
BURNOUT SYNDROME IN ONCOLOGY WORKERS: AN INTEGRATIVE REVIEW¹

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ABSTRACT. The study aimed to identify, in the literature, the main factors causing burnout in health professionals, mainly nurses working in oncology units. This is an integrative review, which used the methodological steps of Ganong. We searched an electronic search for articles indexed in the databases Web of Science, PubMed Central and Virtual Health Library, published between 2010 and 2015. We used, in different combinations, controlled descriptors: burnout, nursing and oncology. The final sample consisted of 18 articles. The highest number of publications, four articles (22.2%) in each year, occurred in 2010 and 2013, mainly in the United States (n=5, 27.8%) and Australia (n = 3, 16.6%). Dealing with the worsening of the patient's disease and death were considered the main burnout causing factors. The implementation of professional appreciation programs and psychosocial support groups for nursing staff have the potential to assist in the development of mechanisms to handle difficult situations that permeate the daily life of oncology nursing.

Keywords: Occupational stress; nursing; hospital environment; neoplasms.

SÍNDROME DE *BURNOUT* EM TRABALHADORES DA ONCOLOGIA: UMA REVISÃO INTEGRATIVA

RESUMO. O estudo teve como objetivo identificar, na literatura, os principais fatores geradores da síndrome de *burnout* em profissionais de saúde, sobretudo em enfermeiros que atuam em unidades de oncologia. Trata-se de uma revisão integrativa, a qual utilizou as etapas metodológicas de Ganong. Realizamos uma busca eletrônica por artigos indexados nas bases de dados *Web of Science*, *PubMed Central* e Biblioteca Virtual de Saúde, publicados entre 2010 a 2015. Nós utilizamos, em diferentes combinações, os descritores controlados: esgotamento profissional, enfermagem e oncologia. A amostra final foi composta por 18 artigos. O maior número de publicações, quatro artigos (22,2%) em cada ano, ocorreu em 2010 e 2013, principalmente nos Estados Unidos (n=5, 27,8%) e na Austrália (n=3, 16,6%). Lidar com o agravamento da doença do paciente e a morte foi considerado o principal fator gerador da síndrome de *burnout*. A implementação de programas de valorização profissional e de grupos de apoio psicossocial para equipe de enfermagem tem potencial para auxiliar na elaboração de mecanismos para suportar as situações difíceis que permeiam o cotidiano da enfermagem oncológica.

Palavras-chave: Stress ocupacional; enfermagem; ambiente hospitalar; neoplasias.

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SÍNDROME DE BURNOUT EN TRABAJADORES DE ONCOLOGÍA: UNA REVISIÓN INTEGRADORA

RESUMEN. El estudio tuvo como objetivo identificar, en la literatura, los principales factores causantes de burnout en profesionales de la salud, sobre todo enfermeras que trabajan en unidades de oncología. Se trata de una revisión integradora, que utiliza los pasos metodológicos de Ganong. Se realizó una búsqueda electrónica de artículos indexados en las bases de datos *Web of Science*, *PubMed Central* y la Biblioteca Virtual en Salud, publicada entre 2010 y 2015. Utilizamos, en diferentes combinaciones, los descriptores controlados: burnout, enfermería y oncología. La muestra final estuvo compuesta por 18 artículos. El mayor número de publicaciones, cuatro artículos (el 22,2%) al año, se produjo en 2010 y 2013, principalmente en los Estados Unidos (n = 5, el 27,8%) y Australia (n = 3, el 16,6%). Encaja con el empeoramiento de la enfermedad y la muerte del paciente fueron considerados los principales factores que causan síndrome de *burnout*. La implementación de programas de habilidades profesionales y grupos de apoyo psicosocial para el personal de enfermería tiene el potencial para ayudar en el desarrollo de mecanismos para manejar las situaciones difíciles que impregnan la vida cotidiana de la enfermería oncológica.

Palabras-clave: Estrés ocupacional; enfermería; ambiente hospitalario; neoplasmas.

Introduction

Oncology is considered a stressful specialty, with great challenges to the whole health care team, due to the necessity of highly complex care and the daily facing of death, once the idea of death is strongly associated to the representation of cancer, for the professionals working on this area (Hercos et al., 2014). Besides that, the exposition to a variety of stressors such as the constant occupational pain, suffering and loss experiences; low salaries; multiple demands for assistance quality; work overload and poor work conditions may predispose those workers to a physical and emotional distress (Avellar, Iglesias, & Valverde, 2007; Poulsen, Poulsen, Khan, Poulsen, & Khan, 2015).

