

Professional Burnout syndrome in health professionals

Síndrome de Burnout profesional en los profesionales de la salud

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Resumen

Burnout, considered an occupational disease, is an emotional and psychological condition that affects many workers, manifesting itself with high levels of stress and anxiety. Objective: to analyze the characteristics of Burnout Syndrome in health professionals working in a hospital in southern Ecuador, between October 2020 - February 2021. Methodology: Quantitative, cross-sectional study. The sample was formed by 208 nurses and assistants. A two-part survey was applied: the first part with demographic information and the second part with the Maslach Burnout Inventory questionnaire (22 items). Results: The health personnel studied, which corresponds to 208 health workers, mostly women nurses, presented severe levels of burnout or job burnout.

Keywords: burnout syndrome, health personnel, emotional exhaustion.

Abstract

El Burnout, considerado como una enfermedad laboral, es una condición emocional y psicológica que afecta a un gran número de trabajadores, manifestándose con altos niveles de estrés y ansiedad. Objetivo: analizar las características del Síndrome de Burnout en profesionales de la salud que trabajan en un hospital del sur del Ecuador, entre octubre de 2020 - febrero de 2021. Metodología: Estudio cuantitativo, transversal. La muestra estuvo conformada por 208 enfermeras y auxiliares. Se aplicó una encuesta de dos partes: la primera con información demográfica y la segunda con el cuestionario Maslach Burnout Inventory (22 ítems). Resultados: El personal sanitario evaluado, que corresponde a 208 trabajadores de la salud, en su mayoría mujeres enfermeras, presentó niveles severos de burnout o desgaste laboral.

Palabras clave: síndrome de burnout, personal sanitario, agotamiento emocional.

248

Introduction

Burnout is a process in which the work context and interpersonal aspects contribute to the development of burnout and a condition of psychological distress related to work organization, characterized by three dimensions: Emotional Exhaustion (EE), Depersonalization (D), and feelings of professional incompetence (PI) (reduced professional achievement), which can be independent or associated¹.

In the words of Gil-Monte and Peiró², Burnout is “a response to chronic work stress made up of negative attitudes and feelings towards the people with whom one works and towards one's professional role, as well as the experience of being exhausted”. Both definitions emphasize and coincide in pointing out that burnout is the central point of this condition.

According to the World Health Organization (WHO), work-related stress negatively affects the psychological and physical health of workers and the effectiveness of the entities for which they work³. Currently, the findings indicate that Burnout

is a complex process with multiple causes, involving stress, boredom, low economic level, difficulties in the professional exercise, work overload, low incentive, low professional orientation, including isolation⁴. This condition has been studied among health personnel, who often work in a work context, with work overload and intense interpersonal relationships, which makes them susceptible to developing Burnout, causing considerably high consequences in the personal, social, and work areas^{5,6}.

Burnout is related to sociodemographic variables, such as gender, age, or years of professional experience⁷. Regarding gender, some authors underline its higher prevalence in women than in men⁶, while others show higher levels of burnout in men than in women⁸. However, Peralta and Moya found no gender differences in burnout⁹.

In professional performance, it is recognized that a significant number of health professionals, not diagnosed with burnout be-

cause of their occupation, may contribute to their activity being underappreciated, since the users of health services, including their colleagues, may see these workers as bad and cold professionals, indifferent to human suffering, illness, and death.

It should be noted that burnout in health professionals is detrimental in the individual and professional spheres because it can negatively affect the quality of health care provided to patients and families in health services at a time when humanization in health care is a priority. In this sense, it is considered important to go deeper into Burnout in health professionals, since understanding this syndrome would serve as a basis for finding strategies to prevent it, which would benefit the health of workers and the quality of care.

This study can contribute to the understanding of this condition to face occupational problems such as Burnout, which generates professional dissatisfaction, absenteeism, labor turnover, occupational accidents, occupation-related diseases, and abandonment of the profession.

