



QUALITY OF LIFE IN CANCER SURVIVORS: AN INTEGRATIVE REVIEW

QUALIDADE DE VIDA EM SOBREVIVENTES DE CÂNCER: UMA REVISÃO INTEGRATIVA

CALIDAD DE VIDA DE SOBREVIVIENTES DE CÁNCER: UNA REVISIÓN INTEGRADORA

Bruna Knob Pinto¹, Julyane Felipette Lima², Rosani Manfrin Muniz³, Eda Schwartz⁴

This study aims at identifying factors related to the quality of life of cancer survivors. The databases PubMed, LILACS and SciELO were used, being quality of life, survival and neoplasms the main keywords entered. Sixty-eight articles were found and ten that approached aspects related to quality of life of cancer survivors were selected. The results analysis was performed in stages. Several factors were identified and grouped into physical (chewing, pain and others), psychological (disease conception), social, financial (high cost of treatment) and miscellaneous (age, treatment performance among others). It is believed that the analysis of the different areas that comprise the quality of life of patients can assist health professionals in the implementation of assistance practices that consider the multidimensionality of cancer survival.

Descriptors: Quality of Life; Survival Analysis; Neoplasms; Review.

Este estudo objetivou identificar os fatores relacionados à qualidade de vida dos sobreviventes de câncer. Utilizou-se as bases de dados PubMed, LILACS e a SciELO, e qualidade de vida, sobrevivência e neoplasias como descritores. Foram encontrados 68 artigos e selecionados dez que abordavam os fatores relacionados à qualidade de vida em sobreviventes de câncer. A análise dos resultados foi desenvolvida em etapas. Identificaram-se diversos fatores, que foram agrupados em físicos (mastigação, dor e outros), psicológicos (concepção da doença), sociais, econômicos (altos custos dos tratamentos) e outros (idade, realização dos tratamentos entre outros). Acredita-se que analisar os diversos âmbitos que compreendem a qualidade de vida dos indivíduos pode auxiliar os profissionais da saúde na instrumentalização de uma prática assistencial que contemple a multidimensionalidade do sobreviver de câncer.

Descritores: Qualidade de Vida; Análise de Sobrevida; Neoplasias; Revisão.

El objetivo fue identificar los factores relacionados con la calidad de vida de los sobrevivientes de cáncer. Se utilizaron las bases de datos PubMed, LILACS y SciELO, y calidad de vida, supervivencia y neoplasias como descriptores. Fueron encontrados 68 artículos y seleccionados diez que abordaban los factores relacionados con la calidad de vida de sobrevivientes de cáncer. El análisis de los resultados fue desarrollado en pasos. Fueron identificados varios factores que fueron agrupados en físicos (mastigación, dolor y otros), psicológicos (la concepción de la enfermedad), sociales, económicos (altos costos del tratamiento) y otros (edad, realización de los tratamientos, entre otros). Analizar las diferentes áreas que comprenden la calidad de vida de los individuos puede ayudar a profesionales de la salud en la instrumentalización de una práctica asistencial que abarque la multidimensionalidad de sobrevivir al cáncer.

Descriptorios: Calidad de Vida; Análisis de Supervivencia; Neoplasias; Revisión.

¹Nurse. Master of Science - Pelotas Federal University Post-Graduate Nursing Program - UFPel. Resident in Family Health UNIJUÍ/FUMSSAR. Member of the Center for Chronic Diseases and Interfaces - NUCCRIN. Santa Rosa, Rio Grande do Sul, Brazil. E-mail: brunaknob@hotmail.com

²Nurse. Master of Science - P Phd Post Graduate Nursing Program - Pelotas Federal University - UFPel. Pelotas, RS, Brazil. E-mail: julyane_felipette@hotmail.com

³Nurse. Doctor in Basic Nursing - Ribeirão Preto Nursing School - São Paulo University - USP. Teaching Assistant at the Pelotas Federal University - UFPel Faculty of Nursing. Leader Researcher at the Center for Chronic Diseases and Interfaces - NUCCRIN. Pelotas, Rio Grande do Sul, Brazil. E-mail: romaniz@terra.com.br

⁴Nurse. Post- Doctorate in Nursing - São Paulo University - USP. Teaching Associate at the Pelotas Federal University - UFPel Faculty of Nursing. Researcher at the Center for Chronic Diseases and Interfaces - NUCCRIN. Pelotas, Rio Grande do Sul, Brazil. E-mail: eschwartz@terra.com.br

INTRODUCTION

Chronic-degenerative diseases and their complications have prevailed when compared to contagious diseases, resulting in changes in the standards of health services uses and a considerable growth in expenses due to the need to incorporate technology in order to treat these diseases⁽¹⁾.

