

# Compassion fatigue and satisfaction in oncology professionals: an integrative review

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## Abstract

This integrative review investigates the factors that may promote or harm the quality of life of oncology professionals, according to compassion fatigue and satisfaction criteria. Bibliographic research was conducted on the CINAHL, Embase, Web of Science, PsycINFO, Scopus, MEDLINE and Virtual Health Library databases. Primary studies published in Portuguese, Spanish and English were included. Of the 909 articles found, 18 were selected for analysis by three independent reviewers. Data were summarized in tables and thematic categories. Sociodemographic factors, internal and external to the individual, can alter professional quality of life. In conclusion, intrinsic and subjective characteristics, as well as work environment aspects, contribute to the development of compassion fatigue and satisfaction.

**Keywords:** Compassion fatigue. Burnout, professional. Oncology nursing. Quality of life. Neoplasms. Health personnel.

## Resumo

### Fadiga e satisfação por compaixão em profissionais oncológicos: revisão integrativa

Este artigo busca identificar fatores que podem promover ou prejudicar a qualidade de vida profissional dos profissionais oncológicos segundo critérios de fadiga e satisfação por compaixão. Utilizou-se estudo bibliográfico descritivo, tipo revisão integrativa, sem recorte temporal. Utilizaram-se as bases de dados CINAHL, Embase, Web of Science, PsycINFO, Scopus, MEDLINE e Biblioteca Virtual em Saúde para a pesquisa analisada por três revisores independentes. Incluíram-se estudos primários nos idiomas português, inglês e espanhol. Realizaram-se análise para alcançar os objetivos propostos neste estudo e síntese dos dados para a apresentação em tabelas e categorias temáticas. Como resultados, selecionaram-se 18 artigos para análise entre os 909 encontrados. Evidenciou-se que fatores sociodemográficos, internos e externos aos indivíduos podem alterar a qualidade de vida profissional. Concluiu-se que características intrínsecas e subjetivas, bem como aspectos do ambiente de trabalho, contribuíram para o desenvolvimento da fadiga por compaixão e da satisfação por compaixão.

**Palavras-chave:** Fadiga por compaixão. Esgotamento profissional. Enfermagem oncológica. Qualidade de vida. Neoplasias. Pessoal de saúde.

## Resumen

### Desgaste y satisfacción por empatía en los profesionales de oncología: una revisión integradora

Este artículo identificó los factores que pueden promover o dificultar la calidad de vida profesional de los profesionales de oncología según criterios de desgaste y satisfacción por empatía. Se utilizó un estudio bibliográfico descriptivo, del tipo revisión integradora, sin corte temporal. El análisis de los datos recopilados en CINAHL, Embase, Web of Science, PsycINFO, Scopus, MEDLINE y Biblioteca Virtual en Salud fue realizado por tres evaluadores independientes. Se incluyeron estudios primarios en portugués, inglés y español. Se realizaron un análisis de los datos, para lograr los objetivos propuestos, y una síntesis para presentarse en tablas y categorías temáticas. Entre los 909 artículos encontrados, se seleccionaron 18 artículos para el análisis. Los factores sociodemográficos, internos y externos a los individuos, pueden alterar la calidad de vida profesional. Se concluye que las características intrínsecas y subjetivas, así como los aspectos del ambiente laboral contribuyeron al desgaste y la satisfacción por empatía.

**Palabras clave:** Desgaste por empatía. Agotamiento profesional. Enfermería oncológica. Calidad de vida. Neoplasias. Personal de salud.

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Hospital environments are considered unhealthy due to the various physical and psychosocial risks they pose to health staff<sup>1</sup>. In oncology, the social and economic characteristics of the Brazilian population lead to late diagnosis of malignant tumors, due to factors such as lack of knowledge of the signs and symptoms of the disease and difficult access to and delay in seeking health care<sup>2,4</sup>. Thus, many patients end up starting treatment when the disease is at an advanced stage, often with no possibility of cure. Some patients remain for long periods in treatment, which may favor bonding between health professionals, patient and family as well as greater suffering in case of death<sup>3</sup>.

It is also known that hospital environments may cause professionals to become ill due to excessive workload, an unhealthy process caused by physical and mental exhaustion in the face of conflicting situations, insufficient staff, fast working pace and repetitive tasks. Oncology nurses in particular are at greater risk of developing burnout (BO) and even leaving their jobs, increasing turnover rates and generating higher annual costs<sup>4,5</sup>.

