OCCUPATIONAL STRESS IN PALLIATIVE CARE IN ONCOLOGY*

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ABSTRACT: The aim of the present study was to identify signs of occupational stress in nursing professionals that provide palliative care to patients with cancer. It is a descriptive and cross-sectional investigation that examined 105 nurses and nursing technicians from a hospital focused on palliative care in oncology in the city of Rio de Janeiro, Brazil. Data collection was carried out through the application of a questionnaire related to sociodemographic variables and the Work Stress Scale and took place from April to July 2015. Fifty-eight percent (n = 61) of the professionals presented a low level of occupational stress, 41% (n = 43) reported a moderate intensity of stress and 0.9% or one participant declared to experience a high degree of stress. The variables related to stress were age and time of professional training. The outcomes suggest that, despite being exposed to stressful factors such as pain, suffering, and death, the studied professionals use effective coping strategies to reduce stress perception.

DESCRIPTORS: Medical oncology; Oncology nursing; Palliative care; Psychological stress; Occupational health.

ESTRESSE OCUPACIONAL NA ASSISTÊNCIA DE CUIDADOS PALIATIVOS EM ONCOLOGIA

RESUMO: O objetivo deste estudo foi identificar o indicativo de estresse ocupacional em profissionais de enfermagem que atuam na assistência a pacientes com câncer em cuidados paliativos. Trata-se de um estudo descritivo, transversal, que contemplou 105 profissionais, enfermeiros e técnicos de enfermagem, de um hospital de cuidados paliativos oncológicos da cidade do Rio de Janeiro, Brasil. Para a coleta de dados, utilizou-se um questionário com variáveis sociodemográficas e a Escala de Estresse no Trabalho. Essa etapa ocorreu no período de abril a julho de 2015. 58,1% (n=61) dos profissionais apresentaram baixo nível de estresse ocupacional, 41% (n=43) deles relataram estresse moderado e 0,9% (n=um) demonstrou alto nível de estresse. As variáveis relacionadas ao estresse foram: idade e tempo de formação profissional. Os dados sugerem que, apesar de estarem expostos a estressores como dor, sofrimento e morte, os profissionais estudados utilizam estratégias de enfrentamento eficazes na diminuição da percepção subjetiva do estresse.

DESCRITORES: Oncologia; Enfermagem oncológica; Cuidados paliativos; Estresse psicológico; Saúde do trabalhador.

ESTRÉS LABORAL EN LA ATENCIÓN DE CUIDADOS PALIATIVOS EN ONCOLOGÍA

RESUMEN: Se objetivó identificar el indicador de estrés laboral en profesionales de enfermería actuantes en atención de pacientes con cáncer en cuidados paliativos. Estudio descriptivo, transversal, incluyendo a 105 profesionales, enfermeros y auxiliares de enfermería, de hospital de cuidados paliativos oncológicos de Rio de Janeiro, Brasil. Datos recolectados mediante cuestionario con variables sociodemográficas y Escala de Estrés Laboral. Dicha etapa se realizó de abril a julio de 2015. El 58,1% (n=61) de los profesionales presentó bajo nivel de estrés laboral, 41% de ellos informó estrés moderado y 0,9% (n=1) expresó alto nivel de estrés. Las variables relacionadas al estrés fueron: edad y tiempo desde graduación profesional. Los datos sugieren que, a pesar de estar expuestos a estresores como dolor, sufrimiento y muerte, los profesionales estudiados utilizan estrategias de enfrentamiento eficaces para disminuir su percepción subjetiva del estrés.

DESCRIPTORES: Oncología; Enfermería Oncológica; Cuidados Paliativos; Estrés Psicológico; Salud Laboral.

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http://dx.doi.org/10.5380/ce.v22i4.50686

^{*}Paper extracted from the dissertation entitled: "Estresse ocupacional e estratégias de enfrentamento da equipe de enfermagem: cuidados paliativos oncológicos". Federal University of the State of Rio de Janeiro, 2016.