Since the institutions must remain in the search for quality of health care, one of the focuses of medical institutions that have invested in the continuous improvement of work processes, on the adequacy of physical structures and the promotion of human resources training, the fact of the existence of Burnout in health professionals goes against the quality of health care services and low user satisfaction. Regarding the quality of care offered by health teams, professional interaction with the work environment appears as a crucial element to ensure positive results and maintain the prerogatives of patient safety.

When considering the importance of this topic, the influence that the care of health professionals has on the health system, to optimize actions aimed at improving the work of the health human talent team. Efficiently identifying and determining the risk factors and variables that comprise and significantly affect the Burnout phenomenon can facilitate the introduction of effective practices in human resources management and the necessary changes in an individual's relationship with work, resulting in effective interventions.

Within an underlying process that impairs health, work stressors deplete the mental and physical resources of employees, specifically health personnel. A systematic review which aimed to examine the evidence on the prevalence of burnout among health professionals working in palliative care found that in eight cross-sectional studies met the inclusion criteria, with a total of 1406 health professionals. The sample was limited to nurses, physicians, and social workers. None of the included articles presented data on other health professionals. Seven of the included studies assessed the prevalence of burnout using the same instrument, the Maslach Burnout Inventory. The data revealed a burnout prevalence of 17.3% among health professionals. Personal Achievement was the subscale of the Maslach Burnout Inventory that had the highest prevalence (19.5%). Nurses had higher levels of Emotional Exhaustion (19.5%) and Depersonalization (8.2%), and physicians had lower levels of Personal Accomplishment

(41.2%). The prevalence of burnout was home care (19.6%). It was higher in social workers (27%). Palliative care setting with the highest prevalence of burnout¹⁰.

On the other hand, a study was conducted to explore the associations between burnout and fast-food consumption, exercise, alcohol consumption, and analgesic use in a multinational sample of 2623 physicians, nurses, and residents from Greece, Portugal, Bulgaria, Romania, Turkey, Croatia, and Macedonia, adopting across national approach. Burnout was significantly positively associated with higher fast-food consumption, infrequent exercise, higher alcohol consumption, and more frequent use of analgesics in the full sample, and these associations remained significant after the inclusion of individual differences and country of residence factors. Cross-national comparisons showed significant differences in burnout and health behaviors and some differences in the statistical significance and magnitude (but not direction) of the associations between them. Health professionals from Turkey, Greece, and Bulgaria reported the most unfavorable experiences. They concluded that burnout and health risk behaviors among health professionals are important both in the context of health and well-being of health professionals and as contributing factors to medical errors and inadequate patient safety. Organizational interventions should incorporate early identification of such behaviors along with health-promoting programs aimed at reducing burnout and job stress¹¹.

In Ethiopia, a cross-sectional design study was conducted on 403 health care providers. They found that, of all study participants, 36.7% scored above the average level of burnout. The highest prevalence (82.8%) of burnout status was found among nurses. The lowest prevalence of burnout was observed among laboratory technicians, which was 2.8% (n = 4). Job insecurity, history of physical illness, low interest in the profession, poor relationship status with managers, concern about contracting infections or illnesses, and physical/verbal abuse were found to be predictors of burnout. They concluded that the prevalence of burnout at work was high. Predictors were job insecurity, history of physical illness, low interest in the profession, poor relationship with managers, concern about contracting infections or illnesses, and physical/verbal abuse¹².

At the national level, a study was conducted in a sample of 2404 health professionals (mean age 40.0 years; 68.4% women) from the capitals of the 24 provinces of Ecuador. They evaluated the presence of burnout by applying the Maslach Burnout Inventory. Sociodemographic variables, emotional distress, social support, and coping styles, as well as organizational variables, were also collected. They demonstrated that all the health professionals surveyed, 2.6% presented burnout syndrome. By dimensions, 17.2% of the participants presented a high level of emotional exhaustion, 13.5% of depersonalization, and 18.2% had reduced personal achievement. Not being of mixed race, being classified as a probable case of mental disorder, and using more passive coping were associated with a higher probability of presenting burnout; having >10 years of experience was associated with a lower probability of burnout¹³.

