English and Spanish, available online in full. It was decided to exclude bibliographic review articles and articles that do not match the theme, year and language of publication. As this is an integrative review study, approval by the Research Ethics Committee (CEP - Comitê de Ética em Pesquisa) was waived in accordance with Resolutions 466/12 and 510/16 of the National Health Council.

Thus, the guiding question of the present study is: How indispensable is nursing training in relation to the diagnosis of childhood cancer?

RESULTS

A total of 1,488 articles were found in the Scielo, BVS and Lilacs databases, remaining after the analysis of inclusions and exclusions, a total of 10 articles published in Portuguese, English and Spanish (Table 1)

Table 1: Description of articles included, 2022.							
References	Title	Objective	Method	Results			
Qingdao LV,Yan yun Zhang,Yan yan Li, etal(2022) ¹⁰	Research on the construc- tion of a Nursing teaching management model based on a model based on small data and its application	Build a teaching management structure in Nursing, where a learning relationship is develo- ped focused on the student's behavioral anticipation, in order to obtain better results in their professional training in clinical practices	Convenience sampling method - control group - including 200 students on internship at a hospital from August 2014 to April 2015	Application of a model of holistic Nursing practice that optimizes the application of the reality of the Nursing workload in the teacher- -student-platform multichannel context.			
Hooke MC, Linder LA(2019) ¹¹	Symptoms in children recei- ving treatment for cancer. Part II: pain, sadness and clustering of symptoms	Evaluate pain and sadness with the aim of directing rese- arch in the area of Nursing, of- fering support to patients and their families in the context of coping with cancer	Systematic review, focusing on the assessment, inciden- ce, correlates, trajectory and biomarkers related to symptoms in children and adolescents with cancer.	Obtaining guiding parameters for research in the field of Nursing in the scope of support for patients and families in coping with chil- dhood cancer			
Withycombe JC, Haugen M, Zupan, et al (2019) ¹²	Symposium Consensus Recommendations State of Science of the Childhood Oncology Group Nursing Dis- cipline: Assessment of Symp- toms During AC Treatment	Recognize and address chil- dhood cancer-related distress	Literary review of the cor- relation between common symptoms and treatment of children with cancer aged 6-12 years	Recommendation on the identifi- cation of essential symptoms for diagnostic evaluation, consi- deration of patient self-report, consistent communication and documentation of the symptom assessment process			