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INTRODUCTION

Throughout human history, work has been gradually gaining importance to individuals and organizations. Currently, it plays a central role in people's lives, is a source of income, represents an opportunity for individual development and increases social identity and self-esteem⁽¹⁾.

Nevertheless, when work causes stress, it can have negative impacts on workers' health conditions and expose them to the risk of occupational stress. Thus, professionals in the nursing area are especially prone to experience this issue, given the characteristics of their activities⁽¹⁻²⁾.

Occupational stress is defined as a process in which a person perceives the demands in their professional context as stressful; when these demands surpass the individual's coping strategies, they result in negative reactions⁽³⁾. For something to be considered stressful in the work environment, it is necessary that workers themselves perceive it as such⁽⁴⁾.

Nursing professionals that work in oncology services are continuously exposed to situations that create conflicts. The scenario includes the traditional biomedical model, oriented to healing and longevity, frequent deaths, interaction with critically ill patients and their families, and mourning⁽⁵⁾.

Palliative care professionals deal with poor prognoses, incurable diseases, and symptoms that cause discomfort and suffering to patients, such as pain, bleeding, dyspnea, constipation, nausea, vomit, fatigue, and mutilations. In addition, they have to witness the death of patients and the mourning of relatives. These elements result in a difficult routine for these healthcare professionals, making them vulnerable to occupational stress⁽⁶⁾.

Taking this context into consideration, which is characterized by specificities and high complexity care and management, studies aimed to determine the level of stress of professionals in this field are fundamental, because they provide resources to interventions related to workers' health, with the design of positive, individual and collective strategies to minimize occupational risks and stress among oncology nurses that provide palliative care⁽⁶⁾.

The objective of the present study was to identify signs of occupational stress in nursing professionals that work in the area of palliative care in oncology.

METHOD

The present investigation was descriptive and cross-sectional, and analyzed nursing professionals from a public hospital specialized in palliative care in oncology in the city of Rio de Janeiro, Brazil. This institution has 56 beds, a multiprofessional outpatient facility, a home care service, and an emergency unit. The nursing team had 48 nurses and 98 nursing technicians, totaling 146 nursing professionals.

The study sample included all the nursing professionals that provided direct care to patients for over six months, both in day and night shifts, regardless of the number of employment relationships. Workers that were on vacation or leave were excluded from the survey.

After the application of the criteria mentioned above, 123 workers were eligible to participate in the study. All were invited to be part of the investigation; two declined the invitation and 16 did not send the answered questionnaires in the established period. Consequently, the final sample had 105 professionals, which corresponds to 85.4% of the initial target population. The participants had been working in the palliative care field for at least one year.

The research proposal was approved by the Research Ethics Committee of the two institutions to which the authors are affiliated (Federal University of the State of Rio de Janeiro: report 992348; Brazilian Cancer Institute: report 1012056). Data were collected between April and July 2015, non-systematically, during the working hours of the institution, according to the schedule and availability of the participants.

Data were collected using two instruments:

I) a sociodemographic questionnaire addressing the following variables: gender, age, marital status, professional category, number of children, religion, length of professional training, time dedicated to palliative care in oncology, area of activity, work shift, other employment relationships, type of employment relationship in the institution where the study was developed and time for leisure activities;

II) the Work Stress Scale (WSS), which evaluates occupational stress through psychosocial-originated organizational stress indicators. It is a unifactorial, self-report tool, with 23 items to be answered in a 5-point Likert scale, whose alternatives vary from "I strongly disagree" to "I strongly agree". This instrument was created and validated to be used with employees from different organizations and that have different functions⁽⁷⁾.

