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REVIEW

Risk factors for suicide in individuals with cancer: an integrative literature review

Fatores de risco para suicídio em indivíduos com câncer: revisão integrativa da literatura

Factores de riesgo de suicidio en individuos con cáncer: una revisión integradora de la literatura

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ABSTRACT

Objective: to develop an integrative literature review on risk factors for suicide in individuals with cancer. **Method:** searching for articles was conducted in the Scientific Electronic Library Online, Medicinal Literature Analysis and Retrieval System Online, Latin American & Caribbean Literature in Health Sciences, Cumulative Index to Nursing and Allied Health Literature and SciVerse Scopus databases, using the descriptors "suicide" and "cancer". **Results:** eighteen articles were selected. Lung, bladder and colorectal cancers are the types of highest risk for suicide. Male, white and over 60 years of age are demographic factors with higher risk for suicide in individuals with cancer. **Conclusion:** this review made it possible to verify that cancer may be a risk factor for suicide. This evidence can be useful for planning preventive actions in order to reduce the risk of suicide.
Descriptors: Neoplasms; Suicide; Risk Factors; Review; Epidemiology.

RESUMO

Objetivo: desenvolver uma revisão integrativa de literatura sobre os fatores de risco para o suicídio nos indivíduos com câncer. **Método:** as buscas dos artigos foram conduzidas nas bases de dados *Scientific Eletronic Library Online*, *Medicinal Literature Analysis and Retrieval System Online*, Literatura Latino-Americana e do Caribe em Ciências da Saúde, *Cumulative Index to Nursing and Allied Helth Literature* e *SciVerse Scopus* por meio dos descritores "*suicide*" e "*câncer*". **Resultados:** selecionaram-se 18 artigos. Os cânceres de pulmão, bexiga e colorretal são os tipos de maior risco para o suicídio. O sexo masculino, cor branca e idade maior que 60 anos são fatores demográficos com maior risco para o suicídio em indivíduos com câncer. **Conclusão:** a revisão possibilitou verificar que o câncer pode ser um fator de risco para o suicídio. Essas evidências podem ser úteis para o planejamento de ações de prevenção, com o intuito de reduzir os riscos de suicídio.
Descritores: Câncer; Suicídio; Fatores de Risco; Revisão; Epidemiologia.

RESUMEN

Objetivo: desarrollar una revisión integradora de la literatura sobre factores de riesgo de suicidio en personas con cáncer. **Método:** las búsquedas de los artículos se realizaron en las bases de datos Scientific Electronic Electronic Library Online, Medicinal Literature Analysis and Retrieval System Online, Literatura Latinoamericana y del Caribe en Ciencias de la Salud, Cumulative Index to Nursing and Allied Helth Literature y SciVerse Scopus a través de descriptores "suicidio" y "cáncer". **Resultados:** se seleccionaron 18 artículos. Los cánceres de pulmón, vejiga y colorrectal son los tipos de mayor riesgo de suicidio. Los hombres, los blancos y los mayores de 60 años son factores demográficos con mayor riesgo de suicidio en personas con cáncer. **Conclusión:** la revisión permitió verificar que el cáncer puede ser un factor de riesgo de suicidio. Esta evidencia puede ser útil para planificar acciones preventivas con el fin de reducir el riesgo de suicidio.
Descriptores: Neoplasias; Suicidio; Factores de Riesgo; Revisión; Epidemiología.

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INTRODUCTION

Suicide is considered an important public health concern in contemporary society[1]. Over 800,000 suicide deaths are estimated annually and the mortality rate is 11.4 per 100,000 people[2]. It consists of a phenomenon in which death occurs due to a behavioral act and is related to complex, universal and multifactorial issues[3]. Risks for suicide include population or individual factors[4]. Those of a population nature comprise aspects such as economic crisis and social fragmentation, while those of an individual nature include family and relationship problems, mental disorders and the use of alcohol or other drugs[4].