One therefore sees that work can interfere with the health of professionals, causing accidents, illness and temporary or permanent disability, occurrences that must be investigated through a more in-depth understanding of the illness of people who provide care for those who are sick. It is observed that fatigue due to the constant exposure of health professionals to stressful situations may cause an individual to become ill, leading to presenteeism and absenteeism in the workplace<sup>5</sup>.

In the field of traumatology, analysis of fatigue due to close contact with the suffering or trauma of other people gave rise in the literature to the term compassion fatigue (CF), defined as a state of biological, social and psychological exhaustion and dysfunction resulting from prolonged exposure to secondary traumatic stress<sup>6-8</sup>. It is a physical and emotional state stemming from the compassion experienced by professionals who care for individuals in situations of physical and/or mental suffering. It is argued that this state of fatigue may affect any health professional engaged in activities that require great physical and emotional energy in providing care<sup>6,7</sup>.

In contrast, in considering the satisfactory experiences that promote professional well-being when providing health care, the term compassion satisfaction (CS) was coined, which refers to positive feelings derived from the act of helping and the reward afforded by efforts in health care provision<sup>8</sup>. Thus, professional quality of life is defined as the quality attributed by professionals to their work, occurring from the integration of the two poles—CF and CS—in health workers<sup>8,9</sup>.

Considering that professional quality of life is a recent construct<sup>1</sup> being developed in different countries, it is relevant to investigate what the literature has produced on this subject regarding oncology professionals from an interdisciplinary approach. That makes it possible to identify the main factors that enable professionals to carry out their activities with more satisfaction and prevent damage caused by high loads of physical and mental exhaustion.

A critical analysis of the results of research on the subject may contribute to conceiving interventions aimed at relieving suffering or strengthening the potential for greater satisfaction among health professionals working in oncology.

## Objective

The aim of this study is to identify factors capable of promoting or impairing the quality of life of oncology professionals according to CF and CS criteria.

## Method

This is a bibliographic, descriptive study, of the integrative literature review type, planned according to the following steps<sup>10</sup>: 1) identification of the subject and formulation of the study question to develop the integrative review; 2) definition of inclusion and exclusion criteria for studies; 3) definition of information to be extracted from selected studies and categorization of studies; 4) evaluation of studies included in the integrative review; 5) interpretation of results; and 6) presentation of the review.

In the first step, the following guiding question was formulated: What evidence is available in the literature on the professional quality of life of oncology health professionals, according to CF and CS criteria?

The bibliographic survey was carried out at the library of the School of Nursing of the University of São Paulo (USP) with the help of a librarian, using the following databases: CINAHL (112 articles); Embase (149 articles); Web of Science (172 articles); PsycINFO (50 articles); Scopus (144 articles); PubMed (168 articles) and Virtual Health Library (VHL) (114 articles). The following health

sciences descriptors (DeCS) and medical subject headings (MeSH) were selected: “compassion fatigue”; “compassion satisfaction”; “oncology”; “cancer”; and “neoplasia,” linked by the Boolean operators “and” and “or.”

In addition, it was decided to delimit the cited terms by also inserting appropriately controlled descriptors for each database, considering strategies that might return broader results. It should be noted that the descriptors were used according to the particularities of each database and obtained by consulting DeCS and MeSH. The search strategies are described in Chart 1.

**Chart 1.** Search strategies

Database	Term search
Scopus	(TITLE-ABS-KEY (“compassion fatigue” OR “compassion satisfaction”) AND (cancer OR neoplas* OR oncology) AND (LIMIT-TO (LANGUAGE, “English”) OR LIMIT-TO (LANGUAGE, “Portuguese”) OR LIMIT-TO (LANGUAGE, “Spanish”)))
Embase	(‘malignant neoplasm’ OR ‘cancer therapy’ OR oncology OR cancer OR neoplasm OR tumor) AND (‘compassion fatigue’/exp OR ‘compassion satisfaction’) AND ([english]/lim OR [portuguese]/lim OR [spanish]/lim) AND [embase]/lim
PsycINFO	((Any Field: (cancer) OR Any Field: (neoplas*) OR Any Field: (oncology)) OR (IndexTermsFilt: (“Oncology”) OR IndexTermsFilt: (“Neoplasms”))) AND ((IndexTermsFilt: (“Compassion Fatigue”)) OR (Any Field: (“compassion fatigue”) OR (Any Field: (“compassion satisfaction”))));
Web of Science	Tópico: (“compassion fatigue”) OR Tópico: (“compassion satisfaction”) AND Tópico: (cancer) OR Tópico: (neoplas*) OR Tópico: (oncology);
BVS	(tw:((tw:((tw:(fadiga por compaixão)) OR (tw:(compassion fatigue)) OR (tw:(fatiga por compasión)))) OR (tw:(satisfação por compaixão)) OR (tw:(compassion satisfaction)) OR (tw:(satisfacción por compasión)))) AND (tw:(cancer OR neoplasm* OR oncology)) AND (instance:“regional”);
MEDLINE	((“compassion fatigue” OR “Compassion satisfaction”) AND (cancer OR neoplas* OR oncology))
CINAHL	(compassion fatigue OR compassion satisfaction) AND (cancer OR neoplasm* OR oncology)