In this context, cancer⁽²⁾ is an important chronic disease that affects nearly 12.4 million people and causes 7.6 million deaths a year worldwide. According to the Cancer National Institute (INCA/MS) estimates for 2012 and 2013, there will be approximately 518,510 new cancer cases in Brazil⁽³⁾. These important changes in disease standards and the consequent alteration in mortality and disability rates are among other reasons, the consequence of the epidemiologic transition the world's population is going through⁽⁴⁾.

As cancer is a disease affected by multiple factors, it can unleash reactions both at the organic and emotional levels, provoking different feelings, unbalances and internal conflicts⁽⁵⁾. Therefore, by experiencing the disease, individuals often redefine their lives, reorganizing it in order to assign new values and meanings to previous experiences⁽⁶⁾. Consequently, there is a need for health professionals to support these patients and help them overcome this painful experience, offering them access to treatments that can minimize pain, resulting in a better quality of life for cancer survivors⁽⁵⁾.

Survival to cancer goes well beyond new treatment technologies, as each person has a particular way to carry on with life after the disease is diagnosed⁽⁷⁾. However, despite the progress made in cancer detection and treatment, survivors face problems unheard of in the past, mainly related to physical and psychosocial aspects such as the possibility of illness recurrence, staying healthy, practical and financial issues related to cancer that are necessary to adjust to, living standards after the disease is diagnosed, etc⁽⁸⁾.

The aforementioned problems may significantly affect survivors' quality of life. The term quality of life (QL) evaluates the physical and psychosocial impact that disabilities, dysfunctions or conditions may have in affected individuals, thus permitting to get more familiar with the patients and their adaptation to their condition⁽⁸⁾. Therefore, understanding the patients' QL should be included in assistance services, affecting decisions and therapeutic behavior of health teams, seeking to approach the multidimensional aspects of surviving cancer.

For all these reasons, this study seeks to identify research studies results on issues related to the quality of life of cancer survivors as published in scientific journals.

METHOD

Based on the proposed objective, we opted for an integrative review. This kind of research may have some knowledge gaps that may be solved by developing further studies, enabling us to summarize multiple published studies and draw general conclusions in the researched area⁽⁹⁻¹⁰⁾.

This review was developed according the following guidelines:⁽¹¹⁾ firstly, we set a research question that was relevant for the scientific community that could define the research purpose in a clear and specific way. The defining question for the research was: "which are the most relevant factors related to the quality of life of cancer survivors?"

Then we defined that databases that would be used for data collection. In this review, research was performed in the databases of the Latin-American and Caribbean Health Sciences Literature (LILACS), *U.S. National Library of Medicine National Institutes of Health* (PubMed) and the *Scientific Electronic Library Online* (SciELO).

The keywords "quality of life", "survival" and

"neoplasms", were entered in English and Portuguese, researching the DeCS (Health Sciences Descriptors Dictionary) and MeSH (*Medical Subjects Headings*), together with the AND Boolean operator.

Besides, research inclusion and exclusion criteria were established, considering that the pre-analysis stage should be based on these criteria. Inclusion criteria applied considered articles published in English, Portuguese or Spanish and their corresponding summaries. As a limitation criterion it was established that only studies with patients over 19 years of age would be considered. No temporal limits were set due to the scarcity of publications found with regards to the proposed subject.

Next, an analysis of found studies was developed, following a careful evaluation seeking to find explanations for the different results found. The definition of how this step is carried out depends on each reviewer, who may also use statistical analysis if the sample study allows for it. In this case, we opted for

systematizing results in order to build an analytical chart that includes database items, first author, journal, year of publication, country (acronym) and type of study, which allowed researchers to have a better perspective and organization of obtained data.

