

## Profile of palliative care patients who display suicidal ideation: a systematic review

*Perfil de pacientes em cuidados paliativos que apresentam ideação suicida: revisão sistemática*

*Perfil de pacientes en cuidados paliativos que presentan ideación suicida: revisión sistemática*

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### ABSTRACT

**Objective:** to draw the clinical and sociodemographic profile of patients in palliative care who display suicidal ideation. **Method:** this systematic review, which included observational studies published from 2016 to 2021, was conducted in the Pubmed, CINAHL, EMBASE, PsycINFO and Web of Science databases in May 2021. The sample consisted of 10 articles. **Results:** patients in palliative care who manifested suicidal ideation were predominantly female, elderly, highly educated, presented with various types of cancer, in pain, with poor prognoses, limited ability to perform daily activities, and symptoms indicative of depression and/or anxiety. **Conclusion:** it is essential to evidence the characteristics of palliative care patients with suicidal ideation in order to understand the complexity of care better, as well as to outline measures to contemplate the unique needs of this public and provide these individuals with better quality of life.

**Descriptors:** Nursing; Palliative Care; Mental Health; Suicidal Ideation; Systematic Review.

### RESUMO

**Objetivo:** identificar o perfil clínico e sociodemográfico de pacientes em cuidados paliativos que apresentam ideação suicida. **Método:** revisão sistemática, realizada nas bases Pubmed, CINAHL, EMBASE, PsycINFO e Web of Science, em maio de 2021, que incluiu estudos observacionais, publicados no período de 2016 a 2021. A amostra foi composta por dez artigos. **Resultados:** os pacientes em cuidados paliativos que manifestaram ideação suicida são, predominantemente, do sexo feminino, idosos, com alto nível educacional, acometidos por diferentes tipos de câncer, apresentam dor, prognóstico ruim, limitação para execução de atividades de vida diária e sintomas indicativos de depressão e/ou ansiedade. **Conclusão:** evidenciar as características dos pacientes em cuidados paliativos com ideação suicida é fundamental para maior compreensão da complexidade envolvida no cuidar, bem como para traçar ações que atendam a singularidade deste público, fornecendo maior qualidade de vida para esses indivíduos.

**Descritores:** Enfermagem; Cuidados Paliativos; Saúde Mental; Ideação Suicida; Revisão Sistemática.

### RESUMEN

**Objetivo:** identificar el perfil clínico y sociodemográfico de pacientes en cuidados paliativos que presentan ideación suicida. **Método:** revisión sistemática, realizada en las bases Pubmed, CINAHL, EMBASE, PsycINFO y Web of Science, en mayo de 2021, que incluyó estudios observacionales, publicados entre 2016 y 2021. La muestra incluyó 10 artículos. **Resultados:** los pacientes en cuidados paliativos que manifestaron ideación suicida son, predominantemente, del sexo femenino, ancianos, con educación superior, sufriendo diferentes tipos de cáncer, sintiendo dolor, con malo pronóstico, limitación para realizar actividades cotidianas y síntomas indicativos de depresión y/o ansiedad. **Conclusión:** evidenciar las características de los pacientes en cuidados paliativos con ideación suicida es fundamental para que haya más comprensión de la complejidad en torno del cuidar, así como para delinear acciones que respondan la singularidad de este público, proporcionándoles una mejor calidad de vida a esos individuos.

**Descritores:** Enfermería; Cuidados Paliativos; Salud Mental; Ideación Suicida; Revisión Sistemática.

## INTRODUCTION

It is indisputable that the advances in the Medicine field have contributed to an increase in patients' survival. However, many people present severe non-communicable and incurable chronic diseases that threaten their life. Such phenomenon makes countless patients eligible for Palliative Care<sup>1</sup>.

The literature points out that Palliative Care patients may have a desire for early death as a way to prevent prolongation of their emotional, physical and social distress. However, the personal experience and each patient's profile influence the different paths through which the wish to die emerges in people<sup>2</sup>.

The prevalence of the wish to die varies considerably across research studies. German researchers asserted that nearly 10% of Palliative Care patients have suicidal thoughts, which are associated with loss of autonomy, increased

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physical dependence, concern about being a burden for the family and hopelessness in the face of a limited prognosis<sup>3,4</sup>. Other scholars have identified that 37.8% of terminally-ill individuals stated a wish to die related to physical and psychological distress, which could be the trigger for a suicidal process<sup>5</sup>.

