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RESEARCH ARTICLE (ORIGINAL)

Educational nursing intervention to promote health behaviors in cancer survivors

Intervenção educacional de enfermagem dirigida à promoção dos comportamentos de saúde nos sobreviventes de cancro

Intervención educativa de enfermería dirigida a promover comportamientos saludables en supervivientes de cáncer

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Abstract
Background: Cancer calls for a joint professional approach that goes beyond diagnosis and treatment. Health-promoting behaviors after cancer are a challenge for nurses and highly relevant for cancer survivors.
Objective: To explore the key aspects to be integrated into an educational nursing intervention to promote health behaviors in cancer survivors.
Methodology: A qualitative exploratory study was conducted with nine experts, using the focus group as the data collection method.
Results: The results suggest the development of an intervention based on *negotiation* and the *use of contracts,* covering several areas, encouraging the adoption of healthy behaviors, and raising awareness about risky behaviors. An early application is recommended, preferably at the hospital.
Conclusion: The nursing intervention should be based on a shared decision-making process, take into account the survivor's preferences and motivation and family members as catalysts for change, foster private emotional expression, and, above all, anticipate the survivor's needs.

Keywords: nursing; nursing, practical; oncology nursing; healthy lifestyle

Resumo
Enquadramento: O cancro reclama uma abordagem profissional concertada que se estenda para além do diagnóstico e do tratamento. Os comportamentos de promoção de saúde após a doença são um desafio para os enfermeiros e altamente relevantes para os sobreviventes.
Objetivos: Explorar os aspetos centrais a integrar numa intervenção educacional de enfermagem para promover os comportamentos de saúde nos sobreviventes de cancro.
Metodologia: Realizou-se um estudo exploratório, qualitativo, com um grupo de 9 peritos. Utilizou-se o grupo focal como estratégia de colheita de dados.
Resultados: Os resultados propõem a construção de uma intervenção através da *negociação* e *contratualização,* que contemple várias áreas, que promova o envolvimento em comportamentos saudáveis e que sensibilize sobre os comportamentos de risco. Sugere-se um início precoce, preferencialmente no hospital.
Conclusão: A intervenção de enfermagem deve recair num processo de tomada de decisão partilhada, considerar as preferências dos sobreviventes, a motivação e o membro familiar como catalisadores da mudança, possibilitar a expressão privada de emoções e, sobretudo, antecipar as necessidades dos sobreviventes.

Palavras-chave: enfermagem; enfermagem prática; enfermagem oncológica; estilo de vida saudável

Resumen
Marco contextual: El cáncer requiere un enfoque profesional concertado que vaya más allá del diagnóstico y el tratamiento. Los comportamientos de promoción de la salud después de la enfermedad son un desafío para los enfermeros y muy relevantes para los supervivientes.
Objetivos: Explorar los aspectos centrales que se deben integrar en una intervención educativa de enfermería para promover comportamientos saludables en los supervivientes de cáncer.
Metodología: Se realizó un estudio exploratorio y cualitativo con un grupo de 9 expertos. Se utilizó el grupo focal como estrategia de recogida de datos.
Resultados: Los resultados proponen la construcción de una intervención a través de la negociación y la contractualización, que abarque varios ámbitos, promueva la participación en comportamientos saludables y sensibilice sobre los comportamientos de riesgo. Se sugiere comenzar temprano, preferiblemente en el hospital.
Conclusión: La intervención de enfermería debe centrarse en un proceso de toma de decisiones compartido, considerar las preferencias de los supervivientes, la motivación y al miembro de la familia como catalizadores del cambio, permitir la expresión privada de las emociones y, sobre todo, anticiparse a las necesidades de los supervivientes.