Cancer represents the second leading cause of mortality in the world, with an estimated 17 million deaths in 2030 and a general proportion of one in six deaths[5]. It is estimated that, in the next 20 years, the total number of new cases will be 29.4 million, with a forecast of reaching 1.9 million deaths[6]. In Brazil, for the 2020-2022 biennium, there is an estimate of 450 thousand new cases for each year[7]. It is a chronic disease, capable of invading surrounding organs and tissues, and is associated with a stigma of death[8-9]. Moreover, being diagnosed with cancer can generate consequences on individuals' mental health, such as mood swings, insomnia, anxiety, and depression[2,4-5].

In individuals with cancer, depression is a disorder that has a high prevalence, which affects patients' ability to deal with the disease, decreasing treatment acceptance, prolonging hospitalization, reducing quality of life and increasing the risk of suicide[10], being a factor that is present in 75% of suicides[11]. In turn, cancer diagnosis is a serious stressor, with many physical and psychological consequences[12], and it is believed to be a risk factor for suicide[10]. Individuals with cancer, when compared to the general population, are at twice the risk of committing suicide[13] and studies carried out in several countries have shown an increase in suicide rates in individuals with cancer[14–18].

A recent systematic review study on cancer diagnosis and suicide highlighted cancer as a factor to increase the suicide rate in these individuals[10]. Poor prognosis, disease progression level, symptoms of depression, feelings of helplessness, disturbing interpersonal relationships and uncontrolled pain are reasons for increased rates of suicide in individuals with cancer[10]. Depression, psychiatric history, previous suicide attempts, hopelessness, demoralization, pain, lack of social support, feeling of being a burden to others and existential concerns (regret, loss of meaning, purpose, and dignity), along with specific demographic characteristics and certain types of cancer, increase the risk of suicide[19].

Although the absolute numbers of suicides in individuals with cancer are low, the high risk of suicide in these individuals should be a concern for health professionals, since they represent potentially preventable deaths. It is essential that cancer health professionals know how to identify suicide risk in their cancer patients; however, the understanding, assessment and recognition of risk by these professionals are limited[20]. A research conducted with oncologists, nurses and social workers reported that most nurses and oncologists had at least one patient who committed suicide. These professionals identified lack of training and awareness as main barriers for identifying patients at risk of suicide[20]. Another research, carried out with oncology nurses, showed that they were able to identify certain behavioral risk factors, but not demographic risk factors, and that most had little knowledge in assessing suicide[21].

For integrated, early care associated with psychosocial care, it is necessary to understand the variation in the risk of suicide between sexes, age group, type of cancer and modifiable risk factors. In this regard, knowing more about suicide in the population diagnosed with cancer is essential both for health professionals who work on the front line with patients, particularly nurses, due to the possibility of previously identifying the main clinical and behavioral characteristics, as well as for managers in preventive measure implementation. The guiding question that guided this literature review was: what are the risk factors for suicide in individuals with cancer observed in articles published in the scientific literature?

OBJECTIVE

To develop an integrative literature review on risk factors for suicide in individuals with cancer.

METHODS

This is an integrative literature review. This review method synthesizes the scientific literature on a given topic, to provide a greater understanding of the leading question. Integrative reviews present the state of science, contributing to the development of theory and have direct applicability to practice and policy[22].

This integrative literature review was carried out in stages that included theme identification; research question development; database research through health descriptors; selection of articles that have eligibility criteria; reading of selected articles; assessment and interpretation of structured data from the integrative review.

Article search was conducted in the Scientific Electronic Library Online (SciELO), Medicinal Literature Analysis and Retrieval System Online (MEDLINE), Latin American & Caribbean Literature in Health Sciences (LILACS), Cumulative Index to Nursing and Allied Health Literature (CINAHL) and SciVerse Scopus (SCOPUS) databases. The descriptors used in the search were extracted from the list of Health Science Descriptors (DeCS – *Descritores em Ciências da Saúde*) and Medical Subject Headings (MeSH). The expression and descriptors applied, and combined, in all searches were "suicide and cancer". The search strategy is described in Chart 1.

