

Burnout in Oncology: a study of Nursing professionals

Burnout em Oncologia: um estudo com profissionais de Enfermagem

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ABSTRACT

Objective: To verify if licensed practical nurses and Nursing technicians working at an Oncology department present burnout syndrome. **Methods:** Data of 21 licensed practical nurses and Nursing technicians who had worked for, at least, one year at the Oncology department of a large hospital in the city of São Paulo, Brazil, were collected. The burnout inventory developed by Maslach and Jackson was used. **Results:** The studied population presented burnout based on scores in each of its three dimensions: emotional exhaustion, depersonalization and lack of personal accomplishment. As to burnout symptoms, this study showed that 28.6% of the sample presented high scores in “emotional exhaustion”; 28.6% had high scores in “depersonalization” and 19.1% in lack of “personal accomplishment”. **Conclusions:** When compared to other studies with nurses, this sample presented greater burnout.

Keywords: Burnout, professional; Stress; Nurses aides; Oncologic nursing/manpower

RESUMO

Objetivo: Verificar se auxiliares e técnicos de Enfermagem que trabalhavam em uma unidade Oncológica apresentavam *burnout*. **Métodos:** Foi realizada a coleta de dados com 21 técnicos e auxiliares de Enfermagem que trabalhavam há, no mínimo, um ano na unidade Oncológica de um hospital de grande porte do município de São Paulo. Para a coleta de dados, foi utilizado o inventário de *burnout* de Maslach e Jackson. **Resultados:** Foi possível verificar que a população estudada apresentava *burnout* por meio da identificação dos escores de cada dimensão: desgaste emocional, despersonalização e incompetência profissional. Quanto à apresentação do *burnout*, esta pesquisa possibilitou mostrar que 28,6% dos auxiliares e técnicos de Enfermagem apresentaram alto nível na dimensão “desgaste emocional”, 28,6% dos auxiliares e técnicos apresentaram alto nível na dimensão “despersonalização” e 19,1% dos auxiliares e técnicos apresentaram alto nível na dimensão “incompetência profissional”. **Conclusões:** Quando comparados os resultados do presente estudo com outros realizados com enfermeiros, a amostra apresentou mais alterações referentes ao *burnout*.

Descritores: Esgotamento profissional; Estresse; Auxiliares de Enfermagem; Enfermagem oncológica/recursos humanos

INTRODUCTION

During life, everybody experiences several ways of stress. Normally, a healthy person is able to face or to cope with stress until it is over. However, stress may demand a lot from stressed persons who may not be able to cope with it and develop reasoning difficulties, inability to face the “stressor” or present physical or psychological conditions⁽¹⁾.

The word stress derives from the Latin word *stringere*, “to restrict”. In 1987, Claude Bernard was one of the first physiologists to recognize possible physical consequences of stress. Potter defined stress as “any physiological or psychological strain menacing a person’s total balance. It may affect homeostasis, leading to negative or self-defeating feelings that affect psychic or emotional well-being, relationships, the way of facing life, and even the attitudes towards the loved ones”⁽¹⁾.

Any factor leading to stress is called a “stressor”. Illnesses, as many other events, may be stressors. Stressors can be classified as internal or external. Internal stressors are produced inside the person: fever, pregnancy and emotions – as guilt. External stressors are produced outside, such as changes in social or family role, rejection by peers or even a sudden change in temperature⁽²⁾.

Physiologically, when perceiving a stressor, the brain, via hypothalamus, sends the pituitary gland messages to release hormones activating the sympathetic nervous system – epinephrine and norepinephrine – and to simultaneously inhibit the parasympathetic system. The hypothalamus releases several hormones as well as the corticotrophin

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releasing factor (CRF), which activates the pituitary gland. The pituitary releases corticotrophin (ACTH), that triggers the release of glucocorticoids by the adrenal glands. These three elements – sympathetic system, corticotrophin and glucocorticoids – increase the blood glucose to provide the body with the energy required⁽³⁻⁴⁾.

Furthermore, stress also interferes with the immune functions. Among the main immunosuppressant effects of glucocorticoids, there are changes in white blood cell function, as well as the decrease in the production of cytokines and inflammation mediators^(3, 5-6).

When facing a stressor, individuals assess it rationally. This cognitive and behavioral effort to dominate, tolerate or reduce external and internal demands was called “coping” by Lazarus and Folkman⁽⁷⁾.