The total WSS score is determined by calculating the arithmetic average of the points in the items, that is, the sum of the points obtained in each item shared by the number of items. The average values were used to classify the participants regarding their stress intensity. As the scale offers five options of answers, whose scores range from 1 to 5, the cutoffs were defined as ≥ 1 and ≤ 2 for a low level of stress, > 2 and ≤ 4 for a moderate level of stress and > 4 for a high level of stress⁽⁸⁾.

For the bivariate analyses, the categories moderate and high stress were grouped into one class, given that only one participant presented high-intensity stress.

In the descriptive analysis, the qualitative nominal or ordinal variables were presented as absolute (n) and percentage (%) numbers, and the quantitative variables were described by their respective mean and standard deviation values. The analysis of the relationships between the subjective stress intensity and nominal and ordinal variables was carried out through the application of Pearson's chi-square test or Fisher's exact test, depending on the number of cases in each category or the number of categories of the tested independent variable. For continuous variables, Mann-Whitney U test or Student's t-test was used, depending on the normality of the variables under discussion.

All statistical analyses were run by the Statistical Package for the Social Sciences (SPSS) software, version 20.0. Values of p < 0.05 were considered statistically significant.

RESULTS

The study sample was characterized by a predominance of female professionals (82.9%, n = 87) with an average age of 39.5 years (SD = 8.8 years). Most participants had children (62.9%, n = 66) and a religion (87.6%, n = 92) and had time to engage in leisure activities (91.4%; n = 96). Table 1 presents the sociodemographic data of the participants.

Table 1 – Sociodemographic characteristics of nursing professionals that work in palliative care in oncology. Rio de Janeiro, RJ, Brazil, 2015 (continues)

Sociodemographic characteristics	Low stress n (%)	Moderate/high stress n (%)	Total n (%)	p value
Gender				
Female	48 (78.7)	39 (88.6)	87 (82.9)	0.182*
Male	13 (21.3)	5 (11.4)	18 (17.1)	
Age (years)				
20-40	30 (49.2)	31 (70.5)	61 (58.1)	0.029*
> 40	31 (50.8)	13 (29.5)	44 (41.9)	

Marital status				
Single	16 (26.2)	15 (34.1)	31 (29.5)	0.834**
Married	31 (50.8)	21 (47.7)	52 (49.5)	
Widowed	1 (1.6)	0 (0)	1 (1)	
Divorced	7 (11.5)	4 (9.1)	11 (10.5)	
Stable union	6 (9.8)	4 (9.1)	10 (9.5)	
Children				
Yes	42 (68.9)	24 (54.5)	66 (62.9)	0.134*
No	19 (31.1)	20 (45.5)	39 (37.1)	
Religion				
Yes	55 (90.2)	37 (84.1)	92 (87.6)	0.351*
No	6 (9.8)	7 (15.9)	13 (12.4)	
Leisure activities				
Yes	54 (88.5)	42 (95.5)	96 (91.4)	0.211***
No	7 (11.5)	2 (4.5)	9 (8.6)	

^{*:} Pearson's chi-square test; **: Likelihood ratio; ***: Fisher's exact test.

As for professional characteristics, 60% (n = 63) of the sample consisted of nursing technicians; 36.2% (n = 38) had 11 to 20 years of professional training and 35.2% (n = 37) had one to ten years. Regarding work in the palliative care field, 76.2% (n = 80) reported to have between one and ten years of experience, 62.9% (n = 66) worked in the inpatient sector and 74.3% (n = 78) were on-call employees, with 38.1% (n = 40) in the day shift and 36.2% (n = 38) in the night shift. Table 2 shows the professional information of the participants.