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Linder	Staff perceptions of symp-	Characterize the description of	Data collection through a	The study demonstrated how
LA,Warzynski. (2018) ¹³	toms, approach to assess- ment among children with cancer	symptoms and carried out by the health team in the care of school-aged children affected by cancer	demographic questionnai- re, applied to 22 pediatric patients and their caregi- vers through 4 sessions with focus groups	the health team responds to the primary assessment of the symptoms of patients affected by childhood cancer.
CraneS,M- Croop J,Lee J,et al (2021) ¹⁴	Parents' perceptions of pediatric oncology phase I clinical trials	Understanding the experience of children and their families during the application of a clinical trial by approaching specific aspects during phase 1 of a study in the treatment of childhood cancer	Phenomenological study, version of the Colaizzi method applied to parents during a clinical trial of children with cancer	Identification of points to be rein- forced to improve the experiences between patients and their families, regarding the coordination of care and obtaining information that alleviates the difficulties during the application of the study.
Costa V, Lou- rençatto G, Medeiros, An- derson, Souza A.(2014) ¹⁵	Early diagnosis of cancer in children and adolescents: the path taken by families	The study aims to describe the path taken by children and adolescents together with their families since the beginning of the signs and symptoms of cancer.	This is a semi-structured interview with a resour- ce for the collection of empirical material with 10 relatives of children and adolescents with cancer undergoing chemotherapy. A descriptive-exploratory study with a qualitative approach.	To contribute to nursing care, around two to five professionals were involved in each case. With this scenario, it shows that health professionals need to identify the signs of childhood and youth cancer, to allow an early diagnosis, with that a therapeutic success.
Sales C,San- tos G,Santos J,Marcon S.(2017) ¹⁶	The impact of childhood cancer diagnosis on the family envi- ronment and the care received.	Learning the impact that occur- red on the family breast after the diagnosis of cancer.	This is a qualitative study based on Heidegger's exis- tential phenomenology. Conducted with family members who were expe- riencing the care of a child with cancer.	The appearance of cancer in their homes sends parents to a situation of abandonment before the world. Nursing should be analyzed as a mode of deprivation resulting from the mundane condition of human beings, and it is up to health professionals to understand these meanings, without presuppositions and prejudices.
Green E,Yuen D,Chasen M,Amernic H,Shabestari O,Brundage M,et al. (2017) ¹⁷	Attitudes of oncology nurses toward the Edmonton symp- tom assessment system: results from a large Cancer Care Ontario study.	To examine the attitudes of oncology nurses and or the Edmonton Symptom Assess- ment System (ESAS) report and determine whether length of work experience and presence of certification in oncology are associated with their reported attitudes.	Exploratory, mixed-me- thods study employing a questionnaire where on- cology nurses participated in a larger, province-wide study that surveyed 960 interdisciplinary providers in oncology care settings.	Oncology nurses are essential to providing high-quality, person- -centered care.
Admi H, Eilon- Moshe Y, Ben-Arye E. (2017) ¹⁸	Complementary Medicine and the Role of the Oncology Nurse in an Acute Care Hospital: The Difference Between Attitudes and Practice.	To describe knowledge of hospital nurses in relation to complementary medicine (CM); compare the knowledge and attitudes of nurse managers to team nurses with experience in diverse oncology; and to assess attitudes towards the integra- tion of KM in the role of hospital oncology nurses, attitudes and practices.	Descriptive, cross-sectional study using a question- naire where a convenience sample of 434 hospital nurses with varied oncology experience was evaluated.	Nurses lack knowledge and we are unaware of risks associated with CM.

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senM,Bhar- palliative gavaR,Dal- ton Symp zellC, System (E	care and the Edmon- otom Assessment ESAS) at an Ontario nter in Canada.	Cancer Care Ontario promo- tes the Edmonton Symptom Assessment System (ESAS) for standardized systema- tic screening and symptom assessment at cancer centers in Ontario, Canada.	A four-part questionnaire was developed, based on items from similar studies that assessed oncologists' attitudes toward palliative care and the Edmonton Symptom Assessment System (ESAS) at an Ontario cancer center in Canada.	MOs and GPOs seem more posi- tive than ROs regarding regular ESAS use. There is disagreement between what is perceived as a useful and beneficial instrument versus the actual use of the ins- trument in daily practice. The rea- sons for this gap need to be better understood in future studies.
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Source: elaborated by the authors, 2022.

DISCUSSION

One of the studies points to evidence that student development in the area of clinical practice contributes to the integral formation of knowledge and development of skills of the nursing professional. The adoption of a nursing language standardization system contributes to the exploration and dissemination of resources and information mining that result in a complete analysis of data that enable greater effectiveness and use of patient care in childhood and different age groups.¹⁰

The studies advocate that questions related to the assessment of symptoms and their nature should be collected directly from the children, since the studies show that from the age of 4 years, the patient has autonomy for self-report. However, limitations in the support of a systematic approach can be observed in the studies, assessments based on observing the child without verbal questioning, difficulties in communicating with the child and lack of effort in assessing symptoms and facilitating resources. ^{11,12,13}

In the family context, a study points to the essential work of the Nursing professional who works with the patient and their family members as a facilitator and promoter of pathways and processes, promoting a broad reach in all stages of treatment from diagnosis, acceptance of the disease, dissemination of information, emotional support and improved experience and integration of services between professionals-patientfamily members. ¹⁴

