1

Burnout and health personnel in Morelos

Burnout y el personal de salud en Morelos

ROQUE-NIETO, Nohemí†, PÉREZ-MAYO, Augusto Renato* and RODRÍGUEZ-BAHENA, Beatriz Lizbeth

Universidad Autónoma del Estado de Morelos

ID 1st Author: Nohemí, Roque-Nieto / ORC ID: 0000-0002-5433-9478

ID 1st Co-author: Augusto Renato, Pérez-Mayo / ORC ID: 0000-0003-1094-3283

ID 2nd Co-author: Beatriz Lizbeth, Rodríguez-Bahena / ORC ID: 0009-0002-6343-3068

DOI: 10.35429/JGE.2023.13.7.1.15 Received July 10, 2023; Accepted December 30, 2023

Abstract

This research aims to identify the existence of burnout syndrome in a sample of 124 nurses from a health organization in Morelos. The instruments used were the Maslach Burnout Inventory (MBI) and a questionnaire to measure the sociodemographic and employment profile of the study subjects. We sought to measure the existence of the syndrome in three subscales measured by the MBI: emotional exhaustion, depersonalization, and personal fulfillment at work, and relate them to sociodemographic and occupational variables. A descriptive statistical study and an inferential analysis were carried out using the statistical package SPSS version 26. The main results found were the following: Nurses present low levels of burnout according to the results obtained in its three dimensions: emotional exhaustion depersonalization (3.31) and personal fulfillment at work (41.87). There are no significant differences between the three dimensions of burnout and the sociodemographic and occupational variables. Although the results indicate low levels of Burnout, it is pertinent to replicate the research in other groups of nurses susceptible to suffering from the syndrome, as well as to carry out interventions, providing them with strategies that allow them to face the demands of their activity.

Burnout syndrome, Nursing staff, Occupational stress

Resumen

Esta investigación tiene como objetivo identificar la existencia del Síndrome de burnout en una muestra 124 enfermeras de una organización de salud en Morelos. Los instrumentos empleados fueron el Maslach Burnout Inventory (MBI) y un cuestionario para medir el perfil sociodemográfico y laborales de los sujetos de estudio. Se buscó medir existencia del síndrome en tres subescalas que mide el MBI: agotamiento emocional, despersonalización y realización personal en el trabajo y relacionarlos con las variables sociodemográficas y laborales. Se realizó un estudio estadístico descriptivo y un análisis inferencial utilizando el paquete estadístico SPSS versión 26. Los principales resultados encontrados fueron los siguientes: Las enfermeras presentan bajos niveles de burnout de acuerdo con los resultados obtenidos en sus tres dimensiones: agotamiento emocional despersonalización (3.31) y realización personal en el trabajo (41.87). No existen diferencias significativas entre las tres dimensiones del burnout y las variables sociodemográficas y laborales. Aunque los resultados indican bajos niveles de Burnout, es pertinente replicar la investigación en otros grupos de enfermeras susceptibles a padecer el síndrome, así como a realizar intervenciones, dotándoles de estrategias que les permitan hacer frente a las demandas en su actividad.

Síndrome de Burnout, Personal de enfermería, Estrés ocupacional

^{*} Author's Correspondence (E-mail: nohemi.roque@hotmail.com) †Researcher contributing first author.

Introduction

Origins of the term "burnout syndrome"

In 1974, a psychiatric doctor Herbert Freundenberger, who worked as a volunteer assistant at the Free Clinic in New York for drug addicts, together with other young and idealistic volunteers, observed that after a more or less long period, between one and three years, most of the doctors suffered a progressive loss of energy, demotivation, lack of interest in their work to the point of exhaustion, together with various symptoms of anxiety and depression.

According to Leiter, the type of work these people did was characterised by no fixed hours, very long hours, very low pay and a very demanding social context, usually tense and compromised. Freundenberger described the process by which these people become less sensitive, unsympathetic, aggressive and organisationally despotic and toxic co-workers or bosses in relation to patients and co-workers, distant and cynical, with a tendency to blame patients and co-workers for their own problems and create negative organisational climates.

This homogeneous behavioural pattern Freundenberger classified as "Burnout", i.e. being burned out, burned out, burned out, which was the term also used to refer to the effects of chronic consumption of toxic substances of abuse. At that time, this word was commonly used in athletic, sporting and artistic jargon, referring to those subjects who did not achieve the expected results, despite the effort made.

