HEALTH INTERVENTIONS WITH FAMILIES EXPERIENCING ILLNESS BY CANCER: AN INTEGRATIVE REVIEW

INTERVENÇÕES DE SAÚDE COM FAMÍLIAS QUE VIVENCIAM O ADOECIMENTO POR CÂNCER: REVISÃO INTEGRATIVA

LAS INTERVENCIÇÕES DE SALUD CON LAS FAMILIAS QUE SUFREN DE ENFERMEDAD POR CÁNCER: UNA REVISIÓN INTEGRADORA

Bruna Stamm¹, Bruna Vanessa Costa da Rosa², Danusa Begnini³, Nara Marilene Oliveira Girardon-Perlini⁴

ABSTRACT

Objective: evaluating the evidences available in scientific articles about health interventions with families who have a member with cancer. Method: an integrative review aimed at answering the question << Which health interventions are carried out with families who have a member with cancer? >>. A search in Pubmed and LILACS occurred in May 2013, with the descriptors: “family”, “neoplasms”, “health education”; and “intervention” as a keyword, and there were selected 17 articles. The analysis allowed the grouping of results: with whom, by whom, what intervention, implementation strategies, and interventions of comparison, time of intervention and main results. Results: predominated quantitative studies in English language. The interventions found were of experimental character randomized. Conclusion: studies of interventions with families are developed with the objective of health education and providing effective care and improved quality of life. Descriptors: Family; Neoplasia; Health Education.

RESUMO


RESUMEN

Objetivo: evaluar las evidencias disponibles en artículos científicos sobre las intervenciones de salud con las familias que tienen un miembro con cáncer. Método: revisión integradora destinada a responder a la pregunta << ¿Qué intervenciones de salud se llevaron a cabo con las familias que tienen un miembro con cáncer? >>. Una búsqueda en LILACS y Pubmed se produjo en mayo de 2013, con los descriptores: “la familia”, “neoplasias”, “educación para la salud”; y la “intervención” como una palabra clave, y seleccionados 17 artículos. El análisis permitió la agrupación de resultados en: con quién, por quién, lo que la intervención, estrategias de implementación, las intervenciones comparadas, el tiempo de intervención y resultados principales. Resultados: predominaron los estudios cuantitativos en inglés. Las intervenciones encontradas fueron de carácter experimental aleatorizadas. Conclusión: los estudios de intervenciones con las familias se desarrollan con el objetivo de educación para la salud y proporcionar una atención eficaz y mejora de la calidad de vida. Descriptores: La familia; Neoplasia; Educación para la Salud.

¹Nurse, Master’s student, Postgraduate Program in Nursing, Federal University of Santa Maria/PPGEnf/UFSM. Santa Maria (RS), Brazil. Email: bruna-stamm@hotmail.com; ²Master’s student, Postgraduate Program in Nursing, Federal University of Santa Maria/PPGEnf/UFSM. Santa Maria (RS), Brazil. Email: bruninha_vcr@hotmail.com; ³Master’s student, Postgraduate Program in Nursing, Federal University of Santa Maria/PPGEnf/UFSM. Santa Maria (RS), Brazil. Email: danusabegnini@hotmail.com; ⁴Nurse, Professor of Nursing, Postgraduate Program in Nursing, Federal University of Santa Maria/PPGEnf/UFSM. Santa Maria (RS), Brazil. Email: nara.girardon@gmail.com
INTRODUCTION

The cancer is characterized as a chronic degenerative disease and ranks second among the leading causes of death by disease, leaving behind heart diseases. Chronic diseases are understood as illnesses characterized by being long term; it can be incurable and, in most cases, causing sequels and functional limitations to cancer patients, requiring individual and family adaptations.

Cancer is an obvious public health problem worldwide. The World Health Organization has estimated that by 2030, 27 million incident cases of cancer, 17 million cancer deaths and 75 million people living annually with cancer. The biggest impact of this expansion will focus on low- and middle-income countries. It is also important to note that cancer can cause damage to families inteiras. Therefore, it is considered important for health care assisting the individual in full, ie, taking into account its closest connection, which is the family to which it belongs. Family can be defined as a group of people that keeps convivial relations, growth and development at different stages of development. The family can also be characterized as a group of individuals linked by strong emotional bonds with a sense of ownership and the inclination to participate in the life of each other, reinforcing the idea that the family “is their members who say they are”.