Palabras clave: enfermería; enfermería, práctica; enfermería oncológica; estilo de vida saludable

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Introduction

Epidemiological transitions have led to a progressive increase in new cancer cases. The 5-year and 10-year cancer survival rates have increased due to population aging and, most importantly, the advances in early cancer detection and more effective and targeted treatments. In the United States of America alone, the estimated prevalence of cancer survivors of 16.9 million individuals at the beginning of 2019 is expected to increase to 22.1 million individuals by 2030 (American Cancer Society [ACS], 2019). This issue is even more serious because cancer treatments are associated with high toxicity levels, whose symptoms may develop years after diagnosis and, consequently, jeopardize survivors' health. Research has shown that people who had cancer have worse health outcomes and an increased risk of recurrence and developing new cancers than those without a history of cancer and similar characteristics (ACS, 2019). Cancer survivors also have a higher risk of developing dyslipidemia, obesity, diabetes, premature menopause, lower bone density, hypertension, and hypothyroidism (Edgington & Morgan, 2011). Moreover, studies show that people who have had cancer continue to display health-risk behaviors such as low levels of physical activity, tobacco consumption, overweight, and poor eating habits (Meraviglia et al., 2015). These circumstances call for a joint professional approach that goes beyond diagnosis and treatment and focuses on salutogenic aspects such as health education and restoration. Nevertheless, evidence shows that educational nursing interventions can increase cancer survivors' knowledge, provide a better understanding of their perceptions, change their attitude towards the disease, increase self-efficacy, and optimize health beliefs (Ebu et al., 2019). Despite the studies on cancer survivors' knowledge about the disease and their health-promoting behaviors in Portugal, the lack of a known educational intervention program to promote cancer survivors' health behaviors makes this study highly significant. As part of a broader research project to develop an educational nursing intervention to increase health-promoting behaviors in cancer survivors, this study explores the key aspects to be integrated into an educational intervention for health behavior promotion in cancer survivors, using a group of experts.

Background

Chronic diseases, such as cancer, cause several changes in survivors in a highly complex health-illness transition process (Meleis, 2010). As a result of the significant impact of these changes, the term *survivor*, which refers to a situation of exception and escape, started to emerge in the literature, although not extensively. More recently, the most consensual concept is that of Feuerstein (2007), who states that a cancer survivor is someone who has completed the active phase of treatments, including those who require prolonged therapy after the treatments, such as hormone therapy. During this phase, health care becomes more intermittent with follow-up visits for surveillance and monitoring for recurrence and neglects the management of long-term effects and health promotion (Hewitt et al., 2006; Sisler et al., 2016). Although survivors are *disease-free*, they still have needs as they go through a wide range of emotions, particularly due to the lack of information about possible side effects of treatment, the lack of help, and the difficulties in coping with uncertainty (Geller et al., 2014). Survivors require adequate support to maintain an active role in the decisions regarding disease management and quality of life after cancer. For this reason, health-promoting behaviors after cancer are a challenge for health professionals. Health promotion is the science of helping individuals, families, and communities change their lifestyles and behaviors to achieve a state of optimal health through a combination of educational and ecological supports for actions and conditions of living conducive to health (Pender et al., 2015). Health-promoting behaviors are actions or behaviors that contribute to improving health, enhancing functional ability, and improving the quality of life, rather than just preventing diseases (Pender et al., 2015). Nurses play a key role in the overall context of health promotion. Nurses are of utmost importance for patients; they are highly trained, highly represented in health services, and very close to patients due to the time spent with them and their families. However, there is significant evidence that cancer survivors lack: a) easy access to professional support to anticipate their needs and focus on health promotion; b) a survivor-centered approach that responds to patients' needs; c) effective communication and information sharing between survivors and professionals; and d) encouragement to adopt healthy lifestyles that improve their quality of life and well-being (Hewitt et al., 2006). Therefore, the planning of an educational nursing intervention for cancer survivors is essential.

Research question

What are the key aspects to consider in developing an educational nursing intervention to promote health behaviors in cancer survivors?

Methodology

An exploratory study with a qualitative approach was conducted using a focus group for data collection and analysis, according to Krueger and Casey's (2014) methodological recommendations. The focus group aimed to identify the experts' views on the topic of the research question. Fourteen participants were selected for the experts' group based on the inclusion criteria (nonprobability purposive sampling). Participants were required to hold the title of nurse specialist and meet at least two of the following criteria: a) holding a master's or doctoral degree; b) being the head nurse of a ward for cancer patients for at least five years; c) working with cancer patients for at least 10 years; d) working as a teacher in the area of health promotion for at least five years; e) working as a teacher in the area of

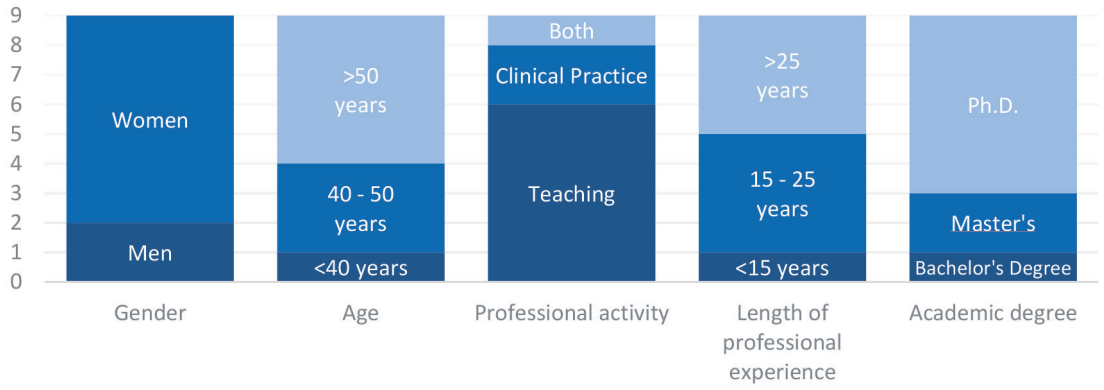
disease management for at least five years; and/or f) having developed at least three research projects (with scientific publication) in the area of health promotion and/or oncology disease management. The Ethics Committee (EC) CHUP/ICBAS issued an opinion about this study, under reference 2020/CE/P009(P321/CETI/ICBAS). Confidentiality was ensured, and all participants were informed that they could withdraw from the research at any time. All participants consented to their participation in the study and signed the informed consent form voluntarily. Data were collected at the *Escola Superior de Enfermagem do Porto* (Nursing School of Porto) in a single 180-minute group session. Concerning its methodology, the study was developed in five phases: 1) Planning; 2) Preparation; 3) Moderating; 4) Data analysis; and 5) Dissemination of results (Krueger & Casey, 2014). In Phase 1 (Planning), the experts' inclusion criteria were set, and a session *plan/script* was designed to help the researcher conduct the session. The session's script consisted of nine questions, divided into three areas: I) Content of the Educational Intervention; II) Inclusion and exclusion criteria of the Educational Intervention; and III) Operationalization of the Educational Intervention. The areas were selected taking into account the objectives set out for the session: a) To identify the contents of the nursing educational intervention to promote health behaviors (questions 1 to 4); b) To establish the criteria for including cancer survivors in the nursing educational intervention to promote health behaviors (question 5); c) To determine how to operationalize the nursing educational intervention to promote health behaviors (question 6 to 9). The questions of the focus group were as follows: (1) "What health promotion areas should be considered when developing a nursing educational intervention for cancer survivors?"; (2) "What nursing health promotion interventions should be considered when developing a nursing educational intervention for cancer survivors?"; (3) "What strategies can be used to develop a nursing educational intervention for cancer survivors?"; (4) "What objectives should be established for the nursing educational intervention for cancer survivors?"; (5) "What characteristics should be considered when including cancer survivors in the intervention plan?"; 6) "Who should implement the intervention?"; (7) "What is the most appropriate moment for implementing the nursing educational intervention?"; (8) "What is the most appropriate approach for implementing the nursing educational intervention?"; (9) "How will the nurses be prepared/trained to implement the intervention?". The questions were pretested by an individual external to the research team but with the same characteristics as the experts to understand their applicability and the need for reformulation. Phase 2 (Preparation) consisted of recruiting the experts, an informal meeting with the experts, communicating the objectives, and logistical organization. The participants were contacted at three moments before the focus group meeting. Moment I / Invitation occurred four weeks before the focus group meeting. The principal investigator sent an email inviting the experts to participate. Moment II / Confirmation occurred two weeks before the focus group, and the experts were asked to confirm their participation. Moment III / Validation occurred the day before the focus group. Participants were contacted by phone to validate their participation in the meeting. After accepting the invitation, the participants were informed of the key aspects of the research already conducted and received the topics under discussion for preliminary reflection. Of the 14 invitations, nine participants accepted to participate and were present in the focus group. Five experts declined the invitation due to professional reasons. The principal investigator welcomed the participants, explained the study objectives, and encouraged the discussion of ideas before the session. In addition to the principal investigator who led the focus group, two research team members were present to monitor, support, and moderate the focus group. The participants knew the research team but were not familiar with the research. Phase 3 (Moderating) occurred during the session. The session was led/moderated by the principal investigator with the instrumental support of two research team members, who recorded the session and observed the group dynamics. Phase 4 (Data analysis) consisted of the decoding, interpretation, and analysis process. The focus group session was audio recorded. Thus, the first step was the full transcription of the session. The full transcript was complemented by field notes taken by the team members during the session. After transcription and text revision, data were analyzed and categorized based on the main objective of this study. Data analysis was carried out in three steps: encoding/indexing, storage/retrieval, and interpretation. In the first step, its content was divided into previously established categories based on the script questions (aprioristic classification) to reflect on the script's topics and hypothesize about new ones (encoding/indexing). In step 2, text extracts were compiled under the same categories for comparison (storage/retrieval). No software was used during this step, and the process was performed manually. Finally, step 3 consisted of a systematic data analysis and assessment (interpretation). Phase 5 (Dissemination of results) consisted of writing a report and presenting the preliminary results to the experts. Transcript excerpts will be used in the presentation of the results as examples. Experts were identified with codes (E1 to E9) to ensure data protection and confidentiality.