In 1976 the social psychologist Cristina Maslach, studying the emotional responses of employees in the helping professions, chose the same term used colloquially by Californian lawyers to describe the gradual process of loss of responsibility and cynical disinterest among their co-workers. Burnout was a socially accepted expression: those affected felt easily identified with this descriptive, non-stigmatising term like psychiatric diagnoses.

Hence, it was necessary to know in which professions this factor was most prevalent. Thus, the first published studies related to burnout syndrome in different professionals, such as doctors, nurses, social workers, teachers, police, among others, as well as in the media, emphasised the importance of individual differences such as previous personality differences, such as perfectionism, idealism, excessive involvement in work, rather than the influence of objective working conditions.

A process of intervention was initiated through prevention and intervention seminars aimed at adequate coping. However, such indiscriminate use of the term caused it to lose its scientific rigour as it was used by researchers and others giving it different connotations, which ranged from considering it as a syndrome associated with working directly with people, after a prolonged time of high emotional involvement with the client, based on Seligman's paradigm of learned helplessness, which is a psychological condition in which a subject learns to believe that they are helpless, that they have no control over the situation in which they find themselves and that whatever they do is useless.

In 1981, Maslach and Jackson provided the concept and methodology for studying the phenomenon by defining burnout as a three-dimensional syndrome characterised by: emotional exhaustion, depersonalisation and reduced personal fulfilment. Due to this conceptual characterisation of the term, they created a specific instrument to measure the levels of the syndrome based on these three components. The instrument is called the Maslach Burnout Inventory (MBI), which is known and applied today.

Nowadays, studies on burnout have been acquiring special importance in different work environments, becoming a specific concern of those who work in the fields of health, social service and education in a fundamental way, and extending this concern to police officers and employees of organisations with negative organisational climates and toxic leadership.

ISSN-On line: 2524-2008 RINOE® All rights reserved.

The concept of burnout

The conceptual delimitation of the term burnout has changed over time and it is possible to establish two perspectives: clinical and psychosocial. The clinical perspective considers it as a state that the subject reaches as a consequence of work-related stress. The early work of Freundenberger and Pines and Aaronson was directed in this direction.

The psychosocial perspective, on the other hand, sees it as a process that develops through the interaction of characteristics of the work environment and personal characteristics, with distinct manifestations in different stages as indicated in the work of Maslach and Jackson.

Another key distinction that can be made about burnout is its conceptualisation as a state or as a process. In the first case, viewing burnout as a state implies that the subject is "labelled" as burned out, in that his or her state is the end product of high levels of stress. However, the conceptual perspective that views it as a process other, apparently more encouraging implications: here burnout is approached as a particular coping mechanism to stress that involves phases in its development, and where burnout is understood as a response to workrelated stress when the functional coping strategies usually used by the subject fail, acting as mediating variables in the relationship between perceived stress and its consequences.

Multiple interpretations of the concept historically givenFreundenbergerⁱ:

A sense of failure and a depleted or worn-out existence resulting from an overtaxing of the worker's energy, personal resources or spiritual strength.

Pines and Kafry: A general experience of physical, emotional and attitudinal exhaustion.

Edelwich and Brodsky: Progressive loss of idealism, energy and motives experienced by people in the helping professions as a result of working conditions.

Freundenberger: A state of fatigue or frustration given by devotion to a cause, way of life or relationship that does not produce the desired reward.

ISSN-On line: 2524-2008 RINOE® All rights reserved. Pines, Aaronson and Kafry: A state of physical, emotional and mental exhaustion caused by being involved for long periods of time in situations that affect the person emotionally.

Maslach and Jackson: A response to chronic work stress that involves the experience of being emotionally exhausted, the development of negative attitudes and feelings towards the people with whom one works (depersonalisation attitudes), and the appearance of processes of devaluation of one's own professional role. They see burnout as a three-dimensional syndrome characterised by: a) emotional exhaustion, b) depersonalisation and c) reduced personal fulfilment.

Brill: A dysfunctional and dysphoric state, characterised by an unpleasant mood, such as sadness, anxiety or irritability, related to work, in a person who has no other major psychopathological disturbance, in a job in which he/she has previously performed well in terms of both objective performance and personal satisfaction, and who is then unable to do so again, except by an external intervention of help, or by a job readjustment, and which is related to previous expectations.

Cronin-Stubbs and Rooks: An inadequate emotional and behavioural response to occupational stressors.