While occupational medicine (OM) is primarily concerned with the prevention of work-related diseases in the physical sense, no disease can occur without emotional concomitants. It was only about 20 years ago that a behavioral entity was added to the medical lexicon: 'Burnout', as a clinical complex, received recognition in the psychosocial literature¹⁴.

Emotional exhaustion is the first response to chronic occupational stress, accompanied by physical exhaustion and depleted emotional resources to cope with the stressful situation¹⁵. Depersonalization, in the sense of dehumanization, refers to the perception of impaired problem-solving ability and decreased satisfaction with work achievements, leading to emotional insensitivity, at which point the professional begins to treat care recipients, colleagues, and the organization in a dehumanized manner¹⁵.

Manifestations such as anxiety, increased irritability, lack of motivation, reduced work goals and commitment to results, reduced idealism, alienation, and selfish attitudes¹⁶ are common currently. Professional incompetence or reduced professional achievement is characterized by a tendency of workers to negatively self-evaluate themselves, thus becoming unhappy and dissatisfied with their professional performance, which, as a further consequence, leads to a diminished sense of competence, success, and ability to interact. Burnout is the final phase of a continuum, with feelings of inadequacy to the job, lack of resources to address the job, insufficient education, and diminished ability to solve problems. Certain occupations have a distinct risk for the development of burnout: those who work with the public or special populations, such as people with disabilities, the seriously ill, children, prisoners, or the impoverished. Similarly, work that involves extreme responsibility, such as hazardous work, precision work, work that may involve serious consequences, shift work, or work in which the responsibilities involved are not appreciated, can be exhausting. While certain specific occupations are at risk for the evolution of burnout, particularly those positions in human services, especially in health care. Many of these careers have been studied and, although some are not involved in the provision of care, they do involve a close working relationship with one or more human beings¹⁴.

Research has shown that negative aspects of the work environment are related to adverse events associated with poor quality care¹⁷. and may increase the risk of undesirable consequences, such as Burnout¹⁸.

Several personal, interpersonal, and organizational stressors lead to the development of Burnout Syndrome. Age, work experience, and personality traits such as insecurity, cowardice, emotional instability, low-stress tolerance, defense mechanisms, and self-control are some of the personal stressors that can positively contribute to increased burnout¹⁹. On the other hand, the most important and common organizational stressors are understaffing, work overload, unnecessary bureaucracy, uncertainty about the results of the medical care provided, contact with death, inadequate health and safety services, type of leadership, poor management, lack of job recognition and the feeling of loss of control in the work environment²⁰.

In terms of prevalence, nurses are more susceptible to burnout compared with other health care workers²¹.

More than half of U.S. physicians experience substantial symptoms of burnout. Physicians working in frontline specialties (e.g., emergency medicine, family medicine, general internal medicine, neurology) are among those at the highest risk for burnout. Burnout is near twice as prevalent among physicians as U.S. workers in other fields after controlling for work hours and other factors^{22,23}.

Likewise, studies of nurses report a similarly high prevalence of burnout and depression. In a 1999, a study of more than 10,000 inpatient registered nurses, 43 percent had a high degree of emotional exhaustion²⁴. A subsequent study of approximately 68,000 registered nurses in 2007 reported that 35 percent, 37 percent, and 22 percent of hospital nurses, nursing home nurses, and nurses working in other settings had high emotional exhaustion²⁵.

For above mentioned reasons we were prompted to analyze the characteristics of Burnout Syndrome in health professionals working in a hospital in southern Ecuador, between October 2020 - February 2021.

Methods

Type of research

A descriptive, non-experimental, correlational, cross-sectional, non-experimental study was carried out with a quantitative analytical approach.

Population

The universe was constituted by the nursing personnel working in a hospital in the South of Ecuador; according to the data of the human talent department, there are 450.