Chart 1 – Database search strategy according to health descriptors

Databases	Search structure
Scielo	(cancer) OR (neoplasm) AND (suicide) OR (*suicídio*)
MEDLINE	(("cancer" [Mesh] AND "suicide" [tiab])) AND surgery
LILACS	(mh: neoplasms OR tw: cancer*) AND (mh: *suicídio* OR tw: *suicídio** *OR* tw: *parassuicídio**))
CINAHL	TI (neoplasm* OR cancer*) AND (("suicide")
Scopus	(TITLE (neoplasm* OR cancer*)) AND OR (TITLE (suicide*)

The terms should be present in the title or in the abstract. Articles in English or Portuguese, original and complete articles, published between 2014 and 2019 were included. Two researchers

searched the articles independently and blindly. Titles and abstracts were carefully examined and the full texts of the papers that met the inclusion criteria were obtained. After this stage, the selected articles were read in full and, at the end, the researchers met to compare the search results. Disagreements among researchers were resolved by consulting a third reviewer.

Literature review studies, letters to the editor, monographs and theses were excluded. Articles that addressed only suicidal ideation, associated with cancer, without relating to suicide and articles referring to assisted suicide or euthanasia were not included. Duplicates have been removed.

The combination of descriptors used in database searches resulted in a quantity of 1,497 scientific articles. Of these, 59 articles were identified by reading the title, abstract and keywords as potential for the selection of inclusion in this integrative review, and read in full by two independent evaluating authors. After reading: nine articles aimed to study suicide attempts and did not relate risk factors to suicide; eight articles did not relate cancer and risk factors for suicide; eight did not answer the guiding question; six related suicidal ideation and attempted suicide; five were literature reviews; five were not available in full.

With the verification of the inclusion and exclusion criteria, the evaluators selected 18 articles for this review. The flowchart is shown in Figure 1.

The classification of the level of evidence was performed using the Center for Evidence-Based Medicine (CEBM) model at the University of Oxford[23]. The classification for the level of evidence of this methodology is based on degrees of recommendation, which are: A (1A: Systematic Reviews of Controlled and Randomized Clinical Trials; 1B: Controlled and Randomized Clinical Trial with Narrow Confidence Interval; 1C: Therapeutic Results "all or nothing" type); B (2A: Systematic Review with Homogeneity of Cohort Studies; 2B: Cohort Study - Including Lesser Randomized Clinical Trial; 2C: Observation of Therapeutic Results and Ecological Study; 3A: Systematic Review with Homogeneity of Case-Control Studies; 3B : Case-Control Study), C (4: Case Reports - including lower quality Cohort or Case-Control) and D (5: Opinion without critical assessment or based on basic materials - physiological study or study with animals).

Assessment is by type of study and the closer to score 1 is categorized, the greater the level of evidence and degree of recommendation.