Shirom: A consequence of the dysfunction of coping efforts, so that as personal resources decrease, the syndrome increases, so that the coping variable would be a determining factor in the understanding of burnout.

Moreno, Oliver and Aragoneses: A type of work-related stress that occurs mainly in those professions that involve an intense interpersonal relationship with the beneficiaries of one's own work.

Peris: A disorder characterised by the overload and/or destructuring of cognitive tasks beyond the limit of human capacity.

Párraga: A disorder of maladaptation to work-related stress, acute or chronic, either due to a lack of coping resources, or due to a failure to carry out known strategies that would lead to a dysfunctional emotional and behavioural state.

From all these definitions of burnout, we can extract, following Mingote, that there are common factors among them:

- 1. Predominance of dysphoric symptoms (unpleasant mood, such as sadness, anxiety or irritability), but above all emotional exhaustion.
- 2. Behavioural disturbances related to the care model or depersonalisation of the relationship with the client, which implies that the relationship between worker-client is intense and long-lasting for the syndrome to appear.
- 3. **Physical** symptoms of psychophysiological stress, such as tiredness to the point of exhaustion, general malaise, together with palliative techniques to reduce residual anxiety such as addictive behaviours, which, in turn, mediate a deterioration in the quality of life, which emerge as a continuous process occurs gradually and "establishes itself" in the individual until it provokes the feelings of the syndrome.
- 4. Syndrome of a clinical-occupational nature that is produced by an inadequate adaptation to work, even though it occurs in presumably "normal" individuals.
- 5. It is manifested by a lower performance at work and by experiences of low personal fulfilment, insufficiency and inefficiency at work, demotivation and organisational withdrawal.

After this overview or state of the art of the concept, we use Maslach and Jackson's definition of burnout as a response to chronic work stress, which has three dimensions: a) emotional exhaustion, b) depersonalisation and c) reduced personal fulfilment.

The paradigms that study burnout

There are three different perspectives from which Burnout Syndrome has been studied:

Psychosocial approach

This perspective aims to explain the contextual and environmental conditions in which Burnout Syndrome originates, the factors that help to mitigate it (especially social support) and the specific symptoms that characterise the syndrome, mainly of an emotional nature, in different professions. In addition, the most widely used measurement instrument to assess the syndrome, the Maslach Burnout Inventory (MBI), was developed within this approach.

Organisational approach

It focuses on the fact that the causes of burnout syndrome originate at three different levels, the individual, the organisational and the societal. The development of Burnout Syndrome generates in professionals responses to work, which do not always have to appear together, such as the loss of the sense of work, idealism and optimism, or the lack of sympathy and tolerance towards clients and the inability to appreciate work as personal development.

Historical approach

It is an outgrowth of studies on the consequences of the rapid social changes in the United States after World War II on work and working conditions.

In this research we ascribe to the psychosocial perspective, so we make the three-dimensional concept of Burnout our own and use the Maslach Burnout Inventory, Human Services Survey version for data collection.

Explaining these approaches a little further, we find that:

The need to explain the burnout episode (antecedent-consequent relationship of its dimensions), together with the usefulness of integrating it into broader theoretical frameworks that can explain its aetiology in a satisfactory way, has led to the emergence of various theoretical models. These models group a series of variables, considered as antecedents and consequences of the syndrome, and discuss through which processes individuals come to feel burnt out.

The models developed from psychosocial considerations can be classified into three groups:

ROQUE-NIETO, Nohem, PÉREZ-MAYO, Augusto Renato and RODRÍGUEZ-BAHENA, Beatriz Lizbeth. Burnout and health personnel in Morelos. Journal-General Economics. 2023

ISSN-On line: 2524-2008 RINOE® All rights reserved.

Socio-cognitive theory of the self

The first group includes models developed within the framework of the socio-cognitive theory of the self. These models characterised by the use of Albert Bandura's ideas to explain the aetiology of burnout. They basically consider that: a) individuals' cognitions influence what they perceive and do and, in turn, these cognitions are modified by the effects of their actions, and by the accumulation of the consequences observed in others, and b) a subject's belief or degree of confidence in their own abilities will determine how hard the subject will work to achieve their goals and the ease or difficulty in achieving them, and will also determine certain emotional reactions, such as depression or stress, that accompany the action. Among the models included in this group are Harrison's model of social competence, Cherniss' model, Pines' model and Thompson, Page and Cooper's model of self-control. In the first three models, perceived self-efficacy is the relevant variable for the development of the syndrome, while in the model of Thompson et al. it is professional self-confidence and its influence on personal fulfilment at work that determines the development of the syndrome.