Based on the critical evaluation of studies, the next step consisted of discussing data taking into account literature and theoretical knowledge. In this context, a discussion of results enabled to identify conclusions, implications and existent study gaps that may encourage the development of further studies.

RESULTS

29 articles were found in the Pubmed database, 34 in the LILACS and 5 in SciELO one, totalizing 68 articles, out of which 56 were excluded for not meeting set criteria and two of them were excluded for being duplicates. Therefore, 10 articles were selected for analysis as introduced in Chart 1 below.

Chart 1 – Characteristics of selected articles on quality of life of cancer survivors (2012).

Database	First Author	Journal	Year	Country (acronym)	Type of Study
LILACS	Biazevic MGH	J Appl Oral Sci	2010	BRA	Quantitative
PubMed	Reid-Arndt SA	J Psychosoc Oncol.	2009	USA	Quantitative
PubMed	Russell KM	Cancer Nurs.	2008	USA	Review
LILACS	Conde DM	Rev Bras Ginecol Obstet	2006	BRA	Review
LILACS	Zaider G	Aquichán	2005	NOR	Qualitative
PubMed	Chirikos TN	Cancer Pract.	2002	USA	Quantitative
PubMed	Winer EP	Psycho-oncology	1999	USA	Qualitative
PubMed	Norum J	Qua Life Res.	1996	ARG	Quantitative
PubMed	Greenberg DB	Oncology	1994	USA	Qualitative
PubMed	Curbow B	Behav Med.	1993	USA	Quantitative

Analyzing studies as per their databases, we can observe that seven of them⁽¹²⁻¹⁸⁾ were selected from PubMed, three^(18,19-21) from LILACS and none from SciELO. As for the publication year, they varied from 1993 to 2010. With respect to the country of origin, six studies⁽¹²⁻¹⁷⁾ were developed in the United States, two⁽¹⁹⁻²⁰⁾ in Brazil, one⁽²¹⁾ in Norway and one⁽¹⁸⁾ in Argentina. As for the methodology applied, five studies^(12,14,16,18-19)

were quantitative, three of them^(15,17,21) qualitative and two^(13,20) literature reviews.

We believe it is important to highlight that all countries in which these studies were originated have government institutes⁽²²⁻²⁵⁾ aimed at cancer control and prevention, assisting oncology patients and training health professionals prepared to assist cancer patients. Besides, in the United States there is a *National Action*

Plan for Cancer Survivorship, developed through a partnership between the *Center for Disease Control and Prevention (CDC)* and the *Lance Armstrong Foundation (LAF)* that seeks to identify and prioritize cancer survivors' needs, sensitizing different publics on the problems of cancer and their impact on people's lives, seeking to improve public health strategies⁽²⁶⁾.

DISCUSSION

The analysis of results allowed to identify the main issues related to the Quality of life (QL) of cancer survivors, being these divided into physical, psychological, financial and miscellaneous aspects. Among the physical factors found we can mention chewing⁽¹⁹⁾, swallowing⁽¹⁹⁾, cognitive deficits⁽¹²⁾, sexual dysfunctions⁽²⁰⁾, tiredness^(12,15), insomnia⁽¹⁵⁾, pain^(15,17,19), dyspnea⁽¹⁸⁾, neuralgia⁽¹⁷⁾ and fertility disorders⁽¹⁷⁾.

According to INCA⁽²⁷⁾, these physical symptoms may be originated in the sequels of the disease and its treatment. Cognitive deficits seem to have little impact on survivors' QL, which contradicts the initial hypothesis of one study⁽¹²⁾.

Chewing and swallowing is widely affected in patients with mouth and oropharyngeal cancer, once there is a need for surgical excision of buccal tissues. According to a study, patients have little or no access to specialized dentistry rehab after surgery⁽¹⁹⁾. Therefore, it is important to encourage the involvement of dentists in the assistance provided to these patients, so that grievances like these ones may be minimized and as a consequence, patients can enjoy a better quality of life.