The health sector has turned its attention to the family, acknowledging that the need and the opportunity for the development of the work of health professionals. Nurses is committed and the moral and ethical obligation to involving families in their health care, because the family also need to be careful. Facing the illness of one of its members because a certain impact on the family group and the strategies used in this process may form an important source for understanding the lived and, from that, effectively, including the family as a subject of care actions.

Nurses who invest in family interventions create a necessary and important bridge between research, theory and clinical practice. Research on nursing interventions in the family become more congruent allied with the intention of nurses in reducing the emotional, physical and spiritual suffering of patients and their families.

For years nursing directs its practice with families to guiding and searching for data, getting it to be restricted receptacle and source of information on which the shares offered to it are ineffective because they do not reach the family experience. Thus, health interventions in the family, from nurses, aimed at changing the “reality” that family members experience, helping them to develop new forms of family interaction.

Researches involving families and chronic diseases most are descriptive in nature, in which the researchers did not develop them, not the test, not propose interventions for which could possibly impact outcomes in individuals, families and communities. Considering that researchers do not direct their actions and research to interventions, shows an increase of new research that did not end up impacting actually.

From the aspects mentioned it realizes the importance of studies of interventions involving families, especially with regard to chronic diseases such as cancer. In this approach it detaches the role of the nurse as interventional agent in health care. Given this, the research question of this study is: “What health interventions are conducted with families who have a member with cancer?” In order to answer this question, we aim to:

- Evaluating evidences available in scientific articles on health interventions with families who have a member with cancer.

METHOD

It is an integrative review, which is a method that allows the incorporation of evidence into clinical practice, which aims to gather and synthesize research findings on a defined theme or issue in a systematic and orderly manner, thereby contributing to the deepening of knowledge of the subject investigated.

Interest for the study emerged from the work entitled “State of Art”, which is a partial requirement to assessing the Discipline Mastership “Evidence-Based Practice in Nursing and its applicability” of the Graduate Program in Nursing, Federal University of Santa Maria - UFSM. For the construction of an integrative review were followed six steps: identification of the topic and the selection hypothesis or research question for the elaboration of the integrative review; establishment of criteria for inclusion and exclusion of studies/samples or literature search; defining the information to be extracted from selected/categorization of studies; assessment of studies included in the integrative review; interpretation of results; and presentation of the review / synthesis of knowledge.

Initially, we defined the research question: <<What health interventions are conducted with families who have a member with >>

Stamm B, Rosa BVC da, Begnini D et al.
cancer? >>. Inclusion criteria were: research articles on the topic of health interventions that have a family member with cancer, original articles in English, Portuguese or Spanish with complete summary is available online in full and free access. Articles in which the intervention was related to cancer prevention, review articles, monographs, theses and dissertations: exclusion criteria were defined.

The survey of the studies took place in May 2013 through the Virtual Health Library (VHL) in databases Latin American Literature data and Caribbean Health Sciences (LILACS) and the National Library of Medicine National Institutes of Health (PubMed). Advanced form as the search strategy in PubMed (‘neoplasms’ [MeSH Terms] AND ‘FAMILY’ [MeSH Terms] AND ‘HEALTH EDUCATION’ [MeSH Terms] AND ‘INTERVENTION’ [Title / Abstract] AND was completed (‘HUMANS’ [MeSH Terms] and (English [lang] OR SPANISH [lang] OR ENGLISH [lang]), and LILACS ‘FAMILY’ [subject descriptor] and ‘NEOPLASIA’[subject descriptor] and ‘INTERVENTION’[words].

For selection of publications it was read every title and abstract extensively to confirming that they contemplated the guiding research question and met the inclusion and exclusion criteria established. Figure 1 shows the distribution of the publications included and excluded from this study.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>PubMed</th>
<th>LILACS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total articles located</td>
<td>96</td>
<td>1</td>
</tr>
<tr>
<td>Articles without abstract or incomplete</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Literature review articles</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Outside the thematic articles</td>
<td>48</td>
<td>0</td>
</tr>
<tr>
<td>Articles unavailable in full</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>Selected articles in Total</td>
<td>17</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 1. Criteria for inclusion and exclusion of articles.