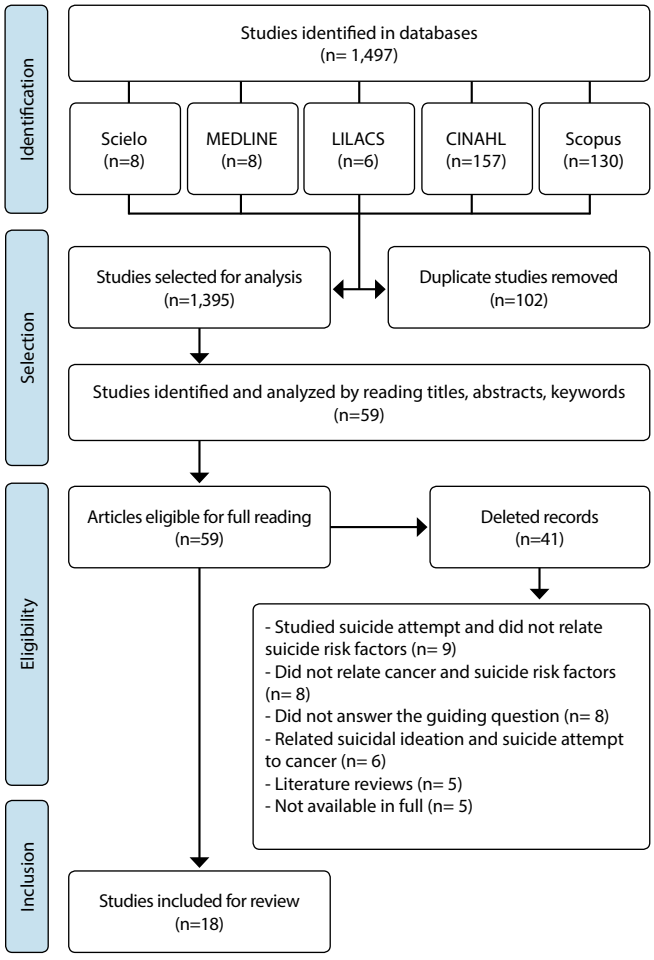

Figure 1 - Flowchart per step of the selection of scientific articles

RESULTS

Of the total of 18 articles selected on suicide in cancer patients, cohort studies were predominant, with 17 articles, and only one was a case-control study. In this regard, the level of evidence most frequently categorized was 2B, for the 17 cohort articles, and the case-control study was categorized with level of evidence 3B (Chart 2).

Chart 2 – Synthesis of articles selected in the review according to year of publication, authorship, country of study, type of study, objective, and level of evidence

Author/Year	Country/Type of study/ Sample	Objective	Level of evidence
Oberaigner, Sperner-Unterweger, Fiegl et al. (2014)[24]	Austria/Cohort (n=231)	To investigate the risk of suicide in cancer patients compared to the general population.	2B
Ahn, Lee, Ramsey et al. (2015)[14]	South Korea/Case-control (n cases=373/n controls=746)	To determine suicide risk factors in the first year of cancer diagnosis.	3B
Klaassen, Jen, DiBianco et al. (2015)[25]	USA/Cohort (n=794)	To identify factors associated with suicide in patients with genitourinary neoplasms.	2B
Sugawara, Kunieda (2016)[26]	USA/Cohort (n=23,620)	To identify factors associated with increased risk of suicide in cancer patients.	2B
Jayakrishnan, Sekigami, Rajeev et al. (2017)[27]	USA/Cohort (n=631,364)	To analyze the risk of suicide in patients with solid cancer.	2B
Siracuse, Gorgy, Ruskin et al. (2017) [28]	USA/Cohort (n=23,620)	To determine the incidence of suicide in patients with bone and soft tissue cancer.	3B
Samawi, Shaheen, Tang et al. (2017)[29]	USA/Cohort (n=1,005,825)	To identify predictors of suicide in patients with colon cancer vs. rectal cancer.	2B

To be continued

Chart 2 (concluded)

Author/Year	Country/Type of study/ Sample	Objective	Level of evidence
Zendron, Zequi, Guimarães, Lourenço (2018)[30]	Brasil/Cohort (n=144)	To determine the risk of suicide in patients diagnosed with prostate cancer.	2B
Klaassen, Goldberg, Chandrasekar et al. (2018)[31]	USA/Cohort (n=915,303)	To characterize patients at risk of suicide after bladder cancer diagnosis.	2B
Gaitanidis, Alevizakos, Pitiakoudis et al. (2018)[32]	USA/Cohort (n=19,409)	To identify relevant risk factors among breast cancer patients.	2B
Wash, Talukder, Lawson et al. (2018)[33]	USA/Cohort (n=168,339)	To examine the associated factors in patients with thyroid cancer.	2B
Zhou, Xian, Zhang et al. (2018)[34]	USA/Cohort (n=5,440)	To estimate suicide rate trend in patients with lung cancer.	2B
Yang, He, Chen et al. (2019)[35]	USA/Cohort (n=90,911)	To identify risk factors for suicide death in male patients with cancer of the genital system.	2B
Guo, Zheng, Zhu et al. (2019)[36]	USA/Cohort (n=171,819)	To identify the possible risk factors associated with suicide in kidney cancer.	2B
Zaorsky, Zhang, Tuanquin et al. (2019)[37]	USA/Cohort (n=856,293)	To identify cancer patients at higher risk for suicide compared to the general population.	2B
Saad, Gad, Al-Husseini et al. (2019)[38]	USA/Cohort (n=4,671,989)	To examine the risk of suicide within a year after a cancer diagnosis.	2B
Dulsas, Patasius, Kaceniene et al. (2019)[39]	USA/Cohort (n=19,409)	To estimate the risk of suicide among patients with colorectal cancer.	2B
Henson, Brock, Charnock et al. (2019)[40]	England/Cohort (n=4,722,099)	To quantify the risk of suicide in cancer patients.	2B