In 1981, Maslach and Jackson described that an unsuccessful coping mechanism can cause the burnout syndrome defined as “a three-dimensional syndrome caused by an inadequate response to chronic emotional stress at the workplace”⁽⁸⁾.

The psychoanalyst Freudenberg* was the first author to describe the clinical concept of burnout. He considers the syndrome to be a state, not a process, caused by working conditions and personal characteristics. Nowadays, this personal connotation has been abandoned and the social dimension was introduced.

The psychologists Christina Maslach and Susan Jackson demonstrated that socio-environmental variables are additional factors in developing the burnout syndrome. These authors also described the three main multidimensional factors of the syndrome: emotional exhaustion, depersonalization, and lack of personal accomplishment⁽⁹⁻¹⁰⁾.

“Emotional exhaustion” refers to feelings of physical and mental depletion, feelings of powerlessness and of having reached his/her own limits⁽⁹⁻¹⁰⁾. “Depersonalization” refers to negative, insensitive or excessively detached attitudes towards work. When depersonalization develops, individuals stop trying to do their best, doing just the minimum necessary and, therefore, job performance also decreases⁽⁹⁻¹⁰⁾. Finally, “lack of personal accomplishment” points to the subject discontent with the performance at work, feelings of worthlessness, low self-esteem, job failure and lack of motivation. Sometimes, there is an urge to leave the job⁽⁹⁻¹⁰⁾.

The instrument most commonly used to study burnout is the Maslach and Jackson inventory, which assesses the three dimensions of this syndrome. According to Benevides-Pereira, burnout is characterized by “high

scores in emotional exhaustion and depersonalization and low scores in job performance”⁽¹⁰⁾.

Most authors agree that although anyone may have burnout, the highest incidence is found among caregivers or professionals responsible for the development of other people, such as physicians, nurses, teachers, social workers, psychologists, and other related professions⁽¹⁰⁾.

According to Menzies, “nursing staff suffers the total, concentrated and immediate impact of stresses deriving from patient care”. The constant contact with ill or disabled persons, uncertainties about outcomes, taking care of patients with non-curable diseases, and the confrontation with suffering and death, along with carrying out disgusting and repulsive tasks are activities that generate stress in the Nursing team⁽¹¹⁻¹²⁾.

All these elements are present in an Oncology department and burnout tends to be more severe. Some studies, as that of Ferreira, relate burnout with Nursing, specifically with Oncology Nursing teams dealing a lot with patient’s afflictions and death⁽¹¹⁾.

Despite all treatment advances, cancer is still considered a severe disease generating a lot of distress due to several factors, such as aggressive treatments, multiple hospitalizations, and lack of social and family interactions.

The study by Popim e Boemer on cancer treatment and its meaning for the Nursing staff showed that, despite the need of a very specialized training in the technical and scientific aspects of Oncology, there are many other factors triggering psychological distress, including interpersonal skills and ethical values⁽¹³⁾.

History shows that many defense mechanisms were adopted by Nursing teams to get emotional control and decrease anxiety in order to allow them to take care of patients. Although often efficient, these coping mechanisms fail, especially when the team has to deal with mutilating, incurable or stigmatizing diseases, such as cancer, in its daily work⁽¹¹⁾.

However, studies on job stress of Nursing teams are still incipient. The Nursing staff is composed of registered nurses, licensed practical nurses and Nursing technicians.

OBJECTIVE

The objectives of this study were to identify if licensed practical nurses and Nursing technicians working at an Oncology Department had burnout and to rate their burnout scores.

* Freudenberg HJ. Staff burn-out. J Social Issues. 1974; 30():159-65.

METHODS

This is a descriptive-investigative study using quantitative resources.

Setting

The study was carried out at two inpatient clinics of a large private hospital in São Paulo treating clinical and surgical oncology patients.

Subjects and sample

The sample comprised 21 licensed practical nurses and Nursing technicians who met the inclusion criteria: working at Oncology departments for at least one year, and agreeing to participate in this study after filling out the informed consent form. The working period was defined as at least one year because it takes some time to establish and is a consequence of the professional relationship/work environment.

Data collection instrument

Two instruments were used to gather data. The first one was a socio-demographic inventory prepared by the authors; the second, the Brazilian version of the Maslach & Jackson burnout inventory (MBI) validated by Lautert, in 1997, to check personal feelings and attitudes in the workplace, and when facing patients and other Health professionals⁽¹⁴⁾.

This instrument is composed of 22 affirmative questions about the staff personal feelings and attitudes towards the job, measuring the three dimensions of burnout. All questions are scored according to the Likert scale, varying from 0 (never) to 4 (every days) in which the highest score means a higher burnout level.