Sample

A simple random sampling was carried out. The sample is 208 nurses from the selected Southern Hospital, according to the Sierra Bravo formula of 1988. The error (5%) that we make in estimating the sample size, starting from a confidence level of 95% ($Z=1.96$).

Inclusion and Exclusion Criteria

Nursing personnel with a third level degree and auxiliary nursing personnel who previously signed the voluntary informed consent form and who work at the Hospital del Sur de Cuenca were included and those who did not meet the valid inclusion criteria were excluded.

Instruments

A survey structured in two parts was used as an instrument: 1. Socio-demographic information such as profession, age, gender, years of service, work status. The second part consisted of the Maslach Burnout Inventory (MBI) questionnaire (22 items). This scale has a high internal consistency and reliability close to 90%. Previously each interviewee had to sign the informed consent, according to the format of the Bioethics Committee of the UCACUE.

Maslach Burnout Inventory Questionnaire²⁶.

It is measured using the Maslach questionnaire of 1986, which is the most widely used instrument worldwide. This scale has a high internal consistency and reliability close to 90%; it is made up of 22 items in the form of statements on the feelings and attitudes of the professional in his work and towards patients and its function is to measure professional burnout.

The Maslach questionnaire is completed in 10 to 15 minutes and measures the 3 aspects of the syndrome: emotional fatigue, depersonalization, personal fulfillment. With respect to the scores, those below 34 are considered low, high scores in the first two subscales and low scores in the third one allows to diagnose the disorder.

1. Emotional exhaustion subscale. It consists of 9 questions. It assesses the experience of being emotionally exhausted by the demands of work. Maximum score 54.

Depersonalization subscale. It consists of 5 items. It assesses the degree to which each person recognizes attitudes of coldness and detachment. Maximum score 30.

3. Self-realization subscale. It is made up of 8 items. It evaluates feelings of self-efficacy and self-fulfillment at work. Maximum score 48.

The rating of the statements is as follows: Emotional exhaustion: 1, 2, 3, 6, 8, 13, 14, 16, 20. Depersonalization: 5, 10, 11, 15, 22. Personal fulfillment: 4, 7, 9, 12, 17, 18, 19, 21. The scale is measured according to the following ranges:

- 0 = Never
- 1 = Few times a year or less
- 2 = Once a month or less
- 3 = A few times a month or less
- 4 = Once a week
- 5 = A few times a week
- 6 = Every day

Procedure

Informed consent was requested from each participant, which included the request for participation in the study and the objective of the study. The Maslach Burnout Inventory scale (22 items) was used in the indicated population. As a second step, it was verified that it is understandable for the study population. Thirdly, it was applied, and it was verified that each person answered all the items. Once this consent was obtained, the survey was filled out. During the data collection process, the researcher was available to answer questions and provide solutions through telephone or video calls. Data collection was carried out in virtual format through contacts, e-mail, and informed consent was requested online, after filling out the survey.

Statistical analysis

After having obtained the relevant data from the context where the research was carried out, a descriptive analysis was performed using frequencies and percentages and measures of central tendency, then a normality analysis was performed using the Shapiro Wilks test, assuming parametric assumptions, therefore the Pearson's correlation test was applied, and the statistical analyses were performed using the statistical program Info Stat.

Results

Sociodemographic and occupational profile of nursing personnel

The sociodemographic data (Table 1) show that 90.4% of the sample was female with a mean age of 35.8 years (SD: 7.03), with a minimum age of 25 years and a maximum age of 59 years.

Regarding work characteristics (Table 2), 88.2% were nurses, 82.2% had less than 10 years of work experience. A total of 64.9% have a permanent appointment.

Table 1. Description of the sociodemographic characteristics of the nursing staff.

Features	f	%
Middle Ages (SD) 35.83 (7.03) min: 25 máx: 59		
Gender		
Female	188	90,4%
Male	20	9,6%

Table 2. Description of the job characteristics of the nursing staff

Features	f	%
Occupation		
Nurse	185	88.9%
Auxiliary nurse	23	11.1%
Years of service		
Less than 1 year	12	5.8%
1 to 5 years	71	34.1%
5 to 10 years	100	48.1%
More than 10 years	25	12.0%
Employment status		
Occasional contract	63	30.3%
Permanent appointment	135	64.9%
Provisional appointment	10	4.8%

Categorization of the Maslach Burnout Inventory scores

Regarding the score obtained according to the responses of the participants in the subscale that evaluates emotional exhaustion, 51.0% are at a low level. With regard to the depersonalization subscale, 44.2% were at a high level, showing signs of Burnout syndrome. Finally, with respect to personal fulfillment, according to the score obtained, 65.9% are at a low level, which is indicative of Burnout. This means that there is a severe degree of Burnout Syndrome (Table 3).

Table 3. Description of the assessment of the BURNOUT scale

Maslach Burnout Inventory Subscales	Under		Medium		High	
	f	%	f	%	f	%
Emotional fatigue	106	51,0%	69	33,2%	33	15,9%
Depersonalization	76	36,5%	40	19,2%	92	44,2%
Self-realization	137	65,9%	22	10,6%	49	23,6%

Association between Maslach Burnout Inventory subscales, profession, age, gender, years of service, and employment status.

The Pearson's R correlation test was performed between the sociodemographic variables and the three subscales of the Maslach Burnout Inventory, the results obtained are presented in Table 4. It can be seen that the professional variable is the one that presents a significant correlation with emotional exhaustion, depersonalization, and personal fulfillment. However, it is only with the latter that it presents a moderate relationship, as Pearson's R is closer to 0.5.

To analyze the relationship between the Maslach Burnout Inventory scales and the sociodemographic variables, Table 5 shows the percentages corresponding to the low levels of Emotional Fatigue, the high level of Depersonalization, and the low level of Personal Fulfillment since these levels prevailed in each subscale. From these results, it stands out that men with 80.0% indicate low personal fulfillment compared to 64.4% of women. Also, the majority (72.4%) of workers with a nursing profession indicate low personal fulfillment, in contrast to (13.0%) corresponding to nursing assistants.

Table 4. Pearson's r correlation between subscales of the Maslach Burnout Inventory, profession, age, gender, years of service, and employment status

Correlations					
Maslach Burnout Inventory Subscales	Profession	Age	Gender	Years of service	Employment status
Emotional Fatigue	-,227**	-,126	-,022	-,039	-,032
	,001	,069	,756	,575	,650
	208	208	208	208	208
Depersonalization	-,304**	-,133	,081	,003	-,049
	,001	,055	,243	,969	,478
	208	208	208	208	208
Self-realization	,430**	,157*	-,088	,055	,038
	,001	,023	,209	,429	,586
	208	208	208	208	208

Pearson's correlation. Bold p-value.

Table 5. Relationship between Maslach Burnout Inventory subscales, profession, age, gender, years of service, and employment status.

		Emotional fatigue	Depersonalization	Personal realization
		Bajo	Alto	Bajo
Gender:	Female	51.1%	43.6%	64.4%
	Male	50.0%	50.0%	80.0%
Age (grouped).	25 - 40 years old	51.2%	41.6%	63.9%
	41 - 59 years old	50.0%	54.8%	73.8%
Profession:	Nurse	45.9%	48.6%	72.4%
	Auxiliary nurse	91.3%	8.7%	13.0%
Years of service	Less than 1 year	66.7%	16.7%	66.7%
	1 to 5 years	47.9%	49.3%	70.4%
	5 to 10 years	51.0%	46.0%	64.0%
	More than 10 years	52.0%	36.0%	60.0%
Employment status	Occasional contract	52.4%	44.4%	69.8%
	Permanent appointment	50.4%	45.2%	64.4%
	Provisional appointment	50.0%	30.0%	60.0%

Discussion

It was analyzed the characteristics of Burnout Syndrome in nursing personnel working in a hospital in southern Ecuador. The sample consisted of 208 nursing workers and is characterized by being formed mostly by women (f=188; 90.4%), the average age is 25.83 years with a minimum age of 25 and a maximum of 59 years; formed mostly by nurses (f=185; 88.9%) and in a lower percentage by nursing assistants (f=23; 11.1%). Workers with years of service between 5-10 years (f=100; 48.1%) and personnel with permanent appointments (f=135; 64.9%) predominated.