Table 2 – Professional characteristics of a nursing team that provides palliative care to oncology patients. Rio de Janeiro, RJ, Brazil, 2015 (continues)

Professional characteristics	Low stress n (%)	Moderate/high stress n (%)	Total n (%)	p value
Professional category				
Nurse	21 (34.4)	21 (47.7)	42 (40)	0.170*
Nursing technician	40 (65.6)	23 (52.3)	63 (60)	
Length of professional training				
1 to 10 years	16 (26.2)	21 (47.7)	37 (35.2)	0.043**
11 to 20 years	23 (37.7)	15 (34.1)	38 (36.2)	
> 20 years	22 (36.1)	8 (18.2)	30 (28.6)	
Time in the palliative care field				
1 to 10 years	46 (75.4)	34 (77.3)	80 (76.2)	0.885**
11 to 20 years	13 (21.3)	8 (18.2)	21 (20)	
> 20 years	2 (3.3)	2 (4.5)	4 (3.8)	
Area of activity				
Inpatient sector	40 (65.6)	26 (59.1)	66 (62.9)	0.689**
Outpatient sector	4 (6.6)	2 (4.5)	6 (5.7)	
Home care	6 (9.8)	5 (11.4)	11 (10.5)	
Emergency sector	10 (16.4)	8 (18.2)	18 (17.1)	
Advanced station****	1 (1.6)	3 (6.8)	4 (3.8)	

Work shift				
Day shift	27 (44.3)	13 (29.5)	40 (38.1)	0.309**
Night shift	20 (32.8)	18 (40.9)	38 (36.2)	
Day laborer****	14 (23)	13 (29.5)	27 (25.7)	
Other nursing employment relationships				
Yes	26 (42.6)	15 (34.1)	41 (39)	0.377*
No	35 (57.4)	29 (65.9)	64 (61)	
Type of relationship				
Statutory regime	45 (73.8)	38 (86.4)	83 (79)	0.118**
CLT regime	16 (26.2)	6 (13.6)	22 (21)	

^{*:}Pearson's chi-square test; **: Likelihood ratio; ***: Fisher's exact test; ****: Sector considered the entry point of patients to the palliative care unit, where only nursing professionals work; *****: Work arrangement characterized by eight daily working hours from Monday to Friday, except holidays.

Professionals with low, moderate, or high levels of stress differed regarding age (p = 0.029) and length of professional training (p = 0.043).

A higher prevalence of moderate or high stress was observed among professionals between 20 and 40 years old (70.5% vs 29.5% in the group older than 40 years old). Professionals that got their degree one to ten years before presented a higher incidence of moderate or high stress (47.7%; n = 21) than the workers with 11 to 20 years of professional training (34.1%; n = 15) and more than 20 years (18.2%, n = 8), as showed in Table 2.

Most investigated professionals (58.1%, n = 61) reported a low-intensity work-related stress; the incidence of a moderate level of stress was 41% (n = 43) and only one participant (0.9%) declared to experience high-intensity stress. These outcomes are presented in Table 3.

Table 3 – Prevalence of stress among nursing professionals that provide palliative care to oncology patients according to stress intensity. Rio de Janeiro, RJ, Brazil, 2015

Average score	Stress intensity	Absolute frequency (n)	Relative frequency (%)
≥ 1 and ≤ 2	Low	61	58.1
> 2 and ≤ 4	Moderate	43	41
> 4	High	1	0.9

The situations that were considered most stressful by the participants were insufficient time to do their activities, the high number of working hours without breaks and task distribution. The less stressful situations were lack of trust of superiors, receiving contradictory instructions and communication between nursing professionals and superiors. Table 4 lists these issues and the scores given by the participants.

Table 4 – Evaluation of stressful situations faced by nursing professionals that provide palliative care to oncology patients. Rio de Janeiro, RJ, Brazil, 2015 (continues)

Most stressful situations	Mean	SD
The short time to do my activities makes me nervous	2.59	1.13
I get in a bad mood when I have to work for too many hours without a break	2.72	1.43
The distribution of tasks in my area has made me nervous	2.74	1.35

Least stressful situations	Mean	SD
I feel bothered about the lack of trust of my superior about my work	1.52	0.98
I have been nervous because my superior gives me contradictory orders	1.54	0.98
I feel bothered about the communication between myself and my superior	1.67	1.02

SD: standard deviation.