The term “suicidal ideation” (SI) refers to a range of contemplations, wishes to hasten death, concerns about death and suicide itself<sup>6</sup>. Although there is no consensus on the term, SI is considered an important predictor of suicidal risk throughout life; therefore, identifying the profile of those affected is fundamental for the elaboration of early intervention projects<sup>7</sup>.

SI is an important and serious consequence arising from not recognizing Palliative Care patients' distress early in time, and health professionals should be attentive to this<sup>8</sup>.

In order to contribute to the elaboration of early intervention tools and care practices targeted at this area, this study aims at identifying the clinical and sociodemographic profile of Palliative Care patients that present SI.

## METHOD

This study is a systematic review carried out based on the following stages: elaboration and registration of the review protocol, definition of the review question and of the eligibility criteria, search and selection of studies, data collection, and synthesis and presentation of the results<sup>9</sup>.

When elaborating the protocol, the items considered were those proposed in the *Preferred Reporting Items for Systematic Review and Meta-analysis Protocols* (PRISMA-P), which was registered at the *International Prospective Register of Systematic Reviews* (Registration No. CRD42021244000)<sup>9</sup>.

The PEOs<sup>10</sup> strategy was used to formulate the review question, where P corresponds to the population (Palliative Care patients), E to the exposure/situation (SI), O to the outcome (profile of the Palliative Care patients with SI) and S to the type of study (observational). Thus, the guiding question of this research was as follows: Which is the profile of the Palliative Care patients that present SI?

Regarding inclusion of the studies, the following criteria were adopted: having evaluated Palliative Care patients with SI, with participants aged at least 18 years old, published in English, Portuguese or Spanish between 2016 and 2021, and having an observational design. Conference abstracts not linked to full-text publications were excluded.

The searches for studies were conducted in May 2021 in the *National Center for Biotechnology Information* (NCBI/PubMed®), *Cumulative Index to Nursing and Allied Health Literature* (CINAHL), *Excerpta Medica Database* (Embase), PsycINFO and *Web of Science* databases

To search for articles in the PubMed®, PsycINFO and *Web of Science* databases, controlled descriptors from the *Medical Subject Headings* (MeSH) were used, *Heading-MH* was consulted for the CINAHL database, and the *Embase Subject Headings* (EMTREE) were employed for the search in Embase.

The following filters were applied in the databases: full-text available, age, language and year of publication. The research strategy combined the Boolean terms and suitable keywords with the key concepts of “Palliative Care” and “SI”: (“*Palliative Care*” OR “*Palliative*” OR “*Palliative Treatment*” OR “*Palliative Therapy*” OR “*Palliative Supportive Care*” OR “*Hospice and Palliative Care Nursing*” OR “*Palliative Nursing*” OR “*Palliative Care Nursing*” OR “*Hospice Nursing*” OR “*Terminal Care*” OR “*End of Life Care*”) AND (“*Suicide*” OR “*Suicides*” OR “*Suicide Attempted*” OR “*Attempted Suicide*” OR “*Parasuicide*” OR “*Suicidal Ideation*” OR “*Ideation*” OR “*Ideation Suicidal*” OR “*Suicidal Ideations*”).