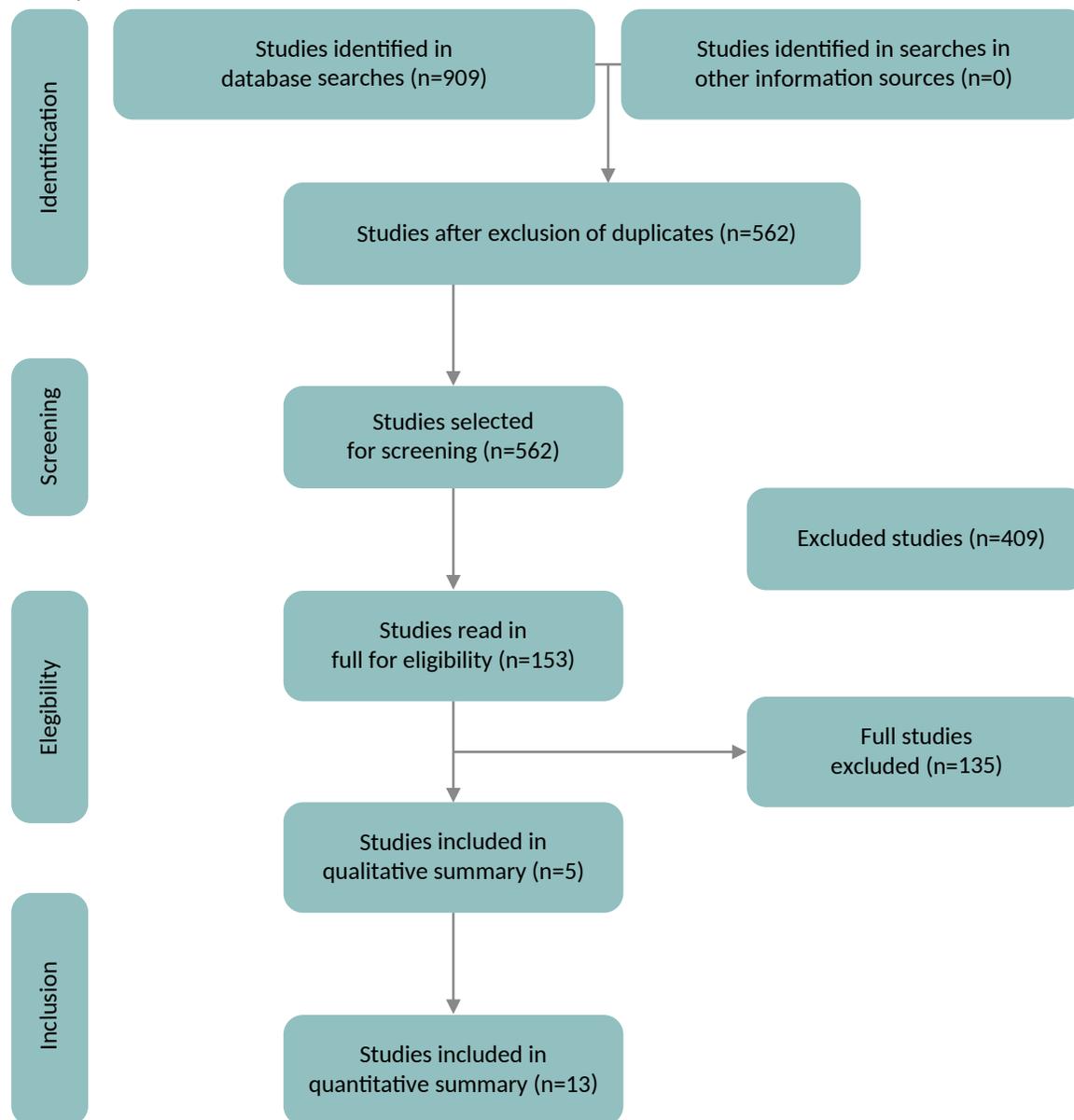
The inclusion criteria were: primary studies in Portuguese, English and Spanish, related to the professional quality of life of health professionals according to CF and CS criteria in the oncology area. The exclusion criteria were studies that did not involve humans, were carried out with students in the health area, involved informal caregivers, patients or family members, and involved professionals working in pediatrics.