Results

Figure 1 shows the demographic characteristics of the focus group participants. The majority of the nine participants were women (7; 78%), with a doctoral degree (6; 67%), working as teachers (6; 67%). Age and length of professional experience emerge based on defined classes due to data heterogeneity. Thus, the experts' mean age (49.7 years) and mean length of professional experience (26.6 years) should be noted.

Figure 1

Experts' demographic characteristics.



The first four questions [1 to 4] of the focus group addressed the intervention's content. Concerning health promotion, the participants agreed that nutrition, physical exercise, self-monitoring of physical changes, weight control, and weight status were unequivocally health promotion areas [E1-E4]. However, an expert reported that the nurse "promotes health by promoting healthy behaviors, but also by avoiding risky behaviors, such as addictive substance use, like tobacco and alcohol" (E2). The experts agreed that nursing interventions need to focus on teaching/educating about health promotion areas (already described) and self-monitoring, but also on educating about the "health and social resources available in the community, such as support groups and associations... and when and how to use these resources" (E4). However, during the discussion, it seemed relevant that information alone was not enough to change behaviors, reinforcing the importance of nursing interventions focused on the cancer survivor's awareness and engagement in new health promotion behaviors "in a carefully controlled way, understanding the fear of recurrence and relapse" (E4) and "the meanings of life and existence, especially those contributing to perceived well-being" (E2) and affecting the adherence to and maintenance of these behaviors. One of the strategies used was that "although there may be a standard educational plan, interventions should be tailored and adjusted to each survivor" (E8), highlighting the difference between survivors who "experience different pathological processes, different therapeutic options, and have different recurrence risks" (E4). An expert also highlighted that interventions should keep up with the latest technological advances, such as the "selection of materials in elimination ostomies and the adequacy of clothing" (E5) and the use of telephone calls during the intervention to monitor the process and keep people engaged and motivated. One of the participants believes that the strategy should be less prescriptive and engage the survivor: "health professionals should let people get involved, that is, let people take responsibility for their decisions based on the paths and options they are given" (E6). This strategy involves "letting the person choose the health promotion areas they want to improve/engage in" (E6). In this selection of areas to be improved, it is important to consider each person's preferences for health behaviors. One of the most discussed strategies was "negotiation and the use of contracts" (E4), that is, "do not force the patient to walk 30 minutes a day, but rather establish with the patient, according to their willingness and capacity, how many minutes of those 30 minutes they can and are willing to walk" (E4). As a result, the *health contract* between the patient and the health professional came up in the discussion. The group realized that the use of this strategy could bring many benefits, namely commitment, proximity, motivation, and co-responsibility (E5 and E7) and that the survivor would feel like "a partner of the workgroup, the main stakeholder in the process" (E5). The experts talked about, even if subtly, the need to include a family member/caregiver in the process and facilitate the change of behavior and assumed that it is up to the survivors to decide whether or not they want this support (E4 and E8). The opinions expressed regarding the objectives of the nursing intervention for behavior change and adherence to new health behaviors focused on: I) *raising* the individual's *awareness* of the need for change; II) *engaging* the individual in the process of change; III) *motivating* the individual to change; IV) *involving* the individual in the decisions about change. Therefore, the importance of "raising awareness about the new condition... and what can happen" was highlighted (E6). One of the experts pointed out that the *key to success* in nursing interventions is engaging the individual:

> There will be no success without engagement, and to engage them, you have to call them, show them different paths, and make them [the person] feel that they have themselves chosen the path... if they choose path A over path B, even if path A is more complex, they will be more engaged because it was their choice. (E6)

Although the group agreed on the importance of motivation in behavioral change, one of the experts pointed out that "in general, people have little responsibility for their health and health behaviors" (E2) and motivation, "the

energy that drives us to act, a personal, intrinsic energy,... depends on the perception of the reasons [for change]" (E2). In this scenario, given that change is always difficult, nurses' interventions are limited to raising people's awareness about change. This process of awareness will be successful if support strategies are used to help the person to find inner reasons for change (e.g., "I value my health very much, therefore, I can change" [E2]), rather than external reasons (e.g., "I don't eat salt because my wife forces me to or because my wife is the one who cooks" [E2]). The group highlighted that motivation is not a simple *yes or no* process; it is a continuous and gradually increasing process of which the nurse is an active member. The fifth question aimed to assess the experts' opinions about the inclusion criteria. The researchers found it relevant not to consider any specific cancer diagnosis or limit the study to any age group or gender: "it will be even more enriching if there are patients with different conditions" (E2). The researchers found that exclusion criteria should apply only to people with cognitive impairment preventing them from understanding and assimilating complex recommendations and physical limitations hindering the adoption of physical activity promotion behaviors. The last four questions [6 to 9] of the focus group aimed to identify the experts' opinions about the operationalization of the intervention. The need for engagement of all those involved and for standardization emerged in the discussion: "the professionals should standardize what they transmit to the patients" (E7). Concerning the nurses who will be in the best position to implement the intervention, the experts agreed that nurses working at the day hospital are closer and have more contact with survivors during the active phase of cancer. Concerning the most appropriate moment for implementing the intervention, the group agreed that it should "start at the hospital, before treatments end" (E5). This idea gathered some consensus, namely regarding care planning "to anticipate the transition process, to prevent patients [survivors] from losing their network" (E3). They highlighted that first contacts should only start when

> it is certain that patients are undergoing their last treatments and there is no recurrence... in this phase, the patient will be more motivated... The contacts and the intervention should be intensified after the treatments. (E7)

Regarding the educational intervention approach, although this intervention is to be implemented by nurses as an autonomous nursing intervention, "interprofessional collaboration is relevant... with doctors and nurses meeting and assessing individual pathways" (E5). The choice of approach (group or individual intervention) also generated discussion because "it depends on people's preferences" (E1). One expert pointed out that "there are individual contacts to promote health during the treatment phase, but group sessions are where we get the best feedback" (E7) in the ward where they work [oncology]. Two experts pointed out that the group intervention in oncology "seems appropriate, but only if patients can request individual sessions or sessions with a family member" (E2), and addressed its advantages: the group "allows the normalization of their situation... and helps people learn from the experiences of others" (E3) and,

> as in group psychotherapy, it has many advantages, namely universality, we are not alone in our misery... it helps to understand how others coped with similar situations... people share information with their peers, making them feel useful to others. (E2)

The topic of nurses' preparation did not generate much discussion. It can be carried out through "a training meeting with the nursing team, where certain recommendations/guidelines can be provided, based on scientific evidence, and then implemented by the respective unit" (E8). It was reinforced that after the team is trained, there has to be a clear involvement: "despite time constraints... paths will have to be defined... guidelines have to be followed... and hierarchy has to work". (E5).

Discussion

Based on the experts' opinion, the results suggest that a nursing intervention to promote health behaviors in cancer survivors should include a wide range of health promotion areas for nurses to promote engagement in healthy behaviors while avoiding risky behaviors. Previous studies on the implementation of health promotion programs in people with cancer corroborate the experts' views and show positive results in using an approach with multiple health promotion areas (Eakin et al., 2015). When discussing health promotion areas, the experts, based on their experience with cancer patients, addressed the need for nursing interventions to prevent risky behaviors. Studies show a high prevalence of alcohol consumption, smoking, drug use, physical inactivity, and overweight among cancer survivors (Tollosa et al., 2019). Nevertheless, there is also evidence to suggest that cancer survivors are more likely to adopt healthy behaviors regarding tobacco use, alcohol consumption, and physical activity than people without a history of the disease (Frazelle & Friend, 2016; Park et al., 2015). Contrary to the results found by Tollosa et al. (2019), these results are based on the fact that experiencing cancer can positively impact individuals' motivation to adopt risk-minimizing health behaviors (Park et al., 2015). As pointed out by one of the experts during the discussion, Seifert et al. (2012) highlight motivation as a key mechanism for change and the development and maintenance of new behaviors. Therefore, motivation and information/knowledge are crucial allies in health promotion and can be seen as mandatory nursing intervention areas. In the course of the discussion, the experts often addressed aspects related to care negotiation and use of contracts, namely the development of an Individualized Education Plan (IEP) for the survivor and the possibility of including a health contract between the nurse and the survivor as a useful strategy to change behaviors. In a review on the effects of contracts between patient and health professionals on patient adherence to treatment, prevention, and health promotion activities, Bosch-Capblanch et al. (2007) demonstrated that these contracts are significantly used for health promotion, namely in the areas of addiction (alcohol, smoking, and opiates), weight control, healthy

eating, physical activity, and breast self-examination. With regard to sharing, negotiation, and use of contracts, the experts consider that an IEP emphasizes care customization, highlights an approach that meets survivors' expectations, interests, and skills, and is consistent with the ACS's (2019) recommendations for interventions in cancer survivors. These recommendations suggest that these interventions should be tailored and adjusted to each survivor's skills. In line with joint decision-making, the experts suggested nursing interventions that "raise awareness," "engage," "motivate," and "involve" the survivor in the transition process. The end of treatments and the beginning of the survivorship phase are characterized by efforts to promote health and constitute an inevitable transition. When moving to the survivorship phase, people are expected to internalize new knowledge capable of changing their behavior, that is, they become *aware* of their experience, get *involved* in the transition processes, and, consequently, change their own definition in the social context (Meleis, 2010). Thus, as the experts highlight, the objectives of the Transitions Theory (Meleis, 2010) can be extremely relevant, especially when it comes to helping nurses to choose the most useful interventions and intervention areas for survivors to achieve the intended health promotion and maintenance objectives. Concerning the timing of the nursing intervention, the experts propose that the preparation for survivorship should begin at the end of the active phase of the disease, colliding with the selected concept of survivor. However, this points to a process, and no limits should be established between the phases, namely the end of treatments and the beginning of survivorship. The experts highlight that the intervention and the contacts with survivors should be more emphasized in the survivorship phase. Hewitt et al. (2006) argue that a survivorship plan should begin when primary treatment ends, although the transition from treatment to survivorship is not always clear. Frazelle and Friend (2016) point out that the period after the active phase of the disease (early survivorship) is a *teachable moment* when survivors are more conducive to lifestyle changes; thus, it is during early survivorship that survivors can benefit more from the intervention. Another relevant finding in the literature is that there is a peak of motivation during this period when nurses should intervene: at the end of treatments, survivors are happy with the success of the treatment, motivated to learn more about their disease, share their experience with their peers, make the course of treatment as smooth as possible, and look for solutions to minimize the risk of cancer recurrence (Coward, 2006).In this phase, survivors are also likely to face several difficulties that may influence the nurses' intervention: survivors reported feeling abandoned, had no intention of engaging in lifestyle changes, experienced uncertainty about how to implement adaptive changes, and described a lack of support from health care providers (Corbett et al., 2018). For the ACS (2019), perceived loneliness/abandonment after the end of treatments results from the decrease in the number of contacts with the health team, representing the ideal opportunity for the nurses' educational intervention given that survivors are more susceptible/vulnerable. The experts also discussed the inclusion of a family member during the intervention to facilitate behavioral change. As suggested by the experts, family involvement in the intervention is relevant because family relationships can be a decisive factor in adopting healthy behaviors during the cancer experience (Cooley et al., 2013). Some studies recognize that including family members in the intervention can be difficult due to the several barriers to communication along the disease trajectory and because many survivors have difficulty discussing their cancer-related concerns with family members and find it more useful to discuss them with people with less personal/emotional involvement (Coward, 2006). Nevertheless, many studies report benefits and recommend including a family member in the professional intervention (Frazelle & Friend, 2016) particularly because the family environment that is created can support or undermine the survivor's behavioral change (Cooley et al., 2013). The overall analysis of the results shows that the technique used in this study provided (qualitative) data and a better understanding of the subject (promotion of health behaviors in cancer survivors). However, this research has some limitations. The focus group allowed for a quick, immediate data collection than other more structured data collection methods. In the session, the experts interacted with the team of moderators, who were also researchers, which may suggest the presence of bias. Data were transcribed and analyzed in a very thorough and detailed manner, which was a very time-consuming task. Moreover, as expected, collected data cannot and should not be generalized because that is not the objective of this type of method, and the experts' opinions referred to the planning of the educational intervention that is being designed. Hence, these results are very useful to the intervention's objectives and context because of the experts' experience and contributions and their reflections.

Conclusion

Health promotion is an area of unquestionable relevance for people who have had cancer. Increasingly effective treatments increase the chances of survival, but they need to be analyzed in a context where the main objective is to live a healthier life. The difficulty in defining, operationalizing, and implementing a comprehensive educational nursing intervention to meet cancer survivors' care needs is closely related to the specificity of the cancer survivor and the chronic nature of cancer disease, which consists of multiple situations subject to different treatments. Nevertheless, the literature and the selected experts agree that the health promotion educational intervention in cancer survivors should involve the survivors in developing their health project. Internal resources such as motivation, as well as external resources such as the family can work as catalysts for change and play a key role in behavioral change. This analysis shows that the inclusion of a health contract between the nurse and the survivor can promote an environment of co-responsibility where survivors are an integral and active part of their health project after cancer and decisions are shared. Both the

literature and the experts emphasize the idea of the disease process of cancer and that the end of treatments provides an opportunity to begin the intervention, with contacts starting at the hospital during the final phase of treatment and extending throughout the survivorship period. This perspective reinforces the idea that health systems should anticipate patients' needs rather than only react to them. To this end, the experts also discussed the importance of involving and training the nursing team and standardizing knowledge and intervention techniques, as well as the responsibility of the management and decision-making bodies in implementing and supervising the intervention plan outlined by the researchers. This study also suggests the need to implement health promotion interventions in cancer survivors that reflect the achieved health gains.

Author contributions

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Writing – review & editing: Pinto, C. A., Santos, C. S.

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