Burnout syndrome or professional exhaustion is defined as an emotional tension state and chronic stress caused by distressful and hostile work conditions (Potter et al., 2010). The term is originated from the English language term "burn out" which means completely burn, which, in the occupational context, reflects the worker's distress in physical and psychological terms. This syndrome is characterized by the following symptoms: emotional exhaustion (a feeling of physical and mental distress); depersonalization (personality alterations, with a feeling of apathy in relation to the population assisted) and professional dissatisfaction, demonstrating the desire of resigning from the job (Potter, Deshields, & Rodriguez, 2013).

Even though it is not a new theme in the scientific community, it is necessary to continue addressing it. Ferreira and Lucca (2015) claim that this syndrome is a serious problem in the professionals' routine, which has not been taken as a priority by employers, especially regarding the psychosocial care and support of the employees. Moreover, as consequences of burnout syndrome, there is the increase of absenteeism, the high level of staff substitution and a deficit in the quality of the assistance provided to the patient (Bowden et al., 2015).

This way, workers of the health care area are vulnerable to the development of this syndrome, due to their intense contact with the patient, added to the disagreement between the professional expectancy and the reality faced (Dermici et al., 2010; Książek, Stefaniak, Stadnyk, & Książek, 2011). Among those health care professionals, the most vulnerable are mainly the ones that integrate the nursing team, for they are on the front line of the patient care and their family, most part of the time (Ferreira & Lucca, 2015).

According to the *Health Education Authority*, nursing is recognized as the fourth most stressful profession, for it is difficult to limit the different roles of the profession; besides that, there is a lack of public recognition, which is demotivating, and elevates the occupational stress, thus generating depersonalization in relation to work (Jodas & Haddad, 2009). The suffering of the patients and their families, which embrace the cancer particularities, (the stigma of this disease and the death expectation), are elements that predispose to the chronic occupational stress and other pathologies that put the professional's physical and mental health at risk (Eelen et al., 2014).

Because of the considerations presented, this study aimed to identify, in literature, the main causing factors of burnout syndrome in health care professionals, especially in nurses that work in oncology units.

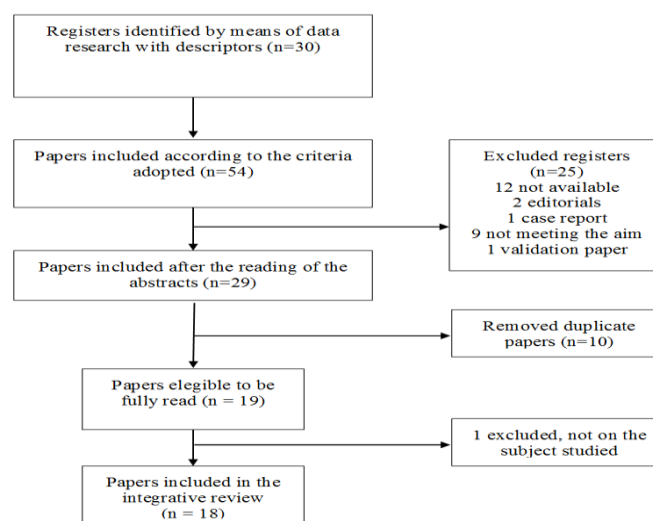
Method

This study is an integrative review of national and the international scientific production; its methodological procedure is based upon theoretical approach of Ganong (1987). According to this methodology, six methodological steps must be taken: selecting the study's guiding question; establishing criteria to select the sample; presenting the characteristics of the primary research; data analysis; interpretation of the results; presenting the review. Therefore, the guiding question of this review was: what are the main factors causing burnout syndrome in nursing workers of oncology units?