Theories of social exchange

The second group includes models developed from social exchange theories. These models consider the principles of equity theory (Buunk and Schaufeli's social comparison model or Hobfoll and Fredy's resource conservation theory).

They propose that burnout syndrome has its aetiology mainly in the perceptions of unfairness or lack of gain that subjects develop as a result of the social comparison process when establishing interpersonal relationships. Professionals in helping services establish exchange relationships (e.g., help, appreciation, gratitude, recognition, etc.) with the recipients of their work, with peers, with supervisors, and with the organisation, and in these relationships expectations of fairness or gain in these exchanges play an important role.

When individuals continuously perceive that they give more than they receive in return for their personal involvement and effort, without being able to adequately resolve the situation, they will develop feelings of job burnout.

ISSN-On line: 2524-2008 RINOE® All rights reserved.

Organisational theory

Finally, the third group considers models developed from organisational theory. These models include role dysfunctions, organisational ill health, structure, culture and organisational climate as antecedents of the syndrome.

- These models are characterised by an emphasis on the importance of organisational contextual stressors and the coping strategies employed in the experience of burnout. They all include burnout syndrome as a response to work stress. Included in this group are the Golembiewski et al. model, the Cox, Kuk and Leiter model and the Winnubst model.
- The first model emphasises the dysfunctions of role processes, and especially the importance of role overload and role poverty in the development of the syndrome, the Cox et al. model emphasises the importance organisational health and the Winnubst model emphasises the importance of organisational structure, culture climate.
- Gil Montes and Peiró's integrated model.
- Currently, Gil-Montes and Peiró outline a new model that can be integrated by the cognitive and transactional models of work stress as a response to perceived work stress that arises after a process of cognitive reappraisal, when the coping strategies employed by professionals are not effective in reducing that perceived work stress. This response is a mediating variable between perceived stress and its consequences and is initiated by the joint development of low self-fulfilment at work and high feelings of emotional exhaustion. The depersonalising attitudes that follow are seen as a coping strategy developed by professionals in the face of the chronic experience of low job selffulfilment and emotional exhaustion.
- This perspective integrates the role of cognitions and emotions as mediating variables in the relationship between perceived work stress and attitudinal and behavioural responses.

- Evolution of the picture and symptomatology associated with each stage.
- In the aforementioned study, Fernández and collaborators establish a detailed symptomatology according to the stages through which the worker goes through in the development of burnout syndrome.
- First stage. An imbalance is perceived between work demands and material and human resources in such a way that the former exceed the latter. This situation causes a state of acute stress related to situations such as disenchantment at work, over-commitment, responsibility and confrontation with difficult situations and excessive direct contact with other people.
- Second stage. The individual is confronted with a significant number of stressful situations where different coping strategies must be put into action. In this stage, symptoms related to the following may develop:
- Hyperactivity. In this case, the professional begins to work more hours than normal without financial remuneration, manifesting feelings of disillusionment.
- The level of commitment to work decreases, there are alterations in the level of attention, excessive aspirations, feelings of disillusionment, lack of motivation, jealousy and, as a consequence, problems with the work team.
- At this stage it is likely that, depending on the individual, feelings of guilt, depression, aggressiveness, etc. may also appear.

Third stage: Professional burnout syndrome really appears, where the symptoms described in the 2nd stage may appear, to which are added:

Psychosomatic symptoms such as headaches, osteo-muscular pain, gastrointestinal discomfort, ulcers, weight loss, obesity, chronic fatigue, insomnia, high blood pressure, menstrual alterations, etc.

Behavioural symptoms: absenteeism from work, abuse and dependence on drugs, alcohol, coffee and other toxic substances, high cigarette consumption, marital and family problems, high-risk behaviour such as reckless driving.

Emotional symptoms: The most characteristic feature is the affective distancing towards the people he/she has to attend to. Anxiety that reduces concentration and performance, impatience, irritability, suspicious and even paranoid attitudes towards clients, colleagues and bosses. They may become callous, cruel and cynical.

Defensive Symptoms: The "worn out" individual denies the above emotions and behaviours and blames clients, colleagues, bosses, for their situation, and does or cannot do anything to get out of it.

Fourth stage: The psychophysical deterioration of the individual leads to frