

# Social support for cancer patients and alcohol and tobacco use: an integrative review\*

Suporte social em pacientes com câncer e uso de álcool e tabaco: revisão integrativa

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#### ABSTRACT

Objective: to assess the knowledge about social support and mental health of people diagnosed with cancer, smokers, and alcohol users, and the implications of these behaviors for cancer treatment. Methods: integrative review using the following databases: CINAHL, Embase, LILACS, PsycINFO, MEDLINE, SCOPUS, and Web of Science, without restriction of period and language. The data was analyzed descriptively. Results: 3,010 documents were identified, 14 studies were eligible. The different types of social support received by people with cancer and a history of alcohol and tobacco use stand out: emotional (n=5), informational (n=4), family and material (n=2 each), religious, sexual-affective partner. tangible, affective, positive social interaction, instrumental and social companionship (n=1 each). Conclusion: targeted social support that is sensitive to the particularities of the history of substance use can significantly improve the way people cope with the disease and treatment. Contributions to practice: providing integrated social support for this population is essential for thinking about quality of life throughout treatment and recovery.

**Descriptors:** Neoplasms; Social Support; Substance-Related Disorders; Medical Oncology.

#### **RESUMO**

Objetivo: avaliar os conhecimentos sobre o apoio social e a saúde mental de pessoas com diagnóstico de câncer, tabagistas e usuários de álcool, e as implicações desses comportamentos no tratamento oncológico. Métodos: revisão integrativa, abrangendo as bases de dados: CINAHL, Embase, LILACS, PsycINFO, MEDLINE, SCOPUS, e Web of Science, sem restrição de período e idioma. A análise dos dados foi realizada de modo descritivo. Resultados: foram identificados 3.010 documentos, 14 estudos foram elegíveis. Destaca--se os diversos tipos de apoio social recebidos por pessoas com câncer e histórico de álcool e tabaco, sendo o emocional (n=5), o informacional (n=4), o familiar e o material (n=2 cada), o religioso, o parceiro sexo-afetivo, o tangível, o afetivo, a interação social positiva, o instrumental e o companheirismo social (n=1 cada). Conclusão: o apoio social direcionado e sensível às particularidades do histórico de uso dessas substâncias pode melhorar significativamente o modo de lidar com a doença e o tratamento. Contribuições para a prática: oferecer suporte/apoio social de forma integrada para essa população é essencial para se pensar em qualidade de vida ao longo do tratamento e recuperação.

**Descritores:** Neoplasias; Apoio Social; Transtornos Relacionados ao Uso de Substâncias; Oncologia.

# Introduction

Cancer is one of the leading causes of mortality globally and has repercussions not only on patients' physical health but also on their psychological and social aspects<sup>(1)</sup>. These factors can result in an increase in the use of alcohol and tobacco<sup>(2)</sup>, which can be associated with symptoms of depression and a greater chance of suicide<sup>(3)</sup>. The links between smoking and alcohol use, the prevalence of morbidity and mortality, and cancer are growing, with evidence of a causal relationship between these substances and cancer illness. Continued consumption after diagnosis worsens the prognosis, increasing the chances of recurrences, new primary tumors, and comorbidities, which worsens the state of physical and psychosocial health, impairing quality of life<sup>(4)</sup>.

In addition to assessing the diagnosis, the cancer treatment process also impacts various aspects of the lives of individuals and their families. However, when patients consume alcohol and tobacco, additional complications arise. The consumption of these substances is associated with an increase in the adverse effects of cancer treatment, such as more significant toxicity and reduced immune response, compromising therapeutic efficacy<sup>(5-6)</sup>.

Studies show that patients who continue to smoke and use alcohol throughout cancer treatment are more likely to suffer complications and have lower adherence to treatment<sup>(7)</sup>. In this context, social support can help promote mental health<sup>(6)</sup>, offering psychosocial help and communication links that favor social interaction and contribute to more remarkable survival<sup>(7)</sup>. This resource has a positive impact on treatment, helping to manage symptoms and quality of life, and varies according to cultural characteristics and individual perceptions<sup>(8)</sup>.

Social support is a multifaceted concept comprising five domains: emotional support (expression of affection), informational support (problem-solving guidance), tangible support (material help), positive social interaction support (presence at pleasant moments), and affective support (expression of love and

affection)<sup>(9)</sup>. As a social determinant of health, it is relevant to promote equity in treating diseases, emphasizing cancer<sup>(10)</sup>, and has been widely studied in various health conditions<sup>(11-13)</sup>.

Despite the growing interest in the effects of social support on cancer patients, many studies still focus mainly on biological aspects and quality of  $life^{(14)}$ . The exploration of the intersections related to social support, smoking, and alcohol use remains limited, and a greater focus on this area is needed to understand the specific needs of these patients and improve care and equity in treatment<sup>(8,13)</sup>.

This study brings new contributions by exploring the relevance of the interfaces of social support for people diagnosed with cancer who also use tobacco/alcohol, highlighting the impact of these substances on mental health and the treatment process. The research addresses an essential gap, as few studies have investigated the intersections between social support and substance use in this group. This study aimed to assess the knowledge about social support and mental health of people diagnosed with cancer, smokers, and alcohol users, and the implications of these behaviors for cancer treatment.

#### Methods

The methodology adopted in this study was an integrative literature review involving the following stages: i) research question, ii) sample, iii) grouping of papers, iv) evaluation, v) significance, and vi) synthesis of results<sup>(15)</sup>. The protocol for this study was registered on the Open Science Framework (OSF) platform<sup>(16)</sup> (https://osf.io/r7hc6/)<sup>(17)</sup>.

A research question was developed using the PICo strategy<sup>(18)</sup>, whose acronym is P—Study Population: Cancer Patients; I—Phenomenon of Interest: Social Support; C—Context: Use of tobacco and/or alcohol. Thus, the question guiding the study is: What is the evidence on smoking and/or alcohol use (current or previous) by people diagnosed with cancer regarding social support?

The search took place from February 2023 to

August 2024, with no initial period restriction and a maximum limit of August 2024. The selection of studies was conducted individually by two reviewers, according to the following eligibility criteria: no language restrictions; studies focusing on social support and the use of tobacco/or alcohol, focusing on individuals suffering from cancer. Exclusion criteria were established, which included studies with cancer patients in palliative care and the terminal phase of the disease, studies with no connection to social support, studies which, despite measuring other aspects of the stigmatization of the disease or quality of life, did not present results linked to social support.

This study used the following databases: EM-BASE, Cumulative Index to Nursing and Allied Health Literature (CINAHL), PsycINFO, Latin American and

Caribbean Health Sciences Literature (LILACS), SCO-PUS, Medical Literature Analysis and Retrieval System Online (MEDLINE), and Web of Science (WoS). Searches were also carried out on the list of references to read the materials and identify new research thoroughly.

A search strategy was developed with the guidance of a specialist librarian based on controlled and uncontrolled Health Sciences terms (DeCS), Medical Subject Headings (MeSH), and CINAHL titles: Social Support, Cancer, Alcohol, and Tobacco, adapted to the databases above, as well as using Boolean operators AND and OR to connect the information in the PICo strategy. Truncation was also used when necessary. Figure 1 shows the methods used to search the research databases.

Database	Search strategies				
LILACS	("Apoio Social" OR "Suporte Social" OR "Apoyo Social" OR "Social Support" OR "Apoio Psicossocial" OR "Apoyo Psicossocial" OR "Psychosocial Support" OR "suporte emocional" OR "Grupos de Apoio" OR "emotional support" OR "support group" AND (mh:C04\$ OR Neoplasia* OR Neoplasm* OR Tumor* OR Câncer*) AND (Álcool* OR Alcohol* OR Tabaco OR Tabagism OR "Uso de Fumo" OR Tabaquismo OR Tobacco OR Smoke*)				
CINAHL	((MH "Support, Social+") OR "Social Support*" OR "Psychosocial Support*" OR "Psychological Support*" OR "emotional support" OR "Support Group*") AND ((MH "Neoplasms") OR Neoplasm* OR Tumor* OR Câncer*) AND ((MH "Alcohol-Related Disorders+") OR Alcohol* OR "Binge Drinking" OR (MH "Tobacco+") OR Tobacco OR (MH "Smoking+") OR Smoke* OR cigarette*)				
MEDLINE	("Social Support" [MeSH Terms] OR "social support*" [All Fields] OR "psychosocial support*" [All Fields] OR "psychological support*" [All Fields] OR "emotional support*" [All Fields] OR "support group*" [All Fields]) AND ("Neoplasms" [MeSH Terms] OR "neoplasm*" [All Fields] OR "tumor*" [All Fields] OR "cancer*" [All Fields]) AND ("Alcohol-Related Disorders" [MeSH Terms] OR "alcohol*" [All Fields] OR "Binge Drinking" [All Fields] OR ("tobacco" [MeSH Terms] OR "tobacco" [All Fields] OR "tobacco" [All Fields] OR "tobacco" [All Fields]) OR "tobacco products" [MeSH Terms] OR "tobacco products" [All Fields] OR "tobaccos" [All Fields]) OR "Smoking" [MeSH Terms] OR "smoke*" [All Fields] OR "cigarette*" [All Fields])				
Embase	('social support'/exp OR 'social support' OR 'social support*' OR 'psychosocial support*' OR 'psychological support*' OR 'emotional support'/exp OR 'emotional support' OR 'support group*') AND ([article]/lim OR [article in press]/lim OR [conference paper]/lim OR [conference review]/lim OR [review]/lim) AND ('neoplasm'/exp OR neoplasm OR neoplasm* OR tumor* OR câncer*) AND ([article]/lim OR [article in press]/lim OR [conference paper]/lim OR [conference review]/lim OR [review]/lim) AND ('alcoholism'/exp OR alcoholism OR alcohol* OR 'alcohol abuse'/exp OR 'alcohol abuse' OR 'binge drinking'/exp OR 'binge drinking' OR 'tobacco'/exp OR tobacco OR 'smoking'/exp OR smoking OR smoke* OR cigarette*) AND ([article]/lim OR [article in press]/lim OR [conference paper]/lim OR [conference review]/lim OR [review]/lim)				
PsycINFO	("Social Support*" OR "Psychosocial Support*" OR "Psychological Support*" OR "emotional support*" OR "Support Group*") AND Index terms({Neoplasms} OR {Breast Neoplasms} OR {Endocrine Neoplasms} OR {Leukemias} OR {Melanoma} OR {Metastasis} OR {Nervous System Neoplasms} OR {Terminal Cancer} OR Any fied (Neoplasm* OR Tumor* OR Câncer*) AND Index terms ({Alcohol Use Disorder} OR {Alcohol Intoxication} OR {Alcohol Abuse}) OR Any fied (Alcoho* OR "Binge Drinking" OR Tobacco OR "Smoking" OR Smok* OR cigarette*)				
SCOPUS	("Social Support*" OR "Psychosocial Support*" OR "Psychological Support*" OR "emotional support*" OR "Support Group*") AND (Neoplasm* OR Tumor* OR Câncer*) AND (Alcohol* OR "Binge Drinking" OR Tobacco OR "Smoking" OR Smok* OR cigarette*)				
Web of Science	("Social Support*" OR "Psychosocial Support*" OR "Psychological Support*" OR "emotional support*" OR "Support Group*") (Topic) and Article or Review Article or Proceeding Paper (Document Types) AND (Neoplasm* OR Tumor* OR Câncer*) (Topic) and Article or Review Article or Proceeding Paper (Document Types) AND (Alcohol* OR "Binge Drinking" OR Tobacco OR "Smoking" OR Smok* OR cigarette*) (Topic) and Article or Review Article or Proceeding Paper (Document Types)				

**Figure 1** – Strategies used to search the databases organized for the integrative review. Tangará da Serra, MT, Brazil, 2024

The search strategy transferred all the derived results to EndNote version 20, a reference manager, to identify and remove duplicates<sup>(19)</sup>. The information was then transferred to the Rayyan Platform, designed to screen and select articles individually and by peers through a semi-automated process<sup>(20)</sup>. Two stages were required to choose the studies, conducted by two independent review professionals. First, the articles were screened, and the titles and abstracts were read. The articles were then read and assessed in total. A third reviewer was consulted in a consensus meeting in disagreements at each stage.

Based on the methodology employed, the data used were those from primary studies, faithfully following a scheme drawn up by the authors to identify the

survey and its properties. The selected studies were analyzed according to their quantitative or qualitative approach and the methodological design of the research, using the terminology proposed by the authors<sup>(21)</sup>.

## **Results**

Three thousand and ten (3,010) documents were identified, and 1,379 were removed due to duplication. Next, 1,631 titles and abstracts were read, and 24 articles were chosen to be read in full. After this analysis and according to the eligibility criteria, eight articles were excluded, resulting in 14 articles selected for this integrative review. Additional details on data selection are shown in Figure 2.

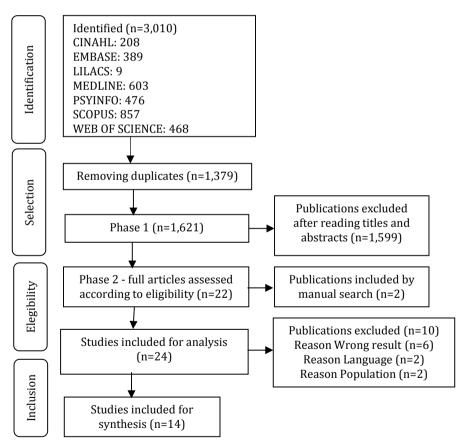


Figure 2 – Article selection process. Tangará da Serra, MT, Brazil, 2024

Figure 3 shows the second condensation of the studies: first author, year of publication, country, jour-

nal, study design, instrument or scale that assesses social support, and social support network cited<sup>(1)</sup>.

Author/ year/ country	Journal	Study design	Social support assessment tool	Support network cited
Andersen et al <sup>(22)</sup> 2004 USA	J Clin Oncol	A randomized clinical trial	The Perceived Social Support (PSS) Scales for Friends and Family measure the need and perception of receiving support from family or friends.	Children, family, and spouse.
Walker et al <sup>(23)</sup> 2004 USA	Prev Med	A coorte retrospective	Social Support Inventory (SSI): assessment of social support, 17 questions.	Not applicable.
Berg et al <sup>(24)</sup> 2013 USA	Psychooncology	Aretrospective cohort with a mixed approach	Multidimensional Scale of Perceived Social Support (MSPSS); composed of 12 questions divided into three subscales: support from friends, family and significant others.	Family and friends.
Chen et al <sup>(25)</sup> 2013 China	Asian Pac J Cancer Prev	A cross-sectional correlational study	Social Support Scale - modified (SSS-m) of 32 questions, which assesses the perceived support of family members and health professionals.	Family and health professionals.
Gonzalez et al <sup>(26)</sup> 2013 USA	University of South Florida	An exploratory descriptive cross- sectional study	ENRICHD Social Support Instrument (ESSI): 5 questions that assess emotional support: "Is there someone available to give you good advice about a problem?" and "Is there someone available to you who shows you love and care?"	Not mentioned.
Graner et al <sup>(27)</sup> 2013 Brazil	Paulista State University Júlio de Mesquita Filho	A longitudinal descriptive study	Items on social support: "Do you have someone to share your problems with? With whom? Do you feel satisfied with the support you receive? Do you profess any religion?".	Family, religion, and career.
Yang et al <sup>(28)</sup> 2013 South Korea	Jpn J Clin Oncol	A multicenter nationwide study	DUKE-UNC Functional Social Support Questionnaire (FSSQ). There are only three items to assess perceptions of the amount of social and personal support (affective and trusting).	Spouse.
Poghosyan et al <sup>(29)</sup> 2016 USA	J Cancer Surviv	A cross-sectional study with a quantitative approach	Question: "How often do you get the socio-emotional support you need?" The answer options were "always," "usually," "sometimes," "rarely," and "never."	Not mentioned.
Black et al <sup>(30)</sup> 2016 USA	Psychooncology	Population-based cohort study	Question: Is there a person who helps you with medical decision-making and cancer-related health issues?	Parents, spouse, childre and amigos.
Choi et al <sup>(31)</sup> 2016 South Korea	J Korean Med Sci	A cross-sectional study	Not mentioned.	Spouse.
Manne et al <sup>(32)</sup> 2016 USA	Head Neck	A cross-sectional, descriptive, and exploratory study	Supportive Care Needs Survey - short version. 25 questions, 5 domains: physical, psychological, health care systems and information, patient care and support, and sexuality domains.	Not mentioned.
Chang et al <sup>(33)</sup> 2018 China	J Adv Nurs	A cross-sectional study with a quantitative approach	Social Support Scale (SSS-m) with 20 questions; four subscales: emotional/informational support, tangible support, affective support, and positive social interaction.	Not mentioned.
Krasne et al <sup>(34)</sup> 2022 USA	Support Care Cancer	A multicenter longitudinal cohort study	Non-validated instrument: 18 questions on emotional support.	Family, parents, friends and spouse.
Miller et al <sup>(35)</sup> 2022 United Kingdom	Support Care Cancer	Qualitative cross- sectional study	Structure analysis using the four types of social support proposed by Cohen and Wills: emotional, informational, social companionship and instrumental support.	Children, friends, spouses, neigh- bors, relatives.

Figure 3 – Summary of the studies included in the integrative review on social support for people with cancer and the use of tobacco and/or alcohol. Tangará da Serra, MT, Brazil, 2024

Of the studies analyzed, eight were conducted in different countries, including the United States of America (USA)<sup>(22-24,26,29-30,32,34)</sup>, China<sup>(25,33)</sup>, and South Korea<sup>(28,31)</sup>, with two articles from each country, as well as one from the United Kingdom<sup>(35)</sup> and one from Brazil<sup>(27)</sup>.

As for the source or context in which the data was collected, 10 (71%) were carried out in hospitals, while 4 (29%) came from national surveys. A total of

12,007 participants were assessed, with the most significant sample comprising 8,055 patients<sup>(29)</sup> and the most minor, 24 people with cancer<sup>(35)</sup>. The average age was 56.5 years, with most participants being adults.

Among the studies, 9 (64%) analyzed the types of cancer intrinsically related to alcohol consumption and smoking<sup>(23-25,27-29,32-33)</sup>, while 5 (36%) addressed the indirect relationship<sup>(22,30-31,34-35)</sup>. Figure 4 shows a summary of the main results.

## Main results

Psychological intervention promoted improvements in the perception of social support, with a significant reduction in anxiety symptoms and a reduction in smoking<sup>(22)</sup>.

The likelihood of relapse to smoking was, at first, reduced after hospital discharge. However, it increased after two months. Active smokers showed a greater desire (craving) to smoke, which was related to symptoms of depression. Those with higher levels of psychological resistance and more social support showed an increase in the levels of urges to smoke<sup>(23)</sup>.

Motivational factors for quitting smoking include the impact of a cancer diagnosis, social support - such as advice from a doctor to leave - and influences from the social environment. On the other hand, barriers to quitting involve feelings of hopelessness, high levels of stress, and nicotine dependence<sup>(24)</sup>.

Factors such as family social support, religious beliefs, alcohol consumption, discomfort with symptoms, and social support were identified as significant predictors of depression. Individuals with low levels of family support were more likely to develop depression.

Individuals who chose to hide their diagnosis avoided informal interactions, showed a greater propensity to consume alcohol, and had a higher risk of recent recurrence. Feelings such as internalized shame and positive re-evaluation emerged as relevant elements in the process of concealing the diagnosis, also influencing behavior about alcohol consumption<sup>(26)</sup>.

The expectation of adequate treatment is more pronounced among individuals with more excellent social support. This is associated with more realistic perceptions of their state of health, greater satisfaction with the care provided, positive expectations regarding the appropriateness of the treatment, a clearer understanding of the information provided, and a strengthened intention to follow the treatment and resume their daily activities on a regular basis<sup>(27)</sup>.

Alcohol use, the early stage of cancer, cancer diagnosis, and a high perception of social support were identified as factors associated with continued smoking<sup>(28)</sup>.

The rates of psychological distress in the last month and the low rates of social support are recurring factors. Survivors who received more robust social support were significantly less likely to continue smoking than those who experienced limited social support<sup>(29)</sup>.

The leading providers of social support were predominantly the patients' spouses or children. A negative association was observed between mindfulness practice, smoking, and alcohol use<sup>(30)</sup>.

Individuals with restricted social support showed a greater predisposition to psychological distress, which was also more prevalent among active smokers, those who used alcohol at risk levels, those with chronic diseases, and those who had negative perceptions of their state of health<sup>(31)</sup>.

Lack of energy was identified as a relevant support need. Individuals abstinent from alcohol and those with a greater fear of relapse expressed a greater desire for information about available treatments and their long-term effects. On the other hand, smokers and patients with high levels of distress revealed a more intense demand for social support<sup>(32)</sup>.

The group that stopped smoking showed substantially more excellent social support, lower levels of depression and better socioemotional function compared to the group that continued to smoke. Single individuals with poor social support and impaired socioemotional function were more likely to continue smoking<sup>(33)</sup>.

The most frequently mentioned coping strategy was social support, with moderate or high use of emotional support from partners, parents, and other family members and dependence on support from friends<sup>(34)</sup>.

Companionship and a sense of responsibility were essential motivational factors for adherence to physical activity; social influences played a relevant role in alcohol use; instrumental support was a determining factor in dietary choices and habits, while informational support stood out as a crucial element in promoting behavioral changes and validating healthy practices<sup>(35)</sup>.

Figure 4 - Summary of the main results of the studies investigated. Tangará da Serra, MT, Brazil, 2024

### Discussion

This study analyzed publications on social support for people diagnosed with cancer, smoking, and alcohol use using seven databases. It was observed that most of the studies used validated instruments to assess social support, while others used questionnaires developed by the authors themselves. In addition, several studies investigated the presence of depression, as well as the use of tobacco and alcohol, both before and after a cancer diagnosis.

It should be noted that five of the risk factors were associated with the development of cancer and are directly related to habits and lifestyles that can be modified, such as an inadequate diet, a sedentary lifestyle, excess body fat, as well as the use of cigarettes and alcohol<sup>(36)</sup>. In line with the results of this study, the combination of alcohol consumption and smoking can significantly increase the risk of developing neoplasms<sup>(37)</sup>.

Because these drugs are widely accepted in society, raising awareness among the population about the use of these substances as a risk factor for illness is still quite challenging and complex. In this way, the findings highlight the importance of education, prevention, and health promotion as essential strategies for promoting healthy choices and encouraging positive lifestyle changes.

In this context, most of the studies in this review also investigated the use of tobacco/alcohol recently or before cancer. In line with this evidence, the potentially carcinogenic effects of these substances and the continued consumption by people with cancer become a health problem, as they pose an additional risk of sequelae, such as unfavorable prognosis, both physical and psychiatric comorbidities, neoplastic recurrence, development of a second tumor, metastases and, additionally, late effects of treatment<sup>(4)</sup>.

The stress associated with becoming ill with cancer acts as a trigger for problems among those who also use tobacco/alcohol, and this relationship varies according to the different stages of the disease. In a

survey of cancer survivors, smoking and alcohol use were analyzed as strategies for promoting relaxation, relieving stress, and dealing with negative emotions, anxiety, and psychological tension<sup>(38)</sup>. Critically examined, the use of these substances as a coping strategy among cancer patients stands out as an inappropriate response to stress because, although it offers momentary relief, it aggravates long-term health risks.

In this sense, approaches using standardized and validated instruments to assess substance use behavior in people with cancer can also serve as an intervention to promote health because they raise awareness about the problems related to consumption<sup>(27,33)</sup> but also offer guidance that supports abstinence from use throughout all stages of cancer illness(39). It is worth noting, therefore, that the use of standardized instruments to measure smoking behaviors and alcohol use in cancer patients is relevant for measuring consumption and as an educational intervention that can raise awareness of the associated risks. However, its effectiveness depends on a sensitive and contextualized application and adequate follow-up to provide ongoing cessation support at all stages of treatment. Critical analysis should consider integrating these tools with other multidisciplinary strategies to maximize patient health benefits.

In addition, it is pertinent to point out that, in line with the results of this review study, scientific literature indicates that appropriate social support can mitigate risk behaviors and the vulnerabilities to which people are subject. This highlights the importance of social networks, characterized by meaningful interpersonal relationships and genuine connections, as a protective factor in promoting healthy habits, seeking improvements, obtaining favorable prognoses, and aspiring for well-being<sup>(40)</sup>.

It is imperative to recognize that social support plays a crucial role in addition to adopting healthy lifestyles as a cancer prevention strategy, especially for those with a more limited support network<sup>(41)</sup>. The literature suggests that poor social support is associated with the harmful use of these substances, as well as

other habits that compromise health<sup>(13)</sup>. In line with the results of this review, support from family, friends, and informal caregivers is closely associated with positive outcomes in cancer treatment, contributing to a reduction in psychological suffering and promoting improvements in emotional well-being<sup>(42)</sup>.

Social support provided by the spouse is an essential element that can broaden perceptions of social support. The feeling of having emotional and moral support from one's partner favors coping more effectively with the disease. In addition, informational support from other family members also plays a significant role in mitigating psychological suffering and symptoms in people diagnosed with cancer<sup>(43)</sup>.

Because becoming ill with cancer is an intrinsically tricky condition in patients' lives, people and social support relationships, including family members, networks of friends, and community groups, also have a significant influence on smoking behavior. Therefore, interventions that involve the participation of people from the patient's social network, particularly those who are smokers, have the potential to improve smoking cessation rates. It is important to note that people who have survived cancer and have more robust social support show a lower tendency to continue smoking<sup>(39)</sup>.

Looking critically, it is worth mentioning that although social support from the spouse and their family is fundamental to coping with cancer, it is essential to recognize that not all support is positive; some dynamics can generate pressure or stress, especially in cases where the partner is also dealing with emotional difficulties. Interventions that include the social network need to be structured to ensure everyone involved understands how to offer support without reinforcing harmful behaviors.

Because of these elements, the accessibility of healthcare facilities and the presence of protective factors, such as integrated networks and family support, play a crucial role in the individual's resilience in the face of the illness process, as well as in their social adaptation and reintegration into new life circumstances. Thus, this form and type of social support should

be incorporated into social and healthcare practices, promoting social interaction and preserving a group with diverse social connections<sup>(44)</sup>.

In addition to social support, issues related to depression in individuals affected by cancer were also investigated. Depression is one of the most common mental disorders among cancer patients and is a condition frequently observed at all stages of the disease, from diagnosis to the control period<sup>(45)</sup>. Therefore, the relationship between social support and psychological well-being, together with the reduction of emotional distress in cancer patients, can significantly contribute to their ability to cope with the disease<sup>(46)</sup>.

Social support is a fundamental psychosocial element that favors mental health and provides help in multiple dimensions of the lives of cancer survivors throughout their illness. It is, therefore, imperative to improve interventions aimed at assessing and providing social support, recognizing it as an essential strategy for improving the quality of these individuals' mental health<sup>(47)</sup>. In this context, social support should be integrated into multidisciplinary approaches, including professional psychological support and coping education. To optimize their effectiveness, interventions should be continuous, regularly assessing the impact of social support and adjusting strategies as needs evolve throughout the illness journey.

The disparity between an individual's ways of thinking (intentions) and behavior (actions) is referred to as the intention-behavior gap. A subject's ability to materialize their intentions is influenced by internal variables, including beliefs, skills, and knowledge, as well as external factors such as time availability, economic resources, and social support, the latter of which was addressed in our study. From this perspective, health professionals must make significant efforts to encourage behavioral changes, especially concerning problems such as alcoholism and smoking among cancer patients, since such interventions can contribute to improving the health and longevity of both affected individuals and their families (48).

In addition to the findings of this review, it should be noted that cancer survivors are more likely

to stop drinking alcohol when they are fully aware of the adverse effects associated with this substance. In this context, medical advice plays a crucial role and is highly valued; the professional's recommendation to stop using alcohol induces participants to reflect on their drinking habits<sup>(38)</sup>. This also highlights the importance of the support provided by health professionals.

Supporting various cancer prevention policies is ultimately paramount, providing a solid foundation for researchers and practitioners to carry out meaningful interventions in their fields of work in communities. Designing policies to be more effective locally and establishing partnerships with communities to investigate the reasons for low adherence to specific strategies is imperative. In addition, these policies should be adjusted to more effectively meet the specific needs of the local population while promoting public education about the interrelationships between health behaviors and the chances of developing cancer<sup>(49)</sup>, with particular attention to smoking and alcohol use.

# **Study limitations**

In terms of the limitations of this study, it is worth mentioning that the research was carried out in seven databases, excluding the gray literature. However, these databases represent the primary sources of information in the health area, and there were no restrictions on the period of publication of the articles analyzed. In addition, it is worth highlighting the limitations inherent in examining the quality of the research method since this was not the central objective of this review study.

## **Contributions to practice**

Social support, incredibly emotional, informational, and family support, is essential for improving the quality of life of these people, offering support during the treatment phase and their recovery. These types of support help to reduce emotional stress and

can contribute to positive changes in behavior, such as reducing consumption of these substances and strengthening treatment adherence. Thus, understanding the importance of this social support can lead to its encouragement and the development of more personalized and successful strategies in cancer care, focusing on patients' emotional and behavioral aspects. In addition, the importance of government support and the work of health institutions and professionals should be emphasized. It is imperative to carry out research in this area, in addition to developing strategies that promote engagement in behavioral change towards total abstinence from smoking and alcohol use, as well as strengthening social support networks in their various facets.

#### Conclusion

It was concluded that social support for cancer patients with a current or previous history of smoking and alcohol use is significant since it can promote emotional benefits, encourage healthy changes in habits, and improve well-being and quality of life throughout treatment and recovery. In this scenario, social support emerges as an essential component in cancer management, particularly for those who have a history of using these substances.

Thus, by motivating this support, we recognize its relevance to the treatment of people suffering from cancer, their well-being, and the improvement of their quality of life, especially for those who face difficulties associated with the use of alcohol and tobacco. In addition, the formation of a support network becomes a key point in the treatment and recovery process of these individuals, with a special focus on people seeking to stop using these substances.

# **Authors' contribution**

The elaboration, methodological design, analysis, and interpretation of the data; The writing of the manuscript or relevant critical revision of the intellectual content; The approval of the final version to be

published; Responsibility for all aspects of the manuscript in ensuring the accuracy and integrity of any part of the manuscript: Reis JB, Pillon SC. Writing or relevant critical revision of the intellectual content; Approval of the final version to be published; Responsibility for all aspects of the text in ensuring the accuracy and integrity of any part of the manuscript: Mendes KDS, Bosso R, Pegoraro NPJ, Santos M.

#### References

- 1. Kolsteren EEM, Deuning-Smit E, Chu AK, Van der Hoeven YCW, Prins JB, Van der Graaf WTA, et al. Psychosocial aspects of living long term with advanced cancer and ongoing systemic treatment: a scoping review. Cancers. 2022;14(16):3889. doi: https://doi.org/10.3390/cancers14163889
- Shi M, Luo C, Oduyale OK, Zong X, LoConte NK, Cao Y. Alcohol consumption among adults with a cancer diagnosis in the all of us research program. JAMA Netw Open. 2023;6(8):e2328328. doi: https:// doi.org/10.1001/jamanetworkopen.2023.28328
- 3. Kazlauskiene J, Navickas A, Lesinskiene S, Bulotiene G. Risk factors for suicide in cancer patients and preventive measures: a literature review. Arch Psych Psych. 2022;24(4):68-77. doi: https://doi.org/10.12740/APP/152776
- 4. Howren MB, Christensen AJ, Pagedar NA. Problem alcohol and tobacco use in head and neck cancer patients at diagnosis: associations with health-related quality of life. Support Care Cancer. 2022;30(10):8111-8. doi: https://dx.doi.org/10.1007/s00520-022-07248-3
- 5. Nascimento AQ, Dantas DB, Melo GS, Gomes FC, Melo Neto JS. Impact of sociodemographic factors and screening, diagnosis, and treatment strategies on colorectal cancer mortality in Brazil: a 20-year ecological study. PLoS One. 2022;17(9):e0274572. doi: http://doi.org/10.1371/journal.pone.0274572
- 6. Corovic S, Vucic V, Mihaljevic O, Djordjevic J, Colovic S, Radovanovic S, et al. Social support score in patients with malignant diseases-with sociodemographic and medical characteristics. Front Psychol. 2023;14:1160020. doi: https://doi.org/10.3389/fpsyg.2023.1160020