The review of the selected articles

allowed analyzing the attitudes and practices of hospital nurses when it comes to complementary medicine applied to pediatric oncology patients, it is believed that complementary medicine (use of medicinal herbs, vitamin supplements, special diets, Chinese medicine, homeopathy, therapeutic relaxation techniques) can improve the quality of life of patients with cancer, it is observed that 51% of the nurses expressed an interest in receiving training, the oncology nurses were ambivalent about the feasibility of applying an integrative approach, while the nurse managers expressed significantly more positive attitudes towards the integration of complementary medicine (CM) within the scope of nursing practices.¹⁸

Although improving nurses' knowledge should be mandatory, it is still insufficient, therefore, a change in approach is needed to integrate CM into conventional health care, from the responsibility of professionals to the responsibility of health policy makers. ¹⁸

The included studies also show the application of the Edmonton Symptom Assessment System (ESAS) form, an instrument for assessing and monitoring nine physical and psychological symptoms in oncology patients undergoing palliative care.¹⁷

One study demonstrates that half of the participants agreed that the ESAS improves symptom screening, the majority would encourage their patients to complete the ESAS, and the majority felt that symptom management is within their scope of practice and clinical responsibilities. Qualitative comments provided additional information clarifying the quantitative responses. Statistical analysis revealed that oncology nurses with 10 years or less of work experience were more likely to agree that the use of standardized and valid instruments to screen and reassess symptoms should be considered best practice, ESAS improves symptom screening, and ESAS allows them to better manage symptom symptoms. patients. ¹⁷

Implementing a population-based symptom screening approach is a major undertaking, the study found that oncology nurses recognize the value of standardized screening, as demonstrated by their attitudes toward the ESAS. ¹⁷

The lack of knowledge of the situation experienced by family members increases fear and anguish, however, if there is a better understanding of the disease and the scenario, family members may experience greater involvement in care, treatment monitoring, anxiety reduction and cooperation with the team. ¹⁶

The professionals' care should not only include the child, but also their family members. The assistance provided to family members must be manifested in solicitude. ¹⁶

The treatment period can be long, invasive and aggressive. As a result, they require a great deal of emotional involvement on the part of the child and their family members. It is when the diagnosis is confirmed that the family and the child learn to deal with the cancer scenario.¹⁵

At the beginning of the disease, the signs and symptoms are similar to other common childhood diseases, making diagnosis difficult. As a result, families resort to different services and resources to obtain a diagnosis. ¹⁵

Establishing a wrong diagnosis referring to the child's and/or adolescent's real illness can bring great harm to the health of the child. There are cases where the wrong treatment can decrease or even mask the symptoms and signs. ¹⁵

With advances in the development of treatment, it is estimated that around 70% of cases of cancer diagnosed early and treated in specialized centers, the child can be cured. With the end of the treatment, the patients dry up, recompose the family dynamics and resume their social life. ¹⁵

The lack of preparation of nursing professionals is the greatest difficulty

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in diagnosing childhood cancer. There are few courses that provide information on the subject. In this way, if the nursing professional knows more about childhood cancer, he can contribute to a better quality of life for children undergoing treatment and, thus, achieve a greater chance of cure. ⁴

CONCLUSION

The family, the doctor, the biological behavior of the disease, socioeconomic reasons (public or private health system, distance from medical centers) may be responsible for the delay in the early detection of childhood cancer. This review study points out relevant evidence regarding the role of the nurse together with the challenge of facing the assessment of symptoms that determine the diagnosis and other procedures related to the treatment of children with cancer. It reaffirms the need to reformulate the system of preparation and education of professionals to work in this area. The professional's contribution is essential during the patient's treatment process, as well as that of all family members and other people around the home who experience the childhood cancer routine, as they act as facilitators in interventions in the areas of patient care, the interaction of the health team with patients and their responsible persons, as well as decisive agents in guiding decision-making.

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