The results indicate values of low emotional fatigue, high depersonalization, and low personal fulfillment, indicative of the presence of a severe degree of burnout or professional exhaustion in the nursing personnel participating in this research. Our results are similar to those of Ureta and Cardo²⁷, who determined that nurses who care for critically ill patients suffer from a medium-high degree of Burnout syndrome. Indeed, Cabrera et al.²⁸ affirm that nursing personnel, especially in the intensive care unit (ICU), suffer from a moderate degree of Burnout, with respect to the average of the general healthy population.

The results obtained coincide with the results of the work of Guntupalli and Fromm²⁹, in which not only high levels of depersonalization appear, but also high emotional exhaustion, arguing that the cause of this is not only attributed to the type of patient, but also the scarce support of the system.

It was determined that the profession presents a significant correlation with emotional exhaustion, depersonalization, and personal fulfillment. Our data point to this possibility since the show that a greater number of nurses compared to nursing assistants present depersonalization and low personal fulfillment. Similarly, few nurses show low emotional exhaustion compared to nursing assistants. It is important to mention that workers with less than 1 year, for the most part, indicate low emotional exhaustion than that those who work more than one year who are more psychologically tired. In addition, it was shown that workers under occasional contracts are the ones who most indicate low personal fulfillment.

According to Albaladejo et al.³⁰, this psychological or emotional exhaustion is related to job dissatisfaction, poor opinion of personnel policy, low identification with the institution, working the afternoon or rotating shift, being married, and being female. In addition, De Lucas et al.³¹ indicate that emotional exhaustion is linked to factors such as having more seniority in the profession, having more seniority in emergencies, dissatisfaction with the shift in which they work.

The fact that nursing workers present this burnout profile or high emotional exhaustion is worrying since it can generate consequences for the health institution; this is due to the fact that apparently healthy nursing professionals are working for years, and they are dissatisfied or embittered in their jobs; consequently, the quality of service provision will be affected, thus increasing the number of complaints from patients, because they are neither qualitatively nor quantitatively productive; therefore, it is necessary to intervene in the work context³². As for the limitations of the study, since the sample was made up mostly of women (90.4%), the results of differences by sex should be analyzed with a certain degree of caution.

Conclusions

The health personnel studied, which corresponds to 208 health workers in a hospital in southern Ecuador, mostly female nurses, present severe levels of burnout. For this group of professionals, high levels of burnout can represent a serious threat to their personal and professional quality of life and affect the quality of care.

In this context, Gil Monte³³ proposes intervention strategies for the prevention and treatment of burnout syndrome, which can be grouped into three categories: individual strategies, group strategies, and organizational strategies. In the individual level strategies, he recommends the use of assertiveness training and training programs for effective time management. At the group level, the strategy for excellence is the use of social support at work from peers and supervisors. Through social support at work, individuals obtain new information, new skills, or improve those they already possess

and get emotional support, advice, or other types of help. Finally, at the organizational level, since the origin of the problem is in the work context and, therefore, the management of the organization must develop prevention programs aimed at improving the environment and climate of the organization. These strategies can be implemented by the organization's management as early socialization programs and organizational development processes. On the other hand, it would be interesting to conduct empirical studies on burnout syndrome during the health emergency due to the COVID-19 pandemic^{34,35,36,37} related to emotional aspects³⁸ and to conduct educational intervention studies^{39,40,41,42}.

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