- Pasek M, Goździalska A, Jochymek M, Caruso R. Social support in a cancer patient-informal caregiver dyad: a scoping review. Cancers (Basel). 2023;15(6):1754. doi: https://doi.org/10.3390/ cancers15061754
- 8. Yao M, Wu DC, Collins NL. Bicultural identity and social support seeking processes: the effects of cultural priming among East Asian Americans. Psi Chi J. 2022;27(4):256. doi: https://doi.org/10.24839/2325-7342.JN27.4.256
- Sherbourne CD, Stewart AL. The MOS social support survey. Soc Sci Med. 1991;32(6):705-14. doi: http://doi.org/10.1016/0277-9536(91)90150-b
- Kailemia PN, Lee EC, Renfrew MJ. Intersection of social determinants of symptomatic breast cancer presentation in a rural setting: a critical ethnographic study. J Adv Nurs. 2023;79(5):1882-97. doi: https://doi.org/10.1111/jan.15645
- 11. Gabarrell-Pascuet A, García-Mieres H, Giné-Vázquez I, Moneta MV, Koyanagi A, Haro JM, et al. The association of social support and loneliness with symptoms of depression, anxiety, and post-traumatic stress during the COVID-19 pandemic: a meta-analysis. Int J Environ Res Public Health. 2023;20(4):2765. doi: https://doi.org/10.3390/ijerph20042765
- Deegan A, Brennan C, Gallagher P, Lambert V, Dunne S. Social support and childhood cancer survivors: a systematic review (2006-2022). Psychooncology. 2023;32(6):819-33. doi: http://doi. org/10.1002/pon.6128
- 13. Rodríguez-González N, Ramos-Monserrat MJ, Arriba-Fernández A. Cómo influyen los determinantes sociales de la salud em el cáncer de mama? Rev Senol Patol Mamar. 2023;36(3):100467. doi: https://doi.org/10.1016/j.senol.2022.100467
- 14. Guan T, Cook P, Xu S, Ranzinger LH, Conklin JL, Alfahad AAS, et al. Family-based psychosocial interventions for adult Latino patients with cancer and their caregivers: a systematic review. Front Psychol. 2023;14:1052229. doi: http://doi.org/10.3389/fpsyg.2023.1052229
- 15. Souza CR, Mendes KDS, Moraes CM, Galvão CM. Application of a risk scale for injuries resulting from surgical positioning: an integrative review. Rev Rene. 2024;25:e93531. doi: https://doi.org/10.15253/2175-6783.20242593531

- 16. Foster ED, Deardorff A. Open Science Framework (OSF). J Med Libr Assoc. 2017;105(2):203-6. doi: https://doi.org/10.5195/jmla.2017.88
- 17. Reis JB, Silva CBP, Pegoraro NPJ, Pillon SC, Mendes KDS. Social support of people with cancer and the use of alcohol and/or tobacco: protocol for an integrative literature review. Project [Internet]. 2023 [cited Aug 17, 2024]. Available from: https://osf.io/r7hc6
- 18. Karino ME, Felli VEA. Enfermagem baseada em evidências: avanços e inovações em revisões sistemáticas. Ciênc Cuid Saúde. 2012;11(supl):11-15. doi: https://doi.org/10.4025/cienccuidsaude. v11i5.17048
- 19. Mendes KDS, Silveira RCCP, Galvão CM. Use of the bibliographic manager in the selection of primary studies in integrative reviews. Texto Contexto Enferm. 2019;28:e20170204. doi: https://doi.org/10.1590/1980-265X-TCE-2017-0204
- 20. Ouzzani M, Hammady H, Fedorowicz Z, Elmagarmid A. Rayyan—a web and mobile app for systematic reviews. Syst Rev. 2016;5:210. doi: https://doi.org/10.1186/s13643-016-0384-4
- 21. Melnyk BM, Fineout-Overholt E. Evidence-based practice in nursing & healthcare. A guide to best practice. 4th ed. Philadelphia: Wolters Kluwer, Lippincott Williams e Wilkins; 2019.
- 22. Andersen BL, Farrar WB, Golden-Kreutz DM, Glaser R, Emery CF, Crespin TR, et al. Psychological, behavioral, and immune changes after a psychological intervention: a clinical trial. J Clin Oncol. 2004;22(17):3570-80. doi: https://dx.doi.org/10.1200/JC0.2004.06.030
- 23. Walker MS, Larsen RJ, Zona DM, Govindan R, Fisher EB. Smoking urges and relapse among lung cancer patients: findings from a preliminary retrospective study. Prev Med. 2004;39(3):449-57. doi: https://doi.org/10.1016/j.ypmed.2004.04.035
- 24. Berg CJ, Thomas AN, Mertens AC, Schauer GL, Pinsker EA, Ahluwalia JS, et al. Correlates of continued smoking versus cessation among survivors of smoking-related cancers. Psychooncology. 2013;22(4):799-806. doi: https://dx.doi.org/10.1002/pon.3077
- 25. Chen SC, Huang BS, Lin CY. Depression and predictors in Taiwanese survivors with oral cancer. Asian Pac J Cancer Prev. 2013;14(8):4571-6. doi: https://doi.org/10.7314/apjcp.2013.14.8.4571

- 26. Gonzalez BD. Prevalence, predictors, and correlates of patient concealment of a lung cancer diagnosis. Tampa (FL): Department of Psychology, College of Arts & Sciences, University of South Florida [Internet]. 2013 [cited Aug 17, 2024]. Available from: https://www.proquest.com/docview/1428165225/99DD57F10F574B-FEPQ/1?%20Theses&accountid=14643&source-type=Dissertations%20
- 27. Graner KM. Pacientes em processo diagnóstico de câncer de cabeça e pescoço: aspectos psicológicos, percepções e expectativas. Botucatu (SP): Faculdade de Medicina de Botucatu, Universidade Estadual Paulista Júlio de Mesquita Filho [Internet]. 2013 [cited Aug 17, 2024]. Available from: https://acervodigital.unesp.br/handle/11449/108529
- 28. Yang HK, Shin DW, Park JH, Kim SY, Eom CS, Kam S, et al. The association between perceived social support and continued smoking in cancer survivors. Jpn J Clin Oncol. 2013;43(1):45-54. doi: https://doi.org/10.1093/jjco/hys182
- 29. Poghosyan H, Darwish SA, Kim SS, Cooley ME. The association between social support and smoking status in cancer survivors with frequent and infrequent mental distress: results from 10 US states, 2010. J Cancer Surviv. 2016;10(6):1078-88. doi: https://doi.org/10.1007/s11764-016-0551-6
- 30. Black DS, Li MJ, Ihenacho U, Nguyen NT, Reyes MF, Milam J, et al. Shared health characteristics in Hispanic colorectal cancer patients and their primary social support person following primary diagnosis. Psychooncology. 2016;25(9):1028-35. doi: https://doi.org/10.1002/pon.3938
- 31. Choi KH, Park SM. Psychological status and associated factors among Korean cancer survivors: a cross-sectional analysis of the fourth & fifth Korea national health and nutrition examination surveys. J Korean Med Sci. 2016;31(7):1105-13. doi: https://doi.org/10.3346/jkms.2016.31.7.1105
- 32. Manne S, Hudson SV, Baredes S, Stroup A, Virtue SM, Paddock L, et al. Survivorship care experiences, information, and support needs of patients with oral and oropharyngeal cancer. Head Neck. 2016;38(suppl 1):e1935-46. doi: https://dx.doi.org/10.1002/hed.24351
- 33. Chang SL, Lo CH, Peng HL, Chen CR, Wu SC, Chen SC. Factors associated with continued smoking after treatment of oral cavity cancer: an age and survival