The dimension “emotional exhaustion” assesses the subject’s feelings related to being exhausted by the job; the dimension “depersonalization” describes items that assume a cold and impersonal attitude towards patients; the dimension “lack of personal accomplishment” assesses the feelings of competence and efficacy of the Nursing staff while carrying out their job. Items of the emotional exhaustion dimension scores vary from 0 to 36; depersonalization is assessed by five questions with scores from 0 to 20. The dimension “lack personal accomplishment” is measured by eight questions, ranging from 0 to 32. The latter dimension has a reverse score.

Operating data collection

A formal authorization request for data collection was sent to the manager of the Oncology department of

the hospital where data was gathered. The collection was conducted by the researcher during the second semester of 2006 after approval by the Research Ethics Committee. The interviewees were informed about the objectives and goals of this study; anonymity and freedom to participate were assured to them. After agreeing to participate, the staff was requested to sign the informed consent form.

Each licensed practical nurse or Nursing technician received an informed consent form, the socio-demographic data form, and the burnout inventory. They received explanations on how to fill out these forms and a date to return forms was scheduled.

Statistical analysis

Data from the demographic inventory were tabulated manually. Burnout inventory data was sent to a database using the Excel 2002 Office 10 Microsoft XP Home Edition 2002. Later, burnout dimension scores were identified for each group studied.

Since burnout reflects high scores in its dimensions, we had to classify each dimension scores as low/moderate or high. We chose the 75th percentile, as in the study by Lautert to validate the MBI in Brazil⁽¹⁴⁾. However, it has to be emphasized that for the dimension “lack of personal accomplishment”, the 25th percentile was used, because this dimension uses the reverse score.

RESULTS

The sample was mainly composed by women (62%), age range of 31-40 years (57%), who did not choose to work at the Oncology Department (52%). As to marital status, married or single had the same frequency (33% each) and 44% had no fixed partner. Time practicing the profession varied from 18 to 300 months (1.5 to 25 years), with an average of 126 months (10.5 years) and time working at the oncology department ranged from 18 to 180 months (1.5 to 15 years), with an average of 75 months (6.25 years).

Table 1 shows that licensed practical nurses and Nursing technicians had the following mean scores for burnout dimensions: emotional exhaustion (9.9) depersonalization (3.2); lack of personal accomplishment (28.4).

Table 1. Descriptive statistics of questions and dimensions of the burnout inventory

Burnout dimensions	n	Minimum	Maximum	Mean	Standard deviation
Emotional exhaustion	21	2	21	9.9	5.9
Depersonalization	21	0	11	3.2	3.1
Lack of personal accomplishment	21	23	32	28.4	2.2

Table 2 shows that 76.2% of Nursing staff had scores of up to 14. Since this percentage was close to the percentile use by Lautert, who validated the Brazilian version of the MBI⁽¹⁴⁾, the score 14 was used as the cut-off for emotional exhaustion in this study. According to this cut-off score, licensed practical nurses and Nursing technicians with scores from 15 to 21 are at high risk of emotional exhaustion (23.9%) and those with scores ranging from 2 to 14 have low/moderate risk (76.2%).

Table 2. Scores of licensed practical nurses and nursing technicians in emotional exhaustion

Scores	n	%	Accumulated %
2	2	9.5	9.5
3	0	0	9.5
4	2	9.5	19.0
5	1	4.8	23.8
6	2	9.5	33.3
7	3	14.2	47.5
8	1	4.8	52.3
9	0	0	52.3
10	2	9.5	61.8
11	1	4.8	66.6
12	0	0	66.6
13	2	9.5	76.1
14	0	0	76.1
15	1	4.8	80.9
16	1	4.8	85.7
17	0	0	85.7
18	0	0	85.7
19	1	4.8	90.5
20	0	0	90.5
21	2	9.5	100.0
Total	21	100.0	100.0

Table 3 shows that 76.2% of the Nursing staff had scores of up to 4 for depersonalization. The score 4 was used as cut-off for depersonalization in this study.

Table 3. Scores of licensed practical nurses and Nursing technicians in depersonalization

Scores	n	%	Accumulated %
0	2	9.5	9.5
1	6	28.6	38.1
2	5	23.7	61.8
3	0	0	61.8
4	3	14.2	76.0
5	1	4.8	80.8
6	1	4.8	85.6
7	1	4.8	90.4
8	0	0	90.4
9	0	0	90.4
10	1	4.8	95.2
11	1	4.8	100.0
Total	21	100.0	100.0

According to this cut-off, we depicted that Nursing staff with scores ranging from 5 to 11 had high levels of depersonalization (24%), and those with scores from 0 to 4 had low/moderate levels in this dimension (76.2%).