The evaluation of the selected articles was performed by fully reading them and completing an instrument of data collection, arranged in the shape of a frame, containing the following information: article code (A1, A2, A3 ... A17), reference, professional category of authors, provenance of study, objective (s), study design, target population and intervention used. The synthesis of the corpus items that composes the analysis of the study is shown in Figure 2.
<table>
<thead>
<tr>
<th>Code</th>
<th>Reference</th>
<th>Authors</th>
<th>Professional Category</th>
<th>Country</th>
<th>Objective</th>
<th>Study Type</th>
<th>Sample Population</th>
<th>Interventions Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>A3</td>
<td>Badger TA et al. Psychosocial interventions to improve quality of life in prostate cancer survivors and their intimate or family partners. Qual Life Res. 2011 Aug; 20(6):833-44.</td>
<td>Nurses</td>
<td>USA</td>
<td>Testing the effectiveness of psychosocial interventions carried out both through telephone for the maintenance and improvement of quality of life (QOL) among survivors of prostate cancer and intimate partners or family members.</td>
<td>Quantitative study on experimental design. Randomized clinical trial.</td>
<td>Survivors of prostate cancer and intimate partners or family members.</td>
<td>Psychoeducational character/psychosocial intervention.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Authors</td>
<td>Country</td>
<td>Study Design</td>
<td>Setting</td>
<td>Objectives</td>
<td>Keywords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------------------</td>
<td>---------</td>
<td>--------------</td>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A6</td>
<td>Harden J et al.</td>
<td>USA</td>
<td>Quantitative</td>
<td>Nurses</td>
<td>Investigate the effect of receiving information and genetic counseling about cancer, knowledge, risk perception, information sharing and satisfaction with the service.</td>
<td>Investigating the effectiveness of information sharing about cancer, genetics, and counseling.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Randomized</td>
<td>USA</td>
<td>Evaluate the feasibility of a randomized clinical trial of an intervention by phone that aims to develop coping skills, membership and scheduling, and assess the trend of change in the results in this context.</td>
<td>Evaluating the feasibility of a randomized clinical trial.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical</td>
<td>Indonesia</td>
<td>Compare the results of children’s treatments before and after the introduction of a parental education program.</td>
<td>Comparing the results of a parental education program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A7</td>
<td>Mutyaba T, Mirembe F, Sandin S, Weiderpass E</td>
<td>Uganda</td>
<td>Randomized</td>
<td>Doctors</td>
<td>Investigate the effect of receiving information and genetic counseling about cancer, knowledge, risk perception, information sharing and satisfaction with the service.</td>
<td>Investigating the effectiveness of information sharing about cancer, genetics, and counseling.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical</td>
<td>Doctors</td>
<td>Evaluate the feasibility of a randomized clinical trial of an intervention by phone that aims to develop coping skills, membership and scheduling, and assess the trend of change in the results in this context.</td>
<td>Evaluating the feasibility of a randomized clinical trial.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Clinical</td>
<td>Indonesia</td>
<td>Compare the results of children’s treatments before and after the introduction of a parental education program.</td>
<td>Comparing the results of a parental education program.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study ID</td>
<td>Title</td>
<td>Country</td>
<td>Description</td>
<td>Sample Size</td>
<td>Methodology</td>
<td>Study Design</td>
<td>Outcome Measures</td>
<td>Interventions that seek to implement, evaluate and validate intervention programmes with families.</td>
</tr>
<tr>
<td>----------</td>
<td>------------------------------------------------------------------------</td>
<td>---------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------------</td>
<td>------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
For assessment of levels of evidence of the studies found it was used as reference the hierarchical classification of seven levels proposed by Melnyk and Fineout-Overholy. Level 1 comprises a systematic review or meta-analysis of all randomized controlled trials or from clinical guidelines based on systematic reviews of randomized controlled trials; Level 2 consists of at least one well-designed randomized controlled trial; Level 3 includes well-designed clinical trials without randomization; Level 4 covers cohort studies and well-designed case-control; Level 5 includes systematic reviews of descriptive and qualitative studies; Level 6 comprises a single descriptive or qualitative study and the Level 7 is the view of officers and / or committees report especialistas. The evidence found in the publications were organized based on the “PICOT Question” (P = patient / population; I = intervention; C = comparison intervention; O = outcome; T = time frame), suggested by Melnyk and Morrison-Beed12 the which is a reference to review studies involving interventions aimed organize and describe data found. The “PICOT Question” is an acronym that allows formulating a clinical question, as well as guiding the search for evidences. Thus, the results were grouped as: to whom, by whom, what the intervention, implementation strategies, interventions comparison (control group), duration of intervention and main outcomes of health interventions in families who have a member with cancer.

In discussing the results, we observed the similarities and divergences from the viewpoint of different authors.

RESULTS

From the analysis of 17 articles that comprise the corpus of this study showed that all items were available in English. With respect to the merits of the studies, 59% were performed in the United States, 12% in Sweden, followed by Portugal, Uganda, Indonesia, Malaysia and Iceland with 5,8% each. As the year of publication, the articles found in the year 2009 corresponds to 23,7% in the years 2011, 2010 and 2005, respectively, were 17,7% of published articles, and the years 2012, 2007, 2003 and 1998 has 5,8% each.

In relation to studies of selected intervention 70,6% are quantitative randomized trial of type, 17,6% are qualitative or descriptive, and 11,8% are longitudinal clinical trials. As regards the quality of evidence, it was found that 12 studies classified as evidence level II; three studies evidence level VI; and two studies are level III. After reading the documents in their entirety it was possible describing the results, organizing them as a group, presented and discussed the following: to whom, by whom, what the intervention, implementation strategies, interventions comparison (control group), time of interventions and main findings of health intervention with families who have a member with cancer.

In relation to whom the interventions are conducted, it is evident that the study participants are patients and families in situations of illness for different cancer types (A2, A4, A10, A13, A16, A15), followed by studies with partners intimate and patients diagnosed with prostate cancer (A3, A8, A12,A14), parents of children with cancer(A5, A8, A5,A11) and family/intimate partners of women with breast cancer (A1) and gynecological (A7,A17).

As for who they are implemented by health interventions with families, the predominance of Nurses (A2, A3, A6, A8, A10, A12, A13, A14, A15, A17), observed, followed by the Multidisciplinary Team (A8, A11, A16), of Doctors (A7, A9), Psychologists (A4) and Social Workers (A1). The evidences regarding which health interventions are developed with families, found that among the identified modalities, most interventions have character education about cancer (A1, A5, A7, A9, A10, A13, A16, A17). Educational interventions are performed, usually through educational sessions that
provide access to information and clarification related to cancer treatment and disease progression, the relations of the everyday life of families facing cancer and social support networks. Another type of intervention is that carried out in order to implementing, evaluating and validating programs of intervention with families \(^{(A4, A11, A12, A14)}\). In psycho-educational interventions / psychosocial character \(^{(A2, A3, A4, A8, A15)}\) are addressed issues like counseling about cancer, support the development and emotional strategies, stress management, coping strategies, expectations and hopes, mobilizing domestic resources, family involvement, relationships and communication and interpersonal psychotherapy.

With regard to strategies for implementing interventions that occurred via phone \(^{(A3, A8, A10, A12)}\), it was found, whereby interventionist researchers provide what a phone line to contact and intervention development with study participants. Another strategy were group interventions to support and clarification \(^{(A4, A6, A11, A17)}\) which are characterized mainly by supporting unsolvable groups of families through psycho-educational / psychosocial interventions to clarifying about cancer and its peculiarities. In some of these interventions written materials to the participants of the family groups were available, and subsequently clarified and discussed. Targeted interventions using visual aids families were also strategies employed in the studies \(^{(A5, A9, A13, A16)}\). The information was made available via CD-ROM and DVD, containing informative videos related to cancer. Educational approaches to the use of reliable resources on the internet to obtain information relating to cancer were also developed.

Interventions through sessions which involved the provision of educational materials (brochures/ booklets and books) \(^{(A1, A2, A7)}\) contained mainly information on the pathology, diagnosis, treatment, disease progression, as well as, issues related to coping with cancer and death and dying. After delivery of the material there were carried meetings to answering questions that might arise from their reading, to ensure understanding by participating families.

Combined interventions using strategies such as providing visual aids and telephone monitoring \(^{(A14)}\) and interventions that were delivered audio visual resources along with written materials \(^{(A15)}\) were also identified in the studies.

For interventions of comparison there are shown studies that used the methodology of randomized type control group \(^{(A1, A3, A4, A7, A8, A9, A10, A11, A12, A14, A15, A17)}\). In most studies developed the control group did not undergo intervention \(^{(A4, A8, A12, A14, A15, A17)}\), serving as a parameter to compare the effectiveness of implemented intervention. In other studies, a control group was subjected to a partial intervention or different \(^{(A3)}\) relative to that proposed for the intervention group \(^{(A5, A7, A11)}\) Another strategy identified in the research intervention was the use of a historical control group \(^{(A9, A10)}\). In this case the results of the interventions were compared with data from samples obtained in previous studies that comprised a database.

With regard to the time of the intervention, it was identified that they were developed in a period of two weeks up to two years. Most studies conducted interventions lasting four months to a year \(^{(A1, A2, A6, A7, A9, A11, A12, A15, A17)}\) followed by interventions under three months \(^{(A3, A4, A8, A12, A15)}\) and with time more than one year\(^{(A10)}\). Studies showed that the intervention time was not described \(^{(A5, A16, A17)}\).

The main results of intervention researches indicate that all the strategies developed with families and patients with cancer were evaluated by participants as positive and effective results, considering the objectives proposed in the studies.

**DISCUSSION**

The analysis of the articles showed that most health interventions with families are performed in patients with various types of cancer and their families, not occurring predominantly a specific type for which interventions are more targeted. In an international integrative review, which included only randomized studies, showed that there was efficacy of interventions aimed at family and not just the individual with the disease diagnosed.\(^ {15}\)

Due to a chronic illness, the family faces situations that can be stressful and generate suffering, making it difficult to accept in the family context, starting instrumentation to overcome the difficulties that may arise, using strategies that allow you to not be intimidated and overwhelmed the disease situation.\(^ {16}\)

The results of an international study, which sought to describing a theoretical model of the links between family relationships, health management and outcomes of chronic disease, suggest that the intervention focused on family rather than being just one of its members reveals an approach that promotes the improvement of the treatment of chronic illness\(^ {17}\) perceive the relevance of
intervention studies in families to leverage these strategies, aiming at coping cancer.

In this sense, the family is the main source of support for cancer patients and therefore care how it comes caring is a way to broaden the focus of professional action to the context of care offered. In a study conducted with community intervention elderly subjects revealed that intervention defined as something “who cares for us”, noting that the importance sum stipulated by the participants to the relationship that health professionals are able to establish with the individual and their family, including their difficulties, providing support and help to overcome them. Thus, this fact becomes a facilitator of change in those receiving the intervention, mainly by nurses.

The scenario of interventions is an important area of insertion for nurses, may be a key player in the search for the true impact of families who experience the illness from cancer. This is confirmed by the results found in this study, in which the nurses were responsible for the majority of health interventions with families.

Regarding the type of intervention, it was shown that most studies have turned their research to be educational interventions on cancer. In that study it sought to characterizing the psychosocial interventions in a department of a large treatment center for cancer, showed that most interventions were of Education, Psychotherapy and Assessment, and the interventions occurred for purposes of education or provide information to patients and their families. Health education is the most common type among interventions with families, which aims to increase understanding ability to cope with the disease by its members, providing support to the necessary adaptations, reconfiguring expectations, reappropriation of papers, among others. Studies show that interventions that sought to provide information about the disease, treatment and disease progression were seen positively by patients and often resulted in less impact on the changes that cancer generates for daily family life.

Interventions developed with families can improve the health of its members and reduce the use of health services. Family interventions should be adaptable to meet the specific needs and characteristics of each family.

Regarding implementation strategies interventions via telephone, group interventions to support and awareness and interventions via audiovisual resources for families were the most frequent. Recent studies showed that interventions by phone have been used to providing education and counseling to patients and their families, emphasizing also that this method can improve the physical and psychosocial well-being of the subjects.

Study that provided individual telephone support for family caregivers of cancer patients in the serious state showed that participants felt supported and reassured when they knew there was an interested person to speak often about their situation. Intervention by means of audiovisual to cancer patients and their families, material is a means to improving knowledge and attitudes from the illness experience by cancer.

From the analysis of articles studies that had compared to the control group interventions implemented were found. Most studies had a control group that did not undergo intervention or suffered a partial intervention. Intervention research in experimental type allows to drawing conclusions about cause and effect relationship between an intervention and an outcome and can be considered the strongest type of intervention study to test cause and effect.

**CONCLUSION**

This study highlighted the importance of health education aimed at obtaining information about the disease, in order to leverage nursing care; Also, evidence from selected studies showed quantitative approach with interventions and randomized trial basis, indicating the need for inclusion of nursing in this context aiming and effective impact on reality and actions in health interventions.

Through interventions by nurses can foster families who experience the illness from cancer, positively influencing, creating change and providing subsidies so that they can face adversity. Adding to the fact that the results listed in the present study had positive aspects regarding interventions with families who have a member with cancer.

It emphasizes the need to conducting studies on nursing interventions with families to contribute to evidence-based practice, providing effective care and improved quality of life. Thus, the intervention becomes a key strategy for developing practices aimed at the welfare of the individual and its family.
REFERENCES