- time-matched study. J Adv Nurs. 2018;74(4):926-34. doi: https://doi.org/10.1111/jan.13506
- 34. Krasne M, Ruddy KJ, Poorvu PD, Gelber SI, Tamimi RM, Schapira L, et al. Coping strategies and anxiety in young breast cancer survivors. Support Care Cancer. 2022;30(11):9109-16. doi: https://doi.org/10.1007/s00520-022-07325-7
- 35. Miller N, Conway R, Pini S, Buck C, Gil N, Lally P, et al. Exploring the perceived impact of social support on the health behaviours of people living with and beyond cancer during the COVID-19 pandemic: a qualitative study. Support Care Cancer. 2022;30(10):8357-66. doi: https://doi.org/10.1007/s00520-022-07291-0
- 36. Olakowski M, Bułdak Ł. Modifiable and non-modifiable risk factors for the development of non-hereditary pancreatic cancer. Medicina (Kaunas). 2022;58(8):978. doi: https://dx.doi.org/10.3390/medicina58080978
- 37. Scherübl H. Tabakrauchen und krebsrisiko. Pneumologie. 2023;77(1):27-32. doi: https://dx.doi.org/10.1055/a-1916-1466
- 38. Ferraguti G, Terracina S, Petrella C, Greco A, Minni A, Lucarelli M, et al. Alcohol and head and neck cancer: updates on the role of oxidative stress, genetic, epigenetics, oral microbiota, antioxidants, and alkylating agents. Antioxidants (Basel). 2022;11(1):145. doi: https://doi.org/10.3390/antiox11010145
- 39. Neumann M, Murphy NJ, Seetharamu N. Smoking cessation after cancer diagnosis: relationships matter. J Clin Oncol. 2022;40(suppl 16):e24039. doi: http://doi.org/10.1200/JCO.2022.40.16\_suppl.e24039
- 40. Carter BJ, Jafry MZ, Siddiqi AD, Rogova A, Liaw W, Reitzel LR. Incorporation of social determinants of health into health care practice: a strategy to address health disparities. Reference Module in Biomedical Sciences. Compr Precis Med. 2024;1:363-82. doi: https://dx.doi.org/10.1016/B978-0-12-824010-6.00016-2
- 41. Chen N, Liang H, Huang T, Huang N. Exposome approach for identifying modifiable factors for the prevention of colorectal cancer. Sci Rep. 2022;12(1):21615. doi: https://doi.org/10.1038/s41598-022-25832-9

- 42. Cetin N. Examining the role of post-treatment family support in pediatric and adolescent cancer survivors: a systematic review. J Adolesc Young Adult Oncol. 2023;12(1):1-8. doi: https://doi.org/10.1089/jayao.2021.0179
- 43. Ruiz-Rodríguez I, Hombrados-Mendieta I, Melguizo-Garín A, Martos-Méndez MJ. The importance of social support, optimism and resilience on the quality of life of cancer patients. Front Psychol. 2022;13:833176. doi: https://doi.org/10.3389/fpsyg.2022.833176
- 44. Sampaio C, Ramos N. Women's health access in the context of forced migration in Portugal: vulnerabilities and adaptation. Rev Ciênc Plural [Internet]. 2023 [cited Aug 17, 2024];9(2):311928. Available from: https://periodicos.ufrn.br/rcp/article/view/31928/17297
- 45. Guo YQ, Ju QM, You M, Liu Y, Yusuf A, Soon LK. Depression, anxiety and stress among metastatic breast cancer patients on chemotherapy in China. BMC Nurs. 2023;22(1):33. doi: https://doi.org/10.1186/s12912-023-01184-1
- 46. Bottaro R, Craparo G, Faraci P. What is the direction of the association between social support and coping in cancer patients? A systematic review. J Health Psychol. 2023;28(6):524-40. doi: https://doi.org/10.1177/13591053221131180
- 47. Pinto BM, Dunsiger SI, DeScenza VR, Stein K. Mediators of physical activity outcomes in a peer-led intervention for breast cancer survivors. Psychooncology. 2023;32(4):619-627. doi: https://doi.org/10.1002/pon.6107
- 48. Espinosa-Salas S, Gonzalez-Arias M. Behavior modification for lifestyle improvement. StatPearls [Internet]. 2023 [cited Aug 17, 2024]. Available from:https://www.ncbi.nlm.nih.gov/books/NBK592418
- 49. Glasgow TE, Miller CA, McGuire KP, Freudenberger DC, Fuemmeler BF. Support for cancer prevention public health policies: results from a nationally representative sample of residents in the United States. Transl Behav Med. 2022;12(12):1124-32. doi: https://doi.org/10.1093/tbm/ibac056



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