Chart 3 – Type of cancer studied in articles and main risk factors for suicide organized by year of publication

Reference	Study cancer type	Outcome
24	All cancers	1. All cancers, except non-melanoma skin cancers, were a risk factor for suicide. 2. Depression and advanced stage of cancer was associated with increased risk of suicide. 3. Suicide was higher during the first six months after diagnosis.
14	All cancers	1. Biliary pancreatic cancer, lung cancer and stomach cancer have more risk of suicide than other types of cancer. 2. Metastatic stage was more frequent associated with suicide risk in the first year of diagnosis.
25	Male genitourinary cancers: prostate, bladder, kidney, testis and penis	1. The genitourinary cancers studied had a significantly statistical risk for suicide. 2.Males, over 60 years old, single, white, metastatic disease and non-committing to surgery were risk factors for suicide. 3. Pain, penis mutilation and erectile dysfunction were risk factors for suicide in individuals with cancer.
26	Stomach cancer	1. Individuals with stomach cancer have a four-fold higher risk of suicide compared to the general population. 2. The risk of suicide is higher in the first three months after diagnosis. 3.Male, white, single and metastatic disease are significantly associated with increased risk of suicide.
27	All cancers except leukemia	1. Individuals undergoing advanced stage cancer surgery, males and age older than 65 years were factors significantly associated with suicide risk. 2. The time of greatest involvement of suicide was in the first month.
28	Soft tissue sarcoma	1. Bone and soft tissue cancer are associated with suicide risk, especially those of the spine and pelvic bones. 2. Males, white and older than 60 years were risk factors for suicide. 3. The risk of suicide was present in the first five years of diagnosis and mutilation and loss of functionality increased the risk for suicide.
29	Colorectal cancer	1. Colon cancer is a risk factor for suicide. 2. Males, older than 60 years, white, metastatic disease and not having undergone surgical procedure were predictors of suicide.
30	Prostrate cancer	1. Prostate cancer was a suicide risk factor. 2. The risk of suicide was associated with anxiety, depression, singles and living alone.
31	Bladder cancer	1. Bladder cancer was a risk factor for suicide. 2. Males, white, single, older than 60 years, non-metastatic disease and not submitted to surgical procedure were risk factors for suicide.
32	Breast cancer	1. Breast cancer was a risk factor for suicide. 2. Males, age under 60 years, white and black and single were risk factors for suicide. 3. Until the second year after cancer diagnosis, there was a significant association with suicide.
33	Thyroid cancer	1. Males and white were risk factors for suicide in thyroid cancer.

To be continued

Chart 3 (concluded)

Reference	Study cancer type	Outcome
34	Lung cancer	1. Individuals with lung cancer are at risk for suicide. 2. Males, white, single and age over 60 years were risk factors for suicide.
35	All cancers for males	1. Cancer diagnosis is associated with increased risk of suicide. 2. Over 60 years of age, single, white and not having undergone surgical procedure were a risk for suicide. 3.The first year after diagnosis has an increased risk of suicide.
36	Kidney cancer	1. Kidney cancer was a risk factor for suicide. 2.Male, single, white color, advanced disease and not having surgery were risk factors for suicide. 3. Pain increased risk of suicide in individuals with kidney cancer.
37	All cancers	1. Lung, head and neck, testicle, bladder, and lymphoma cancers were at higher risk for suicide compared to other cancers. 2. Males, white, age over 60 years and local disease were risk factors for suicide.
38	All cancers	1. Pancreatic, lung and colorectal cancer presented a higher risk for suicide. 2. The first year after diagnosis was at higher risk for suicide.
39	Colorectal cancer	1. Colorectal cancer was a risk factor for suicide. 2. Females, age older than 60 years and advanced stage of cancer were risk factors for suicide. 3. Colostomy increased the risk of suicide in individuals with colorectal cancer.
40	All cancers	1. Cancer diagnosis carries a risk of psychological distress. 2. Individuals with mesothelioma have a higher risk compared to other cancers for suicide. 3. Pancreatic, esophagus, lung and stomach cancer posed a risk to suicide. 4. The first six months after diagnosis presented a higher risk for suicide.

Of the total of 18 articles analyzed, five reported results in the broad category of cancers[14,24,37-38,40]. Among these studies, the type of cancer with the highest risk for suicide was lung cancer, observed in four articles[14,37-38,40].

Eight articles verified the risk of suicide after cancer diagnosis, the period of time being identified as being the most at risk: first month[27], third month[26], sixth month[24], first year[14,35,38], second year[32] and up to five years[28] after diagnosis.

For individuals with cancer who committed suicide, the profile shown in the articles was male, white and older than 60 years[25–29,31–37]. Being single was also associated with increased risk of suicide in seven studies[25-26,30,32,34–36].

Anxiety and depression were associated with suicide in two studies[24,30]. Advanced cancer appeared in six articles associated with an increased risk of suicide[14,24–27,29]. There was evidence in five articles that when cancer is not operable or there is a surgical refusal, individuals were also at risk for suicide[25,29,31,35-36].

The results of the selected articles are shown in Chart 3.

DISCUSSION

This review made it possible, through the search for current scientific articles, to know the main risk factors associated with cancer and suicide. Most studies carried out presented a cohort design (n=17). The cohort research design is adequate to study the risk factors for having statistical analyzes that can infer possible risks for suicide in individuals with cancer[41].

The risk of suicide, in this review, was associated with the site of cancer, such as lung cancer[14,37-38,40], bladder cancer[25,31,35] and colorectal cancer[29,39], although considering that some articles studied specific types of cancer. The reason why cancer, particularly one with a poor prognosis, increases the risk of suicide is probably multifactorial[42]. In a cohort carried out in South Korea, it was observed that the risk of suicide was associated with the anatomical site of the cancer, with the risk being increased in cancers with poor prognosis, such as biliary, pancreatic, and pulmonary[14]. This is consistent with studies that found that cancer patients with a poor prognosis (i.e., a relative 5-year survival of less than 10%) had the highest risk of death from suicide, within one year after diagnosis[13-14,16].

Studies have shown that when diagnosed with lung cancer, the risk of suicide is associated with aggressive treatment and with no prospect of a cure just for symptom palliation[14,37-38,40]. It is necessary to pay more attention to this type of cancer, as it is evidenced as the one most prone to suicide[24]. For genitourinary cancers, risk factors were associated with symptoms such as urinary incontinence, pain during intercourse and erectile dysfunction[25,31]. The same was observed in one about prostate cancer, because, in addition to the symptoms, there were individuals who refused treatment and surgical procedure, thus facing a greater risk of suicide[43].

Surgical therapy makes individuals with cancers more vulnerable to suicide, as mutilation is also a risk factor[25,27]. Articles on colorectal cancer showed that surgical resection of the colon and colostomy bag were factors for suicide[29,39]. This data was similar to a study carried out in patients with osteosarcoma, who are submitted to extensive surgical resections and even limb mutilation[28]. It was observed that, after surgery, individuals who had changes in gait, strength and a mutilated limb were at higher risk of suicide[28].