Table 4 shows that 19.1% of licensed practical nurses and Nursing technicians had a score or up to 26. The 26 score was used as cut-off for the dimension “lack of personal accomplishment” in this study. As this percentage was closer to the 25 percentile used by the Lautert, the score 26 was used as cut-off for this dimension in this study. According to this cut-off, Nursing staff with scores ranging from 27 to 32 have low/moderate levels of lack of personal accomplishment (81%) and those scoring from 23 to 26 had high stress levels in this item (19%).

Table 4. Scores of licensed practical nurses and nursing technicians in Lack of personal accomplishment

Scores	n	%	Accumulated %
23	1	4.8	4.8
24	0	0	0
25	0	0	0
26	3	14.3	19.1
27	3	14.3	33.4
28	4	19.0	52.4
29	3	14.3	66.7
30	3	14.3	81.0
31	2	9.5	90.5
32	2	9.5	100.0
Total	21	100.0	100.0

According to data shown on Tables 2, 3, and 4 it can be said that 28.6% of the Nursing staff showed high levels of emotional exhaustion; 28.6% had high levels of depersonalization; 19.1% had high levels of lack of personal accomplishment.

DISCUSSION

The results found in this study are similar to those found by Lautert, who also studied Brazilian Nursing staff, except for the dimension “emotional exhaustion” – the mean score was lower in the present study. Lautert found a score of 13.0 for emotional exhaustion, 4.00 for depersonalization and 25 for lack of personal accomplishment⁽¹⁴⁾.

Another study using MBI to assess nurses working at Internal Medicine, Oncology, Intensive Care and Infectious Diseases Departments showed that all Nursing staff burnout scores were below the cut-off in

all dimensions, except for Nursing staff at the Internal Medicine Department who showed high scores for lack of personal accomplishment. Nursing staff working at other departments, including Oncology, had low scores in all three dimensions⁽¹⁵⁾.

Albaladejo et al. studied Nursing staff burnout in teams working at the following areas: Emergency, Oncology, Intensive Care and Internal Medicine at a hospital in the city of Madrid, Spain. They used the Spanish version of the MBI and observed that 11.7% of the sample showed high emotional exhaustion, 9.2% had high depersonalization, and 16.9% had high levels of lack of personal accomplishment⁽¹⁶⁾.

Payne studied burnout in 82 nurses working at hospices and found that 16% had high emotional exhaustion, 10% had depersonalization and 31% had feelings of lack of personal accomplishment⁽¹⁷⁾.

Comparing the results obtained in this study and the literature, we verify that a greater percentage of licensed practical nurses and technicians had high burnout scores. Therefore, we can state that some of them suffer from this syndrome.

Some factors may trigger burnout: gender, how long they have been working in this profession and in this specialty, not having a fixed partner, and not having chosen to work at this specialty.

Some studies report that being female predisposes to the syndrome and the majority of our sample was composed by women (61%)^(16,18-19).

Regarding the time working in Nursing and in Oncology, data shows that this sample has some professional experience; according to some authors, it is a predisposing factor for burnout, as there is a sensitizing period: staffs become more vulnerable as times go by. After some time at the job, the initial idealized expectations are turned into reality of daily routine and it is acknowledged that personal, financial, and professional rewards are below expectations⁽²⁰⁻²¹⁾.

According to literature, having a stable partner is a protective factor against burnout. In this study, subjects without a fixed partner predominated, which could be an additional trigger^(19,22).

According to Bianchi, who uses the interaction model, those who choose to work at a certain area have an additional performance incentive that helps them to cope with and protect against burnout⁽²³⁾. However, this fact was not observed in this study.

It is important to emphasize that we found no study on burnout in licensed practical nurses or Nursing technicians working in Oncology. This makes data comparison more difficult. Therefore, Oncology nurses were used as means of comparison.

CONCLUSIONS

Regarding licensed practical nurses and Nursing technicians, this study allowed us to conclude that 28.6% had high emotional exhaustion levels, 28.6% had high depersonalization scores, and 19.1% had high scores for lack of personal accomplishment.

Further studies correlating variables predisposing to burnout must be carried, including gender, age, time of working in the specialty, personality traits, and many others. Longitudinal studies should also be made.

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