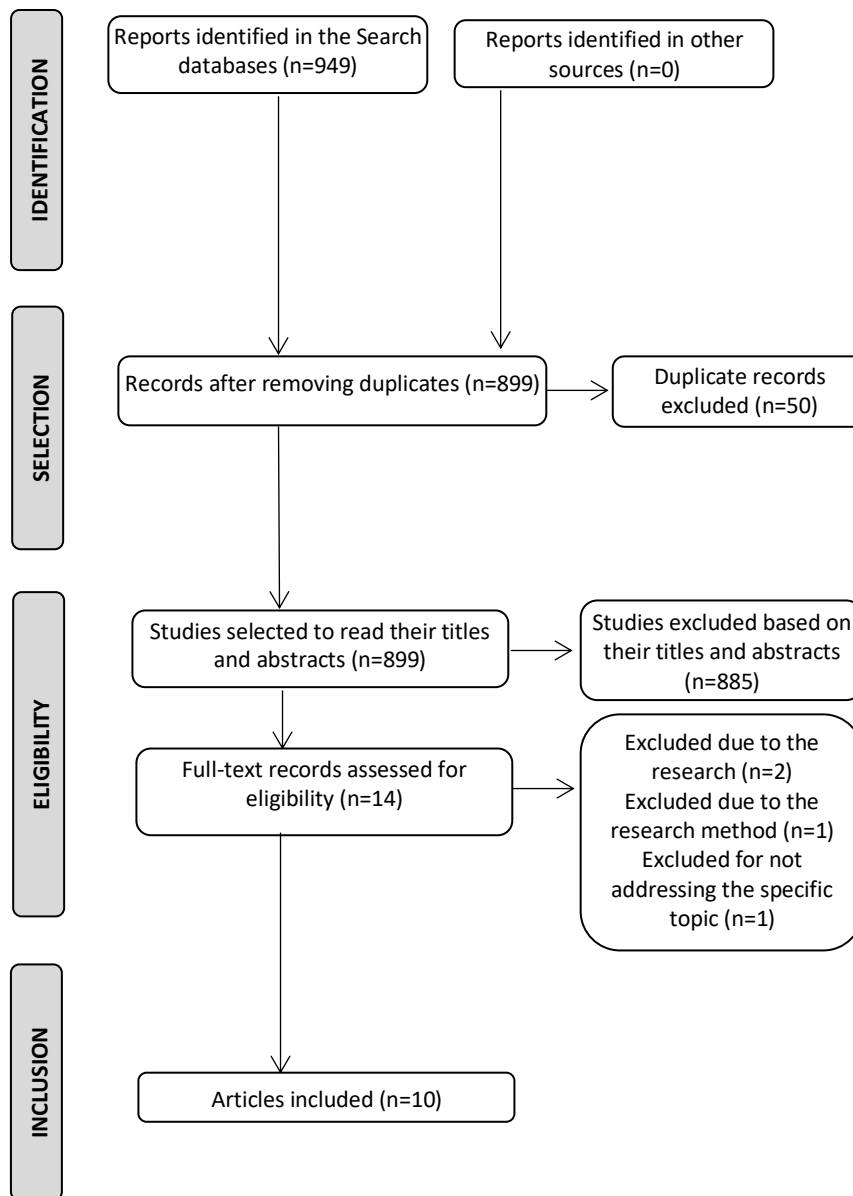
The research results were exported to the Rayyan® software – *Intelligent Systematic Review*, where duplicates were identified and excluded. Two independent and blinded researchers screened the records retrieved. The studies that met the inclusion criteria were retrieved and read in full. Any and all disagreements regarding inclusion of a given study were solved through a discussion among all four members of the review team.

A script was prepared to collect data from the studies included in the systematic review. Thus, the extracted data consisted in specific information related to the review question and objective, such as the following: authors, year of publication, country, title, objectives, population, context, type of study/method, presence of SI, disease that made the patient eligible for Palliative Care, sociodemographic profile, clinical profile and conclusion.

The results were presented as a narrative synthesis, characterized by the descriptive analysis of the quantitative data. A checklist for observational studies (cross-sectional and cohort) was employed to assess the methodological

quality of the studies<sup>10</sup>. The following classification was adopted in relation to the risk of bias: low (more than 70% of “yes” answers), moderate (between 50% and 69% of “yes” answers) and high (less than 49% of “yes” answers)<sup>11</sup>.

The PRISMA methodology<sup>9</sup> was used as a reference to systematize the study selection process; Figure 1 shows a descriptive flowchart of each stage.



**FIGURE 1:** Flowchart corresponding to selection of the articles included in the review, according to PRISMA. São Carlos, SP, Brazil, 2020.

## RESULTS

The main characteristics of the research studies are presented in Table 1.