It is worth mentioning that there was no publication date restriction. The search was carried out in November 2019, and the selection, screening and analysis of texts were done between January 2019 and January 2020. A total of 909 articles were identified, from which 347 duplicate texts were

excluded. The remaining 562 were submitted to title and abstract screening to select those that met the inclusion criteria.

This process was independently performed by three reviewers, resulting in the exclusion of another 409 articles (112 pediatric studies, 129 studies with caregivers and professionals outside oncology, 52 articles in other languages and 116 that did not involve humans). The remaining 153 articles were read in full. Then, 135 articles were excluded (45 for being unrelated to oncology, 69 for not being primary studies on professional quality of life and 21 for involving patients). The selection process is described in Figure 1.

**Figure 1.** Flowchart of article selection for the integrative review undertaken from January 2019 to January 2020



An instrument was developed for data extraction comprising the following items: 1) article identification (journal and year of publication, background and affiliation of the authors, language and country); 2) objectives; 3) methodological design (type of study, sampling); 4) results and conclusions; and 5) factors that improve or impair the professional quality of life of health workers, according to the objectives proposed for this review<sup>11</sup>.

This instrument addresses article identification (journal of publication, background and institution to which the authors are linked, language and country), aspects of methodological design (type of study, sampling, objectives, results, conclusions) and factors that contribute to or impair the quality of life of health professionals (Chart 2)<sup>11</sup>. Following the selection and study of the articles, an analysis was undertaken to achieve the objectives proposed in this study, and the data were summarized for presentation in charts and thematic categories.

## Results

Regarding the characterization of the 18 studies<sup>12-29</sup> analyzed in this review, two were published in 2010 and 2011, 12 were published between 2016 and 2017 and four were published in 2018.

Concerning the country of origin, seven studies were from the United States; three were from Canada; one was jointly from the United States and Canada; and there was one from each of the following countries: Korea, Portugal, Spain, Japan, Israel, China and Brazil.

**Chart 2.** List of articles according to objective, population, study site, type of instrument and type of study

Article	Objectives	Identification and number of subjects	Study site	Instruments used	Study design
1 <sup>12</sup>	To identify the relationship between professionalism and professional quality of life among oncology nurses	Oncology nurses 285 subjects	General outpatient clinic and chemotherapy clinic of two tertiary hospitals	- Hall's Professionalism Inventory Scale - Professional Quality of Life 5	Quantitative study
2 <sup>13</sup>	To explore CF experiences among early-career nurses	Nurses 5 subjects	General cancer hospital	- Semi-structured interview	Phenomenological, qualitative study.
3 <sup>14</sup>	To examine the experience of oncology nurses regarding CF, BO and CS. To identify differences experienced by US and Canadian nurses	Oncology nurses 549 subjects	Canadian Association of Oncology and Oncology Nursing Society	- Professional Quality of Life 5 - Abendroth Demographic Questionnaire	Quantitative study
4 <sup>15</sup>	To characterize CF, BO and CS among nurses at a community hospital, comparing specialties (ICU and oncology)	ICU and oncology nurses 102 subjects	Community hospital	- Professional Quality of Life 5	Quantitative study
5 <sup>16</sup>	To identify CF and BO predictors in nurses	Oncology nurses 19 subjects	Oncology hospitals	- Questionnaire - Reports of CF experiences	Descriptive exploratory qualitative study
6 <sup>17</sup>	To explore the prevalence of CF and BO among oncology professionals	Nurses, nursing technicians, physicians and radiology technicians 153 subjects	Oncology teaching hospital	- Structured interview - Professional Quality of Life 4	Descriptive quantitative study
7 <sup>18</sup>	To identify CF and BO predictors among Canadian oncologists	Oncologists 312 subjects	Canadian Medical Association of various oncology hospitals	- Professional Quality of Life 5 - Emotional Exhaustion Subscale - Maslach Burnout Inventory	Quantitative study
8 <sup>19</sup>	To examine the factors that influenced the quality of life of oncology nurses and the risk of CF	Oncology nurses 20 subjects	Teaching hospital	- Semi-structured interview - Adapted questionnaire, using ProQoL questions	Descriptive mixed study

continues...

Chart 2. Continuation

Article	Objectives	Identification and number of subjects	Study site	Instruments used	Study design
9 <sup>20</sup>	To understand how internal chronotype factors (personality types) and sleep quality influence the various components that contribute to professional quality of work	Oncologists, oncology nurses, pharmacists, radiotherapists 128 subjects	Oncology outpatient clinic	- Morningness Eveningness - Pittsburgh Sleep Quality Index - Professional Quality of Life - 10-Item Personality Inventory	Quantitative study
10 <sup>21</sup>	To understand the relationships between several dimensions of the positive domain (CS): empathy, self-compassion and the negative domains (BO and CF) of professional quality of life	Oncology nurses 221 subjects	Public hospitals	- Professional Quality of Life 5	Quantitative study
11 <sup>22</sup>	To explore the experiences of exemplary nurses in avoiding CF	Oncology nurses 7 subjects	Oncology hospital	- Semi-structured interview	Phenomenological, qualitative study
12 <sup>23</sup>	To identify the psychometric properties of the Spanish and Portuguese versions of the Professional Quality of Life 4 scale	Oncology professionals (physicians, nurses, pharmacists, nutritionists) 546 subjects	Online platform	- Professional Quality of Life 4	Quantitative study
13 <sup>24</sup>	To describe components of nurses' cognitive reactions to exposure to traumatic experiences for the onset of CF	Oncology nurses 30 subjects	6 hospitals in Japan	Semi-structured interview	Descriptive qualitative study
14 <sup>25</sup>	To verify the association between CS, STS and communication about end of life of cancer patients	Oncologists 79 subjects	Online platform	Professional Quality of Life 5 Communication about End of Life Survey	Quantitative study
15 <sup>26</sup>	To describe and explore the prevalence of predictors of professional quality of life (CF, BO, CS) in terms of psychological factors (empathy, personality and coping style) and social factors (social support)	Oncology nurses 650 subjects	10 hospitals in Shanghai (China)	- Chinese version of Professional Quality of Life 5 - Translated version of the Jefferson Scale of Empathy - Chinese Big Five Personality Inventory brief version	Transversal, quantitative study,

continues...

**Chart 2.** Continuation

Article	Objectives	Identification and number of subjects	Study site	Instruments used	Study design
16 <sup>27</sup>	To assess the level of satisfaction and compassion fatigue (CF) among intensive care and oncology nurses	Direct care nurses 38 subjects  Nurse managers 10 subjects	US hospital	Professional Quality of Life 5	Quantitative study
17 <sup>28</sup>	To evaluate the lifestyle and its association with CF in oncology health professionals	Oncology health providers, namely: physicians, nurses, nursing technicians, pharmacists, nutritionists, psychologists and social workers 22 subjects	Referral hospital in oncology in Minas Gerais	Administration of the "Fantastic Lifestyles" questionnaire	Quantitative, descriptive and transversal study
18 <sup>29</sup>	To investigate the prevalence of CF and BO in radiotherapists who provide care to patients with palliative cancer	Radiotherapists 42 subjects	Radiotherapy center	Professional Quality of Life 5	Quantitative, transversal study

CF: compassion fatigue; BO: burnout; CS: compassion satisfaction; ICU: intensive care unit; STS: secondary traumatic stress

There was a predominance of nurses among the participants of the studies (11 of the 18 studies), three of which analyzed the perception of oncologists while the others addressed the interdisciplinary team, including nurses, nursing technicians, physicians, radiology technicians, pharmacists, nutritionists, psychologists and social workers. The data presented in this review summarize the results of surveys carried out with approximately 3,112 professionals.

Regarding research design, 13 studies adopted a quantitative approach, four used a qualitative

approach with phenomenological analysis and one used the mixed method. Among the studies with a quantitative approach, the Professional Quality of Life data collection instrument, versions 4 and 5, was predominantly used. The professional quality of life construct was analyzed in association with different approaches, such as emotional exhaustion, BO, quality of sleep, empathy and personality traits. The data analysis made it possible to compile the factors that were positively and negatively related to professional quality of life (Chart 3).

**Chart 3.** Compilation of protective factors and risk factors in professional quality of professional

Article	Factors that promote professional quality of life (CS - positive pole)	Factors that impair professional quality of life (CF - BO/STS)
1 <sup>12</sup>	Being of legal age; having greater experience in the oncology area; professionalism (having the technical knowledge required for the job)	Being single; being under 40; being younger than your peers; having less experience in oncology
2 <sup>13</sup>	Finding a higher purpose at work (helping people in need)	Bonding more intensely with patient and family (internalizing pain and fears); being exposed to a high number of deaths; feeling guilty about the short time to provide high-quality care; witnessing dehumanized care (centered on aggressive and painful treatments); being unable to share feelings

continues...

Chart 3. Continuation

Article	Factors that promote professional quality of life (CS – positive pole)	Factors that impair professional quality of life (CF – BO/STS)
3 <sup>14</sup>	Working in a healthy and cohesive environment; being an older nurse; teamwork	Being a younger nurse (<40 years old); presenting depressive symptoms, with health condition changes (headache); having personal financial problems; having a traumatic death experience; tending to sacrifice own personal and psychological needs in favor of patients.
4 <sup>15</sup>	Taking part in social and emotional support groups; being a male nurse; having more experience in the oncology area; having more children	Male nurses; married nurses who use some kind of substance or drug
5 <sup>16</sup>	Having greater knowledge of CF through continuing education and being promoted thanks to teamwork	Physical and emotional stress; excessive emotional attachment to patient; lack of peer support; lack of institutional support
6 <sup>17</sup>	Working in outpatient settings	Less experience in oncology
7 <sup>18</sup>	Workplace culture with more flexible working hours	Being a woman; having less experience in oncology; experiencing greater pressure at work
8 <sup>19</sup>	Self-understanding	The disease itself (cancer); lack of communication between nurses and physicians
9 <sup>20</sup>	Better sleep quality; acceptability; extroversion; emotional stability; conscientiousness	Job dissatisfaction
10 <sup>21</sup>	Cognitive and affective empathy, self-compassion and empathic concern	Psychological inflexibility
11 <sup>22</sup>	Empathy; communication with patients	Lack of communication; poor spirituality
12 <sup>23</sup>	Working in palliative care	Less experience
13 <sup>24</sup>	Meaning of life reassessment; desire to share feelings with colleagues; desire to support patients and their families; compassion for patient and family	Feeling of professional inadequacy; brooding over a situation similar to that of the patient, experienced by the actual nurse or a family member; dissatisfaction with the medical team; desire to avoid offering patient care; conflict between belief and reality; feeling powerless in the face of cancer
14 <sup>25</sup>	Greater proactivity and direct communication with end-of-life patients	Distanced communication with end-of-life patients
15 <sup>26</sup>	Having empathy, social support; working in a tertiary hospital; openness and conscientiousness; having training in the psychological care of patients; receiving psychological training	Working in secondary hospitals; neuroticism and passive coping
16 <sup>27</sup>	Working in direct care; communicating and discussing with team after traumatic events; communication.	Working longer in management
17 <sup>28</sup>	Being religious; cultivating and maintaining pleasurable relationships	Not being religious; being under 40
18 <sup>29</sup>	Positivity; helping others; self-compassion	High patient load; fast-paced clinical environment

CS: compassion satisfaction; CF: compassion fatigue; BO: burnout; STS: secondary traumatic stress

These factors were categorized into sociodemographic variables, internal factors and external factors, and then linked to constructs and/or domains related to professional quality of life. In the primary studies, the researchers used simple statistical analysis.

With regard to sociodemographic characteristics, it was found that being over 40, being married, having more children and being a man<sup>12,15</sup> promote professional quality of life. On the other hand, being single, younger than one's peers and suffering from stressors related to personal finances (having less purchasing power)<sup>14</sup> are factors that impair professional quality of life. It is noteworthy that working with oncology increases the risk for CF<sup>18</sup>.

Among the external factors that contributed positively to professional quality of life, healthy and supportive working environments are crucial for the well-being, health and satisfaction of oncology workers<sup>14</sup>, in addition to active participation in groups of emotional and social support<sup>15</sup>, continuing education that addresses CF and development of teamwork<sup>16</sup>. External factors that correlate with increased CF involved physical stress<sup>16</sup>, lack of communication within the interdisciplinary team and lack of support from the institution<sup>19</sup>.

The following internal—that is, subjective—factors were identified as harmful to professional quality of life: feeling of impotence when faced with the reality of the disease, conflict between belief and reality, dissatisfaction with the professional behavior of the medical team, excessive emotional attachment to patients, compassion for patients and their families<sup>19,26</sup>, psychological inflexibility (low resilience)<sup>21</sup> and distanced communication with end-of-life patients<sup>25</sup>.

In turn, among the internal factors that promote professional quality of life, the following should be highlighted: extroversion<sup>19</sup>, proactivity<sup>25,27</sup>, awareness of disease situations<sup>26</sup>, personality pattern<sup>19,26</sup>, openness<sup>26</sup> and availability<sup>26</sup>. Other factors were associated with these, namely: having improved quality of sleep<sup>20</sup>, being able to reassess life, finding a purpose in life and having emotional stability<sup>20</sup>, feeling empathy<sup>21,26</sup>, having self-compassion<sup>21</sup>, communicating openly and effectively with patients, receiving training for

psychological care<sup>16,27</sup>, being religious<sup>28</sup> and being able to cope with end of life<sup>25</sup>.

It was observed that the desire to encourage conversation circles with peers and receiving capacity building and training on the feeling of loss and death of patients were also pointed out as factors correlated with improved professional quality of life<sup>13,26</sup>, as well as the ability to have empathy and imagine that the care provided could be potentially offered to a family member<sup>20-22</sup>.

Still regarding internal factors, it is noted that empathy has a negative relationship with neuroticism, when there is a tendency for the individual to remain in a negative emotional state (which can cause a greater risk for anxiety compared to other personality traits)<sup>26</sup>.

## Discussion

The aim of this integrative review was to identify factors that promote and impair the professional quality of life of health workers in oncology, according to CF and CS criteria.

An increase was noted in the scientific production on the subject over time, with a predominance of studies carried out in North America and lack of research in Brazil on the relationship of CF and CS with professional quality of life in oncology. This information is worth mentioning because, given the characteristics of the disease, professionals who work directly with cancer patients are more likely to suffer greater impacts on physical and psychological health, which negatively affect the family, social and work spheres<sup>12,19</sup>.

In this article, it was shown that close contact with cancer patients stirs feelings related to excessive emotional attachment. It is argued that these feelings, associated with a sense of impotence in the face of the disease, cause workers to run the risk of developing CF, compromising their quality of life<sup>19,25,26,28-31</sup>.

The literature consistently shows that experiences of suffering and distress related to health care may cause burnout, characterized by prolonged exhaustion and loss of interest. This situation may result from the routine of dealing with situations of terminality<sup>30,31</sup>. In this

context, the physical and psychological dimensions of workers can be marked by balance, satisfaction and development, as well as maladjustment, stress and, consequently, illness<sup>29,30</sup>.

By categorizing the studies, it was possible to identify internal and external factors that influence the development of CS and CF, strengthening evidence that point to the promotion of professional quality of life. The particular relevance of this analysis is highlighted by studies that point to lack of external support and balance between personal and professional life as risk factors for CF<sup>7,12</sup>.

Thus, this integrative review presented factors that benefit and factors that impair professional quality of life. It is understood that several subjective constructs that are difficult to measure influence job quality; therefore, studies with comprehensive methods indicate advances in the understanding of the phenomenon. The study listed proactivity, ability to communicate with end-of-life patients, openness, availability, awareness and empathy as examples of those constructs that impact the quality of life of professionals and pose numerous challenges to be faced<sup>1,23-26</sup>.

In the qualitative study, important components were identified of the cognitive reactions of nurses who faced traumatic experiences of cancer patients. Among the listed categories are polarity—which was also verified in the theory of professional quality of life—a feeling of professional inadequacy, development of compassion for patients and their families, desire to support patients and their families, brooding, a sense of achievement of professional duty, dissatisfaction with the medical team, desire to integrate with colleagues, shirking of duties, conflict between belief and reality, reassessment of life and a feeling of impotence in the face of cancer<sup>24</sup>.