Time of suicide after cancer diagnosis was studied in eight articles in this integrative review[14,26-28,32,35,38]. The first three months of knowledge of the disease was possibly associated with difficulty of coping, its symptoms and adverse effects of treatment[26-27]. Another study, in turn, showed that from the sixth month onwards, the risk of suicide was associated with the stage of cancer. A cohort study carried out in Tyrol, Austria, showed that a quarter of suicides occurred in the first six months, in patients with advanced cancer stage[24]. In another cohort study, it was found that more than 70% of suicides in the first year occurred in patients with metastatic stages, but the risk decreases over time, with no difference between individuals with cancer and the general population[14]. This

data was different from that found in a North American cohort, in which there was a risk of suicide after five years of diagnosis[28]. The authors related that the factor for this suicide risk was the presence of pain, hopelessness, and depression[25,28,36]. More than a cultural aspect, the poor prognosis of a disease, in addition to the adverse effects of treatment, makes individuals with cancer dependent on another person, such as a family member[19].

Male, white and old age were risk factors for suicide in individuals with cancer, as found in twelve articles[25–29,31–37]. Increased risk of suicide for men due to cancer was related to socioeconomic situations, as men end up moving away from work, reducing family income[19-20,24]. Another study showed that the feelings of demoralization, helplessness and hopelessness are greater among males, which can lead to suicide[34]. Another cohort study showed that men also tend to seek less family support or live alone, which makes it difficult to form a help network so that individuals can support cancer diagnosis and treatment[30]. Two studies have shown that a form of guidance for the reduction of suicides is through support groups, as they strengthen the health network and assist services in preventing suicide[24,27].

This review noticed that depression was associated with a risk factor for suicide in two studies[24,30]. Depression is a significant risk factor for suicide in individuals with cancer[30]. The verified relationship between depression and suicide is manifested in symptoms, both physical, such as pain, and in subjective symptoms, such as changes in mood and financial situation[28-29]. Two cohorts, one from England and one from the United States, have shown that the immediate health implications of cancer survivors are legitimate financial burdens, which can cause depression and increase the risk of suicide[36,40]. One study found that the relationship between suicide in individuals with cancer and depression was the perception or assumption that there is no cure for the disease, increasing the risk of committing suicide[24]. Psychotherapy is an important strategy for suicide prevention in individuals who have been diagnosed with cancer[44]. A study has shown that psychotherapy has a positive effect on cancer patients, which include symptom control, such as pain relief, disease acceptance and coping[45].

Study limitation

This study has some limitations: the searches were made in five databases (SciELO, MEDLINE, LILACS, CINAHL and Scopus) and, eventually, other publications may not have been found; the criteria for inclusion of articles in Portuguese and English may have limited access to other publications; some of the selected studies may have bias, because they did not study patients with different types, but with certain types of cancer, such as lung, genitourinary, solid tumors. Thus, it is not possible to conclude that one of the risk factors for suicide is having a certain type of cancer; although the purpose of the integrative review is to show current data, based on primary studies, the studies analyzed were heterogeneous in terms of samples, demographic characteristics and types of cancer, which limited their comparability.

Contributions to nursing, health, and public policies

Although it is a relatively rare event, healthcare professionals should be aware that cancer diagnosis increases the risk of suicide. In this regard, this study has contributions for nursing professionals, as it outlines the main risk factors for suicide in individuals with cancer. Types of cancer, time of diagnosis and demographic factors most likely to commit suicide in individuals with cancer are explained. The increased risk of suicide in the first six months after cancer diagnosis, pointed out by some of the studies in this review, suggests the need for psychosocial support and support and special attention for individuals with specific cancer groups. Nurses are the health professionals who most stay with patients with cancer, thus being able to recognize suicidal ideation and behavior. Carrying out systematic screening to identify suicidal ideation and behavior allows an individual with cancer, who presents a risk of suicide, to be evaluated and the appropriate mental health treatment performed.

CONCLUSION

The present integrative review made it possible to verify that cancer can predispose suicide to individuals affected by this disease. Identifying cancer, demographic characteristics, the time from diagnosis to suicide and the adverse effects left by cancer such as pain and loss of functionality guide health professionals to be attentive in care practice. Based on what was verified in this study, the evidence can be useful for planning preventive actions, in order to reduce the risk of suicide.

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