An electronic search was carried out, including national and international publications indexed on the databases Web of Science, PubMed Central and *Biblioteca Virtual de Saúde* (Health Virtual Library - BVS). In the process of the research elaboration, the controlled descriptors of DECS (*Descritores em Ciências da Saúde* – Health Sciences Descriptors): *esgotamento profissional* (burnout, professional), *enfermagem* (nursing) and *oncologia* (medical oncology) were used, in different combinations, by means of Boolean operators (AND; OR; AND NOT). The inclusion criteria used were: scientific papers published from 2010 through 2015; in one of the following languages: Portuguese, English or Spanish. Papers concerning validation of instruments, not available in full, journal editorials, duplicate studies in different databases, case or experience reports and studies that were not directly related to the theme were excluded. The search and the selection of the papers was carried out from August to September, 2015, by means of the reading of their title, followed by the analysis of the abstracts; after the papers were selected, they were read in full.

After the search, 130 papers were identified; their titles and abstracts were exhaustively read, to assure the selection of the ones that addressed the guiding review question and met the inclusion and exclusion criteria previously established. In the end, 18 studies were selected to be entirely read. Figure 1 shows the methodological procedures for the inclusion of the papers found, structure in accordance with PRISMA Group (Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group, 2009).

Figure 1. Graphic representation of the methodological steps taken for selecting the papers.



For the data collection, the information was registered in a spreadsheet by means of an instrument elaborated by the authors, composed by the following items: procedure of the periodical authors, title, aim, publishing year, databases, country where the research was developed, important remarks on the

factors causing burnout syndrome. The analysis of the papers was carried out by means of the descriptive method.

Results

Initially, 29 abstracts were selected to be minutely read; nevertheless, 10 of them were excluded, for being repeated in distinct data bases; one was excluded for not referring to professional exhaustion of oncology nurses. The final sample of this review was composed by 18 studies.

According to the publishing year, it could be observed that 2010 and 2013 were the years with the biggest number of published papers on the investigated theme, with four (22.2%) publications in each, followed by the years 2012 and 2014, with three publications (16.6%) in each; in 2011 and 2015 only two papers were found (11.1%) in each year (Chart 1).

Chart 1. *Published papers indexed on the databases, according to the periodical and publication*

Paper title	Authors/year	Journal
1) Evaluation of burnout syndrome in oncology employees	Dermici et al. (2010)	<u>Medical Oncology</u>
2) Comparison of experienced burnout symptoms in specialist oncology nurses working in hospital oncology units or in hospices	Ostacoli et al. (2010)	Palliative and Supportive Care
3) Scope of practice of the breast care nurse: A comparison of health professional perspectives	Jones, Leach, Chambers, & Occhipinti (2010)	European Journal of Oncology Nursing
4) Compassion fatigue and burnout: prevalence among oncology nurses	Potter et al (2010)	Clinical Journal of Oncology of Nursing
5) Burnout syndrome in surgical oncology and general surgery nurses: A cross-sectional study	Książek, Stefaniak, Stadnyk, & Książek (2011)	European Journal of Oncology Nursing
6) Communication skills, working environment and burnout among oncology nurses	Emold, Schneider, Meller, & Yagil (2011)	European Journal of Oncology Nursing
7) Alleviating Emotional Exhaustion in Oncology Nurses: an Evaluation of Wellspring's "Care for the Professional Caregiver Program	Edmonds, Lockwood, Beznak, & Nyhof-Young (2012)	<u>Journal of Cancer Education</u>
8) Taking Care of Care Providers: A Wellness Program for Pediatric Nurses A Wellness Program for Pediatric Nurses	Zadeh, Gamba, Hudson, & Wiener (2012)	Journal of Pediatric Oncology Nursing
9) Demands and Rewards Associated With Working in Pediatric Oncology: A Qualitative Study of Canadian Health Care Providers	Dix, Gulati, Robinson, Syed, & Klassen (2012)	<u>Journal of Pediatric Hematology/ Oncology</u>
10) Riscos psicossociais no trabalho: estresse e estratégias de coping em enfermeiros em oncologia	Gomes, Santos, & Carolino (2013)	Revista Latino Americana de Enfermagem
11) Developing a Systemic Program for Compassion Fatigue	Potter, Deshields, & Rodriguez (2013)	<u>Nursing Administration Quarterly</u>
12) Helping the Helpers: Mindfulness Training for Burnout in Pediatric Oncology--A Pilot Program	Moody et al. (2013)	Journal of Pediatric Oncology Nursing
13) Nursing Practice Environment and Outcomes for Oncology Nursing	Shang, Friese, Wu, & Aiken (2013)	<u>Cancer Nursing</u>
14) O Trabalho dos Profissionais de Enfermagem em Unidades de Terapia Intensiva na Assistência ao Paciente Oncológico	Hercos et al. (2014)	Revista Brasileira de Cancerologia
15) The prevalence of burnout among oncology professionals: oncologists are at risk of developing burnout	Eelen et al. (2014)	Psycho-oncology
16) Personal determinants of nurses' burnout in end of life care	Gama, Barbosa, & Vieira (2014)	European Journal of Oncology Nursing
17) Recovery experience and burnout in cancer workers in Queensland	Poulsen, Poulsen, Khan, Poulsen, & Khan (2015)	European Journal of Oncology Nursing
18) Work-related stress and reward: an Australian study of multidisciplinary pediatric oncology healthcare providers	Bowden et al. (2015)	Psycho-oncology

As for the periodicals, important international journals appeared; among them, we can highlight *European Journal of Oncology Nursing* with five publications, followed by the journals *Journal of Pediatric Oncology Nursing* and *Psycho-oncology*, with two studies (11.1%) each (Chart 1). Concerning the modalities of the researches, it is important to mention that, from the 18 selected articles, 17 (94.4%) of them are original, and only one (5.6%) is an integrative review.

Table 1. Characterization according to the sample, Ribeirão Preto, SP, 2016

PAPER	COUNTRY	SAMPLE (HEALTH CARE PROFESSIONALS)
1	Turkey	Doctors, nurses, radiotherapy technicians.
2	Italy	Specialized oncology nurses, a team that worked with palliative care.
3	Australia	BCNs and other health care professionals involved with the care of the patient with breast cancer.
4	The United States	Nurses who worked in the oncology sector, assistant doctors and radiotherapy and nursing technicians.
5	Poland	Nurses who worked in two departments: general and oncology surgery.
6	Israel	Oncology nurses.
7	Canada	Nurses of pediatric oncology, surgical oncology and the team of general oncology, besides nursing supervisors.
8	The United States	Pediatric nurses.
9	Canada	Oncology doctors, oncology resident-doctors, nurses, social assistants and specialists in child care in hospitals.
10	Portugal	Nurses at oncology jobs and at neck and head surgery.
11	The United States	Nurses, nursing managers and doctors.
12	Israel and the United States	Nurses, social assistants, doctors, psychologists and specialists in pediatrics.
13	The United States	Nurses.
14	Brazil	Not applied.
15	Belgium	Oncology doctors and radiotherapists, psychologists, social assistants and nurses, who worked in oncology.
16	Portugal	Oncology nurses, hematology and palliative care.
17	Australia	Nurses, doctors, nutritionists and oncology health care professionals.
18	Australia	Doctors, nurses and health care professionals of pediatric oncology.

In relation to the origin country, five papers (27.8%) were from the United States, three from Australia (16.6%), two (11.1%) from Israel, Portugal and Canada and one paper (5.6%) was published by each one of the following countries: Turkey, Italy, Poland, Brazil and Belgium (Table 1). It is important to highlight that, in those papers, burnout was researched by different health care professionals of diverse oncology subspecialty, such as pediatric oncology, hematological oncology, palliative care, clinical oncology and surgical oncology (Tables 1 and 2)

Tabela 2. Characterization of the papers as for their aims, Ribeirão Preto, SP, 2016