Cognitive deficits seemed to have little impact on survivors' QL, not corresponding to an author's initial belief. However, we believe that long-term follow-up and assistance to cancer survivors may help them deal better with the consequences of disease and treatment⁽¹²⁾.

Sexual dysfunction is an important factor related to QV scores, as evidenced by a study⁽²⁰⁾ that appointed an expressive prevalence of sexual dysfunctions in

breast cancer survivors. In this sense, and according to data provided by the *National Cancer Institute*⁽²⁸⁾, several cancer types and their treatments are frequently associated to sexual dysfunctions, considering that estimates may vary between 40% and 100%. In the discussion of this issue in particular, we believe that health professionals have the challenge to consider sexual issues such as the acceptance of changes provoked by cancer, involving both patients and their partners⁽²⁹⁾.

Fertility also appeared as a QL affecting factor, as individuals reported to have good physical and mental health related to the capacity to have children⁽¹⁷⁾. Through this perspective, health professionals have paid the necessary attention to fertility matters through the implementation of techniques such as sperm cryopreservation, which enables assisted reproduction even after sterility treatment has been completed⁽³⁰⁾.

As for the factors qualified as psychological, aspects related to the meanings assigned to the disease^(16,21), which have been historically and socially constructed have been mentioned. In this perspective, we believe that getting familiar with the ways in which survivors experience their process of getting sick is a relevant factor in order to focus on a comprehensive approach.

In this sense, nurse professionals may act as facilitators of the cancer meaning process, empowering the patient to play a key role in his or her own care plan. This is because cancer survivor care involves a mobilization of skills that transcend technical knowledge, both for professionals and survivors.

Aspects qualified as social are those related to the individuals' social interactions. Many studies^(12-14,19) mentioned these aspects as relevant in quality of life discussions, however it was not possible to identify them nominally.

Financial wellbeing and issues related to costs generated by cancer survival were qualified as financial

aspects related to QL⁽¹⁴⁾ and in this context we consider that domestic finance counseling is important and should be redefined, seeking to make it flexible enough to consider the demands resulting from the cost of disease and treatments. It is also understood that this data⁽¹⁴⁾ refers to a health system that works with a different perspective than the one we have in Brazil.

Other relevant factors found related to QL were the correlation between chronological age and cancer diagnosis, the materialization of surgery, the use of chemotherapy and hormone therapy, the presence of the spouse during diagnosis and treatment, social support, working capacity and physical and mental health⁽²⁰⁾.

It would also be relevant to promote discussions with regards to the need to define and validate generic and specific evaluations that consider the survivor as a whole⁽²⁴⁾. This approach understands that the cancer survivor has a multidimensional characteristic that should be carefully analyzed and considered in order to prepare a care plan according to the patient's needs.

Another evidence believed to be relevant is the recent publication of several studies on breast cancer^(12-14,20) and how this cancer type affects QL. We believe that specific breast cancer studies are a sign of the interest in meeting the care needs of this group of survivors⁽³¹⁾.

FINAL CONSIDERATIONS

This study identified aspects related to the QL of cancer survivors, which were classified into physical (chewing, swallowing, cognitive deficits, sexual dysfunctions, tiredness symptoms, insomnia, pain, dyspnea, neuralgia and fertility disorders); psychological (meanings assigned to the disease); social, financial (wellbeing and issues related to the costs generated by the disease) and other miscellaneous factors that include chronological age and cancer diagnosis, surgery, chemotherapy, hormone therapy, the presence of the

spouse during diagnosis and treatment, social support, working capacity and mental and physical health.

We believe that this research may significantly contribute to the construction of knowledge, as analyzing the diverse areas that involve patients' quality of life may help health professionals to implement assistance practices that truly consider the multidimensionality of surviving cancer. Besides, it is evident that it is very important that further studies on this type of analysis are developed, including all involved actors in the process and promoting a deep reflection on the health professionals' routine praxis.

We believe that although there is already a significant amount of information on quality of life-related factors, it is necessary to develop new studies with regards to concepts, construction and validation of specific grading systems applied to evaluate the different aspects inherent to cancer survivors' care.

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