DISCUSSION

The average participant of the present study was a female, which corroborates the profile of nursing professionals in Brazil and worldwide. The development of labor activity in this profession has been influenced by history and culture, and reflects the relationship between the female figure and the skills and specific qualities required in care execution and management⁽⁹⁾.

Some studies reported similar results regarding the age group most affected by stress^(8,10). It was shown that, the older the professional, the lower the intensity of perceived stress. It is reasonable to assume that older professionals have more experience and maturity, which can contribute to better decision making at work and in their personal lives⁽¹¹⁾.

Longer length of training and experience provides a greater mastery in the field, technical safety, and control over the adversities that arise in nursing care⁽¹²⁾. These characteristics show that maturity can help improve skills and increase safety to opt for coping strategies to face stressful situations, minimizing stress perception or even avoiding exposure to it. Hence, it is understood that employees tend to develop more effective coping strategies to reduce work-related stress throughout their professional lives.

It is possible to conclude that the time dedicated to the palliative care area is relevant, because it makes the interaction with other professionals and the environment easier, resulting in a quicker identification of negative and stressful conditions and the capacity to plan adaptation strategies in the workplace⁽⁸⁾. In the present investigation, 75.4% of the studied professionals declared to have worked in the field for one to ten years, 21.3% for 11 to 20 years and 3.3% for over 20 years.

As for the marital status, there was a predominance of married participants, just like it has been described in other publications^(8,12). The average number of children among the professionals was low and is a consequence of the low fertility rate registered in Brazil in the past decades, provoked by the transition of the country from rural to urban, followed by the insertion of women in the marketplace and educational institutions and the dissemination of contraception methods⁽¹³⁾.

Some authors consider spouses and children as a fortress, an important social support for professionals, for representing safety and easing the coping with occupational stress^(10,14).

Most participants declared to have a religion, which can be considered by some of them as a support or even a coping strategy, as it has already been reported for oncology nurses⁽¹⁵⁾. Leisure activities can be construed in the same way: they can minimize the physical and emotional distress originated at work⁽¹⁶⁾.

There is evidence of a difference in stress levels among nursing categories, pointing out that nurses experience a higher level of stress than nursing technicians (12); this finding was not corroborated by the present study, though. The higher intensity of stress observed in nurses can probably be explained by their management and care activities, which include team and unit coordination, supervision activities and requirements from administration sectors, in addition to care itself. In the present investigation, 60% of the sample consisted of nursing technicians and 40% of nurses. There was no statistically significant difference (p = 0.17) in the association of professional category with stress level.

Although the specific work dynamics of each professional category was not the object of the present investigation, it is possible to infer from the results that there was a good communication among the

interviewees and their colleagues, coherence in the deliberations and trust among the members of the teams, because these items were described as low-stress factors by the participants.

The sample showed a predominance of professionals that work during the day, either in day shifts or as day laborers. Some studies demonstrate that working during the night changes the circadian rhythm and can cause a higher level of stress, affecting health and leading to an early ageing process⁽¹¹⁾. However, the outcomes of the instruments revealed no association between work shift and stress intensity, contrarily to what has been reported in another paper that addressed the same variables⁽¹²⁾.

It is important to emphasize that the work shift can be related to a higher number of employment relationships of the examined professionals. Having a double working day is a common reality among nursing professionals⁽¹⁰⁾, but the sample of the present study showed a predominance of workers that have only one employment relationship. This result can be related to the fact that most participants were civil servants, with predefined career plans, job stability and distinct salaries in comparison with counterparts that work in private institutions. This salary gap was observed in the wage level and performance and degree bonuses received by professionals in the sample.

Work in the nursing field is usually characterized by the contact with stressful situations, which can be more frequent in specialties whose professionals assist patients with chronic-degenerative diseases, such as cancer. These workers are exposed to situations that create conflict and live around patients with advanced diseases, which impose them physical and social limitations, large bandages, unpleasant scents, chronic pain, and families that have to deal with the loss of a relative.