Paper	Aim
1	Understanding better the state of the burnout syndrome and evaluating its relation with individual and work factors of oncology workers of a university hospital.
2	Shedding light on individual factors and situations that contribute to the neutralization of burnout syndrome experienced by two independent groups of oncology specialists.
3	Investigating the practical scope of oncology nurses specialized in breast cancer (BCNs), from the perspective of BCNs themselves and of other health care professionals.
4	Exploring the prevalence of burnout syndrome and fatigue among caretakers in the admission sector and in the ambulatory of a big oncology medical center.
5	Assessing the occurrence of burnout syndrome among nurses who worked in general surgery and oncology surgery.
6	Assessing the self-efficient communication, dealing with environmental perceptions and burnout, in an Israeli sample of oncology nurses.
7	Assessing changes on the burnout components, emotional exhaustion, by means of the scale <i>Maslach Burnout Inventory</i> .
8	Encouraging self-care, education and formation of nursing teams to develop proactive strategies, improving welfare and promote discussions between the patient-team interaction and more complex care scenarios.
9	Identifying the main necessities related to work and the rewards in pediatric oncology.
10	Identifying stress sources and coping strategies in nurses who work in three oncology services and head and neck surgeries, of three central hospitals in Portugal.
11	Improving and assessing the application of a systematic program that measures the stress and the fatigue of the health care professionals.
12	Exploring the importance of <i>Mindfulness-Based Course</i> to reduce burnout syndrome in members of a multidisciplinary team of pediatric oncology in the United States and in Israel.
13	Analyzing the differences of the results, such as work dissatisfaction and burnout among oncology nurses and medical-surgical nurses.
14	Identifying the factors that influence on the actions of the nursing professionals in oncology units and strategies that favor the assistance to the oncology patient.
15	Examining the prevalence of burnout in oncology professionals in Flanders.
16	Identifying, in sociodemographic terms, the professional exposure, the training level and relevant factor for burnout, in nurses that deal with death issues.
17	Examining the relations of burnout, welfare and commitment, with the experiences of psychological recovery and relaxing, in an oncology team.
18	Examining the stress sources related to the work and specific rewards of the multidisciplinary team of pediatric oncology in Australia.

For the analysis of the main factors causing burnout syndrome mentioned in the analyzed manuscripts, we chose to classify them into two categories: emotional factors and professional factors. In relation to the factors listed in the first category, we highlight the work with patients at the end of life

phase and with death (eight papers: 1, 4, 5, 10, 14, 15, 16 and 18); experience of the suffering lived by the patients and their families (four papers: 2, 3, 11 and 17) and the emotional exhaustion (two articles: 6 and 12). In the second category, the professional characteristics were listed: excessive working hours, work overload and double work shifts (five papers: 8, 9, 10, 13 and 16); the professional inexperience (three papers: 1, 7 and 8); lack of professional recognition (two papers: 10 and 14); lack of professional fulfillment (paper 2) and the low salaries (paper 10).

Discussion

It was verified that most publications analyzed in this review resulted from studies carried out in developed countries, which suggests a pertinent preoccupation with the issue and with the worker's mental health. In relation to Brazil, only one publication was found within five years, which evidences a gap to be researched in our country, concerning burnout in oncology.

Oncology nursing professionals are more vulnerable to burnout because their work embraces situations such as taking care of patients with a serious disease, and, many times, at an imminent risk of dying (Shang, Friese, Wu, & Aiken, 2013). Faria and Maia (2007) argue that living the process of a patient's dying, especially if (s)he is a child, is described as a difficult situation faced by the team. Taking care of patients who are seriously sick and at the end of life may initiate a feeling of discouragement and mourning, difficulty to concentrate, isolation and stress (Zadeh, Gamba, Hudson, & Wiener, 2012).

The empathy with the sick patients at the end of life phase puts the nurses into confront with the meaning of their own finitude and mortality, making them reflect that losing health and life is an inevitable fact (Książek et al., 2011). Death is recognized by those professionals as a painful and distressing process, reflecting on feelings like impotence, frustration and sadness (Rodrigues & Chaves, 2008).

Those situations point out the necessity to offer continuous psychological support that stimulates the development of coping strategies, even more when dealing with oncology nurses, for they participate in the cancer diagnosis, watch the impact of it on the patients and their families; watch the symptoms experienced by the patient, such as pain, depression, fear, low self-esteem, uncertainty about the future and watch the evolution of the disease, in some cases, until the death of the patients (Ostacoli et al., 2010).

The results of a study carried out in Portugal are in agreement with the stressing factors found in our research; among them, we can mention work overload, low salaries and lack of professional recognition (Gomes, Santos, & Carolino, 2013).

Toh, Ang and Devi (2012) described that the oncology nurses who work with insufficient staff, frequently express dissatisfaction and stress and are more likely to develop burnout, and, consequently, to quit the specialty. The authors mentioned above also explain that this situation originates an unceasing demand for the health care services to assure human resources, physical structure and adequate equipment and working conditions, institutional professional recognition for the improvement of the professional satisfaction of the whole team, institutional space for discussing fears and anxieties, permanent education for professional training and for dealing with the process death/dying, besides psychological monitoring, in order to assure the assistance quality.

The nursing field embraces multiple demands imposed by management and assistance necessities, for example, a high number of patients per nurse and diverse bureaucratic demands, conditions that may also cause stress (Gandi, Wai, Karick, & Dagona, 2011). In Israel and in the United States, teams of oncology nursing revealed that they felt overloaded with the work demands and impotent to change the clinical situation of the patients, who, in time, may evolve to finitude (Ostacoli et al., 2010).

Most publications occurred in developed countries, demonstrating more interest in evaluating how health care workers face burnout syndrome, or even in identifying what are the main causes that make that professional develop the syndrome; differently from what occurs in countries under development, which already have a precarious working structure that worsens the syndrome. However, it does not

seem to be an important theme in the scientific publications (Gandi et al., 2011). In the study of the researchers Girgis, Hansen and Goldstein (2009), carried out in Australia, a country with a developed economy, difficulties similar to the ones found from Brazil were reported, such as organizational problems, work overload, lack of experienced and sufficiently trained human resources, which also contributes to the development of burnout.

To improve the quality of the professionals' assistance and working conditions, their sociodemographic characteristics must be considered, as well as their affinity with the field and the necessity of permanent education in specific aspects of cancerology (Potter et al., 2010). Those aspects influence on the development of self-care, on the relations among the different professionals of the team and in the relations with the patients and their families (Hercos et al., 2014).

Approaching the coping strategies, a study carried out in Portugal showed that the oncology professionals use, as coping strategies: planning, active dealing with different situations, acceptance and self-distraction (Gomes et al., 2013). Studies carried out with oncology nurses on the binomial coping versus occupational stress showed that coping strategies frequently adopted were: preservation (setting limits for the involvement in situations that cause stress), reconstruction (actions that allow the reconstruction of the balanced identity) and reassessment (re-analyzing the circumstances in terms of meaning and problem-solving alternatives) (Ekedahl & Wengstrom, 2006; Negromonte & Araújo, 2011). In this context, "*not getting involved*" with the patients and the co-workers is a way found by the nurses to achieve the self-preservation and support, when the termination and other demands of their routine are faced (Rodrigues & Chaves, 2008).

By adding the results found on the papers to the experience of the authors of this integrative review in the oncology clinical practice, those factors causing burnout are similar to the ones found in their professional routine, such as the excessive patients' demands due to their clinical situation, long-duration care, work overload because of insufficient staff and closeness to the family. Another perception that we could identify was that, when the worker is really qualified to work in this field, they become empowered, and, with this, more prepared to deal with difficult issues, such as death and daily suffering. In fact, this empowered professional has emotional education and well defined strategies to cope with the situation, knowing also that factors like work overload could be modified if the managers made an appropriate dimensioning of the nursing team.

Final considerations

With this study, we have achieved the proposed goal; it was evidenced, by means of this review, that, despite the fact that the papers are from different countries and cultures, the results were uniform. However, few papers were produced during the period researched. The main causers of burnout on the oncology nursing team were: the dealing with death, having a direct contact with the worsening of the patient's disease, the work overload, the lack of recognition and the professional dissatisfaction. It is known that some of these factors, characteristic of the oncology routine, are not simple to be managed in the work environment. Liking the specialty and being qualified are protective elements against this occupational disease.

It can be noticed that, even though it is not a new topic in the literature, the periodicals continue publishing papers on burnout syndrome in oncology professionals; it reinforces its scientific and psychosocial importance. We understand that another important fact is that cases of this syndrome continue to happen, and, concomitantly, the diagnoses of neoplasms have been increasing every year. It reflects directly on the increase of the demand for nursing professionals at the oncology care.

It means that more people may be vulnerable to the development of this syndrome; it reinforces the necessity to continue dealing with this subject. Actions must be taken in order to prevent and fight this illness, which causes so much emotional damage to the workers, as well as financial losses to the institutions, mainly the social security department, once the health care professionals cannot stay at their jobs.

Therefore, it can be noticed a relevant necessity to improve programs of professional valorization and of psychosocial support groups, aiming at helping the professionals to construct coping devices to deal with complex situations of the nursing oncology routine.

From what has been exposed, we believe that the synthesis of the knowledge of studies already published on this subject may provide incentives for the development of more studies, as well as offering ways and support for the planning and the improvement of strategies to prevent burnout syndrome, generating positive repercussions on the worker's life and work quality.

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