**TABLE 1:** Quality assessment of the studies included. São Carlos, SP, Brazil, 2021.

Studies	Type	1	2	3	4	5	6	7	8	9	10	11	Total (%)
Wilson et al. <sup>2</sup>	Cross-sectional	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes			100
Sullivan et al. <sup>12</sup>	Cohort	N/A	Yes	Yes	Yes	Yes	N/A	Yes	Yes	Yes	N/A	Yes	100
Zhong et al. <sup>14</sup>	Cross-sectional	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes				87.5
Diaz-Frutos et al. <sup>15</sup>	Cross-sectional	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				100
Lu et al. <sup>16</sup>	Cohort	N/A	Yes	Yes	Yes	Yes	N/A	Yes	Yes	N/A	N/A	Yes	100
Robinson et al. <sup>17</sup>	Cross-sectional	Yes	Yes	Yes	Yes	Yes	1	Yes	Yes				100
Aboumrad et al. <sup>18</sup>	Cohort	N/A	Yes	Yes	N/A	N/A	N/A	Yes	Yes	Yes	N/A	Yes	100
Rodriguez-Mayoral et al. <sup>19</sup>	Cross-sectional	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				100
Diaz-Frutos et al. <sup>20</sup>	Cross-sectional	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes				100
Zendron et al. <sup>21</sup>	Cohort	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes	72.7

N/A: Not Applicable.

Items of the cohort studies: (1) Were both groups similar and recruited from the same population?; (2) Were the exposure situations similarly measured to allocate the individuals both to the exposed and unexposed groups?; (3) Was exposure validly and reliably measured?; (4) Were confounding factors identified?; (5) Were strategies to deal with the confounding factors stated?; (6) Were the groups/participants free from the outcome at baseline (or at the time of exposure)?; (7) Were the results validly and reliably measured?; (8) Was the follow-up time reported and sufficient for the results to occur?; (9) Was the follow-up complete and, if not, were the reasons for the losses described and explored?; (10) Were strategies used to address incomplete follow-up?; and (11) Was an adequate statistical analysis used?

Items of the cross-sectional studies: (1) Were the inclusion criteria in the sample clearly defined?; (2) Were the study subjects and setting described in detail?; (3) Was exposure validly and reliably measured?; (4) Were objective and standard criteria used to measure the condition?; (5) Were confounding factors identified?; (6) Were strategies to deal with the confounding factors stated?; (7) Were the results validly and reliably measured?; and (8) Was an adequate statistical analysis used?

The study designs included were the following: cross-sectional (n=6), prospective (n=2) and retrospective (n=2). The surveys were conducted in eight countries (four in North America, two in Europe, two in Asia, one in Oceania and another one in South America), with sample sizes varying from 64 to 20,900 participants. Most of the studies performed analyses to identify the prevalence and factors associated with SI among Palliative Care patients. It was possible to extract information about the sociodemographic and health profiles, as shown in Figure 2.

Study	Design and sample	Suicidal ideation	Palliative Care	Sociodemographic profile	Clinical profile
Wilson et al. <sup>2</sup>	Cross-sectional n=377	30.5% with an occasional wish to die 12.2% with a severe wish to die	Median survival time until death = 63 days	55.2% women, with a mean age of 67.2 ( $\pm 12.9$ ) years old, 94.4% white-skinned	100% with cancer 66.7% with depression 75.0% with anxiety 58.3% with hopelessness 58.3% with loss of interest or pleasure
Sullivan et al. <sup>12</sup>	Retrospective cohort n=20,900	Of the 30 suicide cases, 93% involved firearms Overall suicide rate in the cohort = 210.3 for every 100,000 people/year Mean time between diagnosis and suicide = 91 days 20% of the patients who committed suicide were on PC	88% with lung cancer Time since diagnosis: 81 days (16 – 371)	Those who committed suicide were: - 93% non-Hispanic and white-skinned - 100% men - 63% single - 63% urban residents	53% current smokers 47% undergoing chemotherapy
Zhong et al. <sup>14</sup>	Cross-sectional n=517	Prevalence of SI at 1 month for the total sample = 15.3%, with 12.9% in the male gender and 17.6% in the female gender	Lung cancer (n=22), digestive tract cancer (n=12) and breast cancer (n=17); n=48 in metastatic stage Time since the cancer diagnosis $\leq$ 18 months: n=51 > 2 hospitalizations: n=58 Current treatment regime: 40 undergoing chemotherapy or radiotherapy; 29 on PC	There were 33 men and 46 women among those that presented SI: 50-64 years old (n=31) Married (n=72) Not living alone (n=68) No religious belief (n=70) Self-assessment of their economic situation: poor (n=40)	n=65 with depressive symptoms n=77 with anxiety symptoms n=44 with moderate to severe pain intensity
Diaz-Frutos et al. <sup>15</sup>	Cross-sectional n=158	Mean SSI score = 1.59 ( $\pm 1.73$ ) Score obtained by the group without psychological distress: 0.40 ( $\pm 0.89$ ) Score obtained by the group with psychological distress: 1.87 ( $\pm 1.76$ )	36.1% lung cancer; 28.5% female genitourinary cancer; 27.2% colorectal cancer; 8.2% male genitourinary cancer 78.2% on a palliative therapeutic approach	56.3% women Mean of 63.8 ( $\pm 10.5$ ) years old 55.1% living with someone 64.6% retired 58.9% with high schooling levels 55.7% with high incomes	71.5% with anxiety symptoms according to HADS-A 88% with depressive symptoms according to HADS-D
Lu et al. <sup>16</sup>	Prospective cohort n=113	Baseline: 27.2% with SI and 14.7% with suicide attempts At month 3: 21.6% with SI and 8.6% with suicide attempts At month 6: 25.8% with SI and 13.3% with suicide attempts	HIV-positive individuals undergoing monitoring in the outpatient modality	97.3% homosexuals Mean age = 31.8 years old, 94.6% single, 84.1% with low schooling levels, 95.5% unemployed	12.5% of the participants had a history of depression, 11.5% of alcohol abuse, and 47.7% of illicit drug consumption
Robinson et al. <sup>17</sup>	Cross-sectional n=162	Mean in SAHD: 4.14 ( $\pm 3.85$ )	89% cancer Mean time since illness onset: 29.96 months	51.9% women Mean of 69.91 (12.31) years old 51.2% married 54.7% Christians 34.8% with high schooling levels 67.7% retired	PHQ-9 mean of 7.25 (4.93) – Depressive symptoms

**FIGURE 2:** Characterization of the observational studies that evaluated Suicidal Ideation in Palliative Care patients (continue). São Carlos, SP, Brazil, 2021. PC: Palliative Care; SI: Suicidal Ideation; SSI: *Scale for Suicidal Ideation*; HADS-A: *Hospital Anxiety Scale*; HADS-D: *Hospital Depression Scale*; SAHD: *Schedule of Attitudes Toward Hastened Death*; PHQ-9: *Patient Health Questionnaire-9*; BHS: *Beck Hopelessness Scale*; BDI: *Beck Depression Inventory*.

Study	Design and sample	Suicidal ideation	Palliative Care	Sociodemographic profile	Clinical profile
Aboumradi et al. <sup>18</sup>	Retrospective cohort n=64	n=64 suicides 75% suicides involving firearms 39% reported recent SI, suicidal attempt or both 67% of the suicides occurred within 7 days of the medical appointment, especially during the first 24 hours (41%)	44% of the suicides occurred during the palliative approach 34% prostate cancer and 22% lung cancer All 64 suicide cases were after the initial diagnosis, during the treatment, or within 5 years of monitoring	100% male 28% aged 60-69 years old 27% aged 70-79 years old 45% with family problems	59% with depression 28% with anxiety 20% with substance abuse 59% with medical comorbidities 38% with bad prognoses 47% with pain 17% with sleep problems
Rodriguez-Mayoral et al. <sup>19</sup>	Cross-sectional n=64	44% presented a wish to hasten death, with 42% in the form of death ideas, 14% as SI, and 9% with euthanasia or assisted suicide requests	17% gynecological cancer, 12% breast cancer, 14% urological cancer	57.8% women Mean of 49 years old 42% single 39% married Elementary School (n=18) Professed some religion (n=59)	64% with Major Depressive Disorder 64% with anxiety 11% using substances
Díaz-Frutos et al. <sup>20</sup>	Cross-sectional n=202	74.7% SSI < 3 25.3% SSI ≥ 3	30.7% lung cancer 25.2% colorectal cancer 32.7% female genitourinary cancer 11.4% male genitourinary cancer 78.2% on PC	56.9% women Mean of 61.7 (±12.9) years old 61.9% with high schooling levels 53.5% were married 59.9% were retired 56.4% with incomes of more than € 1,500	78.0% with depression according to HADS-D (≥ 13) 45.1% with anxiety according to HADS-A (≥ 13) 88.0% with hopelessness according to BHS (≥ 9) 52.9% with depression according to BDI (≥ 29)
Zendron et al. <sup>21</sup>	Prospective cohort n=250	Prevalence of the risk of suicide = 4.8% This prevalence rose to 88.7% in relation to living alone, having already undergone psychiatric treatment, and scoring for anxiety	100% prostate cancer Time since diagnosis: from 1 to 6 months	Mean of 62.6 years old Among the participants with SI: 11.1% had no partner and 20.0% lived alone	20.8% with previous psychiatric treatment 22.2% with anxiety according to HADS-A 23.5% with depression according to HADS-D Suspected alcoholism in 2.8% of the group

**FIGURE 2:** Characterization of the observational studies that evaluated Suicidal Ideation in Palliative Care patients (conclusion). São Carlos, SP, Brazil, 2021. PC: Palliative Care; SI: Suicidal Ideation; SSI: *Scale for Suicidal Ideation*; HADS-A: *Hospital Anxiety Scale*; HADS-D: *Hospital Depression Scale*; SAHD: *Schedule of Attitudes Toward Hastened Death*; PHQ-9: *Patient Health Questionnaire-9*; BHS: *Beck Hopelessness Scale*; BDI: *Beck Depression Inventory*.

As for the methodological quality analyzed<sup>10</sup>, all the studies presented overall quality scores above 70%, indicating good internal validity and low risk of bias.

### Suicidal ideation

The prevalence of SI varied between 4.8% and 39.0% across the studies. Data from a retrospective cohort study conducted with 20,900 patients in the United States showed that the overall suicide rate in the cohort was 210.3 for every 100,000 people/year and that only 20.0% of the patients who committed suicide were on Palliative Care<sup>12</sup>. In turn, another study carried out in Canada with 377 cancer patients in consecutive hospitalizations observed that 115 (30.5%) indicated an occasional wish to die and that 46 (12.2%) stated a serious desire to die<sup>13</sup>. A research study conducted with 517 cancer patients hospitalized in two tertiary-level general hospitals from China identified 15.3% prevalence of SI<sup>14</sup>.

A longitudinal and prospective study conducted in Taiwan with the objective of evaluating changes in SI, the predictors and the moderating effects of psychosocial factors in 113 patients diagnosed with HIV in the last 12 months found that, at baseline, 27.2% presented SI and that 14.7% had attempted suicide. In the third follow-up month, SI remained at 21.6% and suicide attempt at 8.6%, whereas at the sixth follow-up month, 25.8% of the participants presented SI and 14.7% had attempted suicide<sup>16</sup>.



## Palliative Care

70.0% (n=7) of the studies described diverse information about the palliative approach. Mean survival until death varied from 63 days to 29.96 months<sup>13,14,17</sup>. The most prevalent types of cancer prostate<sup>18-20</sup>, lung<sup>12,18</sup>, gynecological<sup>19</sup>, breast<sup>19</sup> and colorectal<sup>20</sup>. Only one study was conducted with patients diagnosed with HIV<sup>16</sup>.

A research study developed in the United States, based on records of 64 consummated suicides in cancer patients, identified that 44.0% of the cases occurred during the palliative approach, 38.0% had a poor prognosis, 47.0% presented pain and 17.0% had sleep problems<sup>18</sup>. On the other hand, another study found that Palliative Care was associated with a reduced likelihood of suicide (Odds Ratio: 0.19; 95% CI: 0.08 – 0.47)<sup>12</sup>.

## Sociodemographic profile

There was higher prevalence of the female gender and age from 38 to 88 years old among the participants<sup>13-15,17,19,20</sup>. Four of the studies (40.0%) presented data about marital status<sup>12,16,19,21</sup> and another four (40.0%) did so about the participants being retired or unemployed<sup>15-17,20</sup>. Only two (20.0%) studies evaluated religion<sup>17,19</sup> and ethnicity<sup>12,13</sup>.

In relation to schooling level, five studies (50.0%) provided information about the educational profile, indicating 30.0% of patients with high schooling levels<sup>15,17,20</sup> and 20% with low levels<sup>16,19</sup>. As for the economic self-assessment, two studies (20.0%) indicated high economic self-assessment<sup>15,20</sup> and one (10.0%) low economic self-assessment<sup>14</sup>.

A Brazilian study verified that the risk of suicide was associated with being divorced, separated, widowed or single (p=0.045) and with living alone (p=0.028)<sup>21</sup>. Another research study, carried out in the United States, identified that non-Hispanic white race was associated with higher chances of suicide (Odds Ratio: 6.4; 95% CI: 1.53 – 26.9)<sup>12</sup>. One of the studies found an association between SI, advanced age and retirees<sup>20</sup>. In turn, the study conducted in Taiwan identified that high levels of social and family support proved to be protective factors<sup>16</sup>.

## Clinical profile

Eight of the ten studies included in the review presented information about the participants' clinical conditions. In general, the patients stated psychological distress and had depressive and/or anxiety disorders<sup>13-21</sup>, they indulged in some substance abuse<sup>18-19,21</sup> and had a history of abusive consumption of alcohol and other drugs and current tobacco use<sup>12,18</sup>.

Some studies pointed out that patients with high psychological distress levels were more prone to presenting SI<sup>14-17,19-21</sup>. In turn, another one indicated that the presence of depression increased by 14 times the risk of expressing a wish to hasten death<sup>19</sup>.

One of the research studies highlighted that psychological disorders were more common among those with a serious death wish, who were approximately 2.5 times more likely to be diagnosed with a psychological disorder<sup>13</sup>. In addition, low quality of life and life purpose levels were associated with the wish to hasten death, as well as high levels of depressive symptoms<sup>17</sup>.

## DISCUSSION

The current systematic review described the sociodemographic and health profile of Palliative Care patients with SI based on studies carried out in different continents. Within the sample universe there was predominance of female individuals, aged, with high schooling levels and affected by different types of cancer. From the analyses it is possible to infer that Palliative Care patients who manifested SI are also those who (more frequently) present pain, poor prognoses, limitation to perform activities of daily living and symptoms indicative of depression and/or anxiety.

The presence of female and highly educated individuals on Palliative Care in the studies analyzed is corroborated by other authors<sup>22,23</sup>. They asserted that men with low schooling levels are more likely to choose therapeutic obstinacy and, therefore, less likely to receive a palliative approach. In addition, the predominance of the female gender can be both due to women's longer life expectancy and a result of better acceptance regarding Palliative Care.

However, the predominance of a profile with high schooling levels may not be applicable to the Brazilian reality, considering that almost all the studies included in this systematic review were conducted in First World countries. Data from a national study indicate that, out of a sample of 239 Palliative Care patients, only 4.6% had complete Higher Education<sup>24</sup>.

Another important aspect is that only four studies included an investigation of the socioeconomic profile. It is extremely important to analyze this indicator, considering that the literature relates individual socioeconomic circumstances and suicidal behavior. It is known that a high socioeconomic level environment contributes to healthier life behaviors and to access to health promotion and disease prevention activities, in addition to lower mortality and morbidity overall rates<sup>25</sup>.

The fact that the profile analyzed consist mostly of aged people with cancer is in line with the global trend of population aging since, as a consequence of this phenomenon, there is also higher prevalence of chronic degenerative diseases<sup>26</sup>. However, it draws the attention that this population segment combines two important risk factors for suicide: being aged and having cancer.

The annual suicide rate in the population between 50 and 69 years old is 16.17 per 100,000 inhabitants, with a possibility of reaching 27.45 in the population over 70 years old<sup>27</sup>. A number of studies point out that this is mainly due to the combination of the neurobiological changes linked to the aging process, to loss of autonomy and identity, to approximation of life finitude, to alienation, to disconnection from the meaning of life, and to loss of coping skills<sup>28</sup>. The wish to hasten death in older adults also seems to be related to their perspective in relation to their future. There is significant fear that they will become “a burden” for their family members, requiring help with the activities of daily living and, in this case, hastening death would be pertinent.

The cancer diagnosis carries with it a substantial risk of psychological distress, which can lead to suicide. According to a survey carried out in England between 1995 and 2015 with 4,722,099 cancer patients, 2,491 committed suicide, representing 0.8% of the total deaths<sup>29</sup>.