Consequently, it is reasonable to assume that these professionals are exposed to high levels of stress. However, this hypothesis was not confirmed by the findings of the present study, according to which most participants presented a low level of stress. A similar result was registered among nursing professionals that provided care to women with breast cancer⁽¹⁷⁾.

Although the majority of the examined professionals declared to experience a low level of stress, it is worth stressing that more than 40% of the sample presented moderate or high degrees of stress. This is a relevant outcome, given that people with signs of moderate or high occupational stress can have physical and emotional burnout symptoms that can lead to death, depending on the intensity and time of exposure⁽¹⁶⁾. This implies health damages to workers and financial losses to institutions.

The stressful factors pointed out by the participants were related to work overload, work division and the number of working hours. A similar result was obtained in a survey with resident physicians⁽¹⁶⁾. It is fundamental to mention that the institution where the study was carried out was going through a change in general and nursing leading positions, which may have increased the work overload reported by the professionals, given that the absence of some workers in specific sectors was necessary for the design of the transition plan and for bureaucratic issues.

The specificities of oncology patients under palliative care require a significant workload from the nursing team, especially because the sizing of the teams rarely meets the real demand in this sector, a factor that should be a concern to health managers. Hence, work overload is a possible explanation for the significant incidence of moderate or high stress. This issue may impact the number of missed work days and the health condition of these professionals and originate physical, psychological and social distress, with an increased number of medical leaves and a poorer staff sizing⁽¹⁸⁾.

One of the situations classified among the most stressful by the participants was "The distribution of tasks in my area has made me nervous". It shows that work division was considered a source of suffering or a threat. Work distribution guides the employees' activities and acts as a mind guide that establishes the sequence of actions. By organizing their job, each individual can evaluate the best option for its execution, directing it to achieve results and personal satisfaction. If this does not occur, work can become a threat to psychoemotional balance⁽¹⁶⁾. Keeping the work environment mild, organized and harmonic is a challenge for managers. Work division and function delegation are crucial parts of the creation of this ideal setting⁽¹⁹⁾.

It is worth emphasizing that, to keep the physical and mental health of nursing professionals and prevent them to fall ill, it is necessary to identify and interpret the presence of stressful factors in the work environment. Therefore, the better the understanding and control of negative situations in the

work setting, the better the adaptation to them, and consequently the lower the levels of stress⁽²⁰⁾.

The situations associated with a lower intensity of stress showed that the trust between employees and superiors acts as a protection factor. This result indicates that communication and relationship flow smoothly among work colleagues.

Communication is a complex process that involves interaction, sharing of messages, ideas, feelings, and emotions and can influence people's behavior, who will, in their turn, react to it according to their values, beliefs, life history, and culture. It requires interpretation, imagination, sensibility, active participation, and exchange of energy. It is a sharing act that aims to establish and keep relationships with other people⁽²¹⁾.

The limitations of the present study are related to its design, which does not allow the identification of cause-effect relationships between the outcomes and the non-systematic sample, a factor that contributes to selection bias. The authors recommend the elaboration of new studies, with systematic samples gathered in other oncology palliative care reference centers, whose methodologies allow to explore the stress phenomenon among nursing professionals.

FINAL CONSIDERATIONS

Palliative nursing care in oncology is fundamental, because it results in relief of physical and psychological symptoms and offers quality of life to patients through the application of less invasive and technological techniques. The nature of this work exposes professionals to a strenuous physical and emotional work overload, given that their activities demand not just technical knowledge, but also comfort, communication, and care skills to assist patients and their families in a moment of fragility of human life.

The results of the present study suggest that nursing managers should establish mechanisms that contribute to work process and conditions in this area, reducing occupational risks, minimizing damages to workers' health, and consequently improving the quality of care.

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