These results, combined with the identification of factors that promote and impair professional quality of life presented in this study, can contribute to understanding the onset of CF and provide the basis for identifying risk and protective factors<sup>3,4,8,9</sup>.

By analyzing the studies, from the viewpoint of professional quality of life, it was possible

to distinctly identify the potential positive and negative factors. However, some factors deserve greater attention in order to advance in the distinction between CF, BO and CS. The correlations between CF, BO and CS levels with sociodemographic variables from different cultures made it possible to confirm this polarity due to the similarity of the variations obtained between CF and BO and the negative associations with CS<sup>14</sup>.

The results were similar to those obtained in other studies that delved deeper into the comparison between these constructs, also showing resilience as an important mediator of this relationship<sup>8</sup>. It was observed, in a comparative study that analyzed the phenomena of CF, CS and BO among nurses from emergency, nephrology, intensive care and oncology services, that those who provided oncology services had higher CF levels<sup>1</sup>.

The improvement of professional quality of life is known to largely depend on healthy working environments as a key factor to the well-being, health and satisfaction of nurses. Improvements in the workplace can prevent negative aftereffects and contribute to satisfactory health outcomes for patients.

Given the above, introducing institutional changes, such as designing policies and guidelines to develop preventive and psychosocial support interventions for nurses, are suggested, especially in the context of oncology. It is understood that caring for cancer patients can significantly influence the development of stress, which causes employee dissatisfaction and mental exhaustion<sup>15,17</sup>.

A study found that healthcare staff in hospitals had lower CS scores than their peers working in outpatient settings<sup>17</sup>. Although this review did not explore the multiple factors that may contribute to stress in the workplace, the literature offers data for reflection.

Stressors in hospitals differ from those in outpatient settings: patients' demand for care is greater and includes exposure to a greater number of deaths, more complications resulting from treatments and illnesses, and greater severity of clinical symptoms. In addition, environmental conditions are often inadequate<sup>1,2</sup>.

Several articles that showed relevant aspects for the occurrence of CF were found, such as poor

training of professionals in dealing with death, lack of understanding of the team—especially for not agreeing to “prolong” suffering through palliative care—and projection of patients’ and relatives’ emotional overload on staff<sup>13,19,24-26</sup>.

Professionals who have been working longer in oncology had a lower CF score compared to their peers who had just started their professional lives. Furthermore, it was recorded that female nurses also had higher CF than male nurses<sup>12,14-16</sup>.

A recent study reports that oncology nurses face difficulties in communicating with patients: they do not know the right words to use and fear that they may upset the patient or the family. Lack of experience and training in communication decrease nurses’ confidence in discussing certain topics with patients and families, which can be further aggravated by cultural differences between nurses and patients<sup>32</sup>.

The results of this study provide theoretical support for an approach aimed at promoting the quality of life of professionals working in oncology—especially nursing professionals, who work very closely to patients and their families. This review presents some limitations due to the reduced number of studies delving deeper into CF and CS, which hindered a more comprehensive analysis of the professional quality of life construct.

The data presented can support guidelines for the design of institutional policies and interventions, thus contributing to improved care for cancer patients in the different stages of treatment and disease. Also noted is the lack of dedicated online tools for the review method, levels of evidence of studies and quality thereof.

## Final considerations

The results of this review found gaps in knowledge related to professional quality of life

in oncology settings, especially among younger workers with less time in the profession.

This study made it possible to characterize the scientific production on professional quality of life according to CF and CS criteria, with regard to methodological characteristics. There was a greater number of investigations with a quantitative approach, justified by the development of the Professional Quality of Life evaluation instrument. Thus, preference was given to studies with other methodological trends, mainly for involving subjective constructs such as empathy, compassion and experiences that bring satisfaction to professionals.

The relationship with the other researched studies made it possible to verify that the negative and positive poles are related to certain individuals in different cultural and working contexts. In addition, factors that promote and impair professional quality of life were identified through categories related to sociodemographic variables and internal and external factors of health professionals.

Communication with patients, capacity for empathy and participation in emotional support groups help professionals develop protective factors for professional quality of life. It is worth noting that reduced and distanced communication with patients and less time on the job were identified as factors that impair professional quality of life.

Therefore, the creation of institutional policies and strategies based on these factors is recommended in order to achieve the best effectiveness in actions for the promotion and prevention of workers’ health. In this sense, further investigations are needed so that these poles are clarified and other professional categories are investigated in any situation in which there is a relationship between health professional and patient.

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