In addition to the cancer diagnosis itself exerting a negative impact on the mental health of those affected (mainly due to stigma), most of the cases are identified in advanced stages, resulting in worse prognoses, lower survival rates, higher recurrence risk and several limiting clinical symptoms such as pain<sup>30</sup>.

According to a study developed with 56 Palliative Care patients, most of the individuals (53; 94.6%) made use of some analgesic drug, and 30 (53.7%) reported pain, with severe pain as the most frequent (11; 36.7%), followed by mild (10; 33.3%) and moderate (9; 30.0%)<sup>31</sup>.

The relationship between pain and SI was identified in two studies of the current review. Pain is characterized as a multifaceted and disabling sensory event, capable of influencing affective, cognitive, behavioral and social elements<sup>32</sup>. It attributes a new meaning to the experience of living, reducing the perception of well-being, quality of life, autonomy and happiness; as well as impairing activities of daily living and favoring SI. In addition to that, it is related to substantial mobility disability, increased risk of falls, sleep problems, anxiety and depression<sup>33</sup>. Therefore, pain requires adequate prevention and treatment, primarily for those on Palliative Care.

In addition to pain, the studies included in this review indicated that Palliative Care patients with SI frequently presented positive results in the screening for psychological distress. Despite using different methodologies, the research studies have found high prevalence of depressive and anxiety symptoms.

Depression combined with anxiety in the cancer population is the main risk factor for suicide. A number of scholars point out that these pathologies are part of the main conditions that render individuals vulnerable to SI, along with the following: atheism; white race; low schooling level; living in a rural area; being unemployed; not having a marital relationship; being old; having advanced stage cancer; presenting pain; and having physical limitations and low social support<sup>34</sup>.

Thus, it becomes imperative that the assistance provided to Palliative Care patients who present SI also includes screening and treatment of psychiatric comorbidities, aiming at the effective implementation of assertive support and comforting measures that also guarantee these individuals' quality of life in the terminality process.

However, in order to provide qualified assistance to these individuals with SI, the importance of early identifying this behavior in all Palliative Care patients is emphasized through already validated screening instruments<sup>35</sup>. Furthermore, in addition to using these tools, there is a need to consider that the results obtained will be influenced by the patients' context. The current review found prevalence values between 4.8% and 39.0% for SI, reiterating the importance of understanding the health determining and conditioning factors of each local reality.

It is suggested that future studies evaluate whether or not Palliative Care patients with depression and anxiety received treatment (drug therapy and/or psychotherapy) for such conditions, taking into account that the treatment exerts direct impacts on the mental disorder prognosis and on quality of life. Other important data to be added in the assessment include the known risk factors for suicide, such as presence of previous suicide attempts and history of mental disorder and early stress, in addition to suicide attempts in the family. Finally, it is pertinent to investigate the impact exerted by this assistance in Palliative Care regarding the persistence of SI and death due to suicide when compared to the usual treatment.

### Study limitations

The current review presented some limitations, with the following standing out: the heterogeneity of the studies included, which analyzed SI from the perspective of a central problem of the Palliative Care patients and even as a supplementary item to the evaluation of the physical symptoms and in the screening for anxiety and depression. We



were not able to examine the SI profile associated with a specific type of cancer or to identify whether psychiatric comorbidities such as anxiety and depression were already present even before the Palliative Care condition.

Regarding the methodological quality, the cross-sectional studies had better quality scores. The reasons for non-scoring included lack of information about the monitoring in the longitudinal studies and failure to identify confounding factors in the cross-sectional ones. Finally, this review did not include research studies from the Gray Literature or unpublished studies.

## CONCLUSION

The results of this review provide diverse evidence that Palliative Care patients who manifested some suicidal behavior are mostly part of a group comprised by aged women, with high schooling levels, affected by different types of cancer, expressing pain, with poor prognoses, limitation to perform activities of daily living, and symptoms suggestive of depression and/or anxiety.

It becomes imperative to emphasize that carrying out studies that evidence the general characteristics of Palliative Care patients with suicidal ideation is fundamental to better understand the complexity involved in the care to be provided in life-threatening disease situations, as well as to outline actions that meet the singularity of this population segment, providing better quality of life as long as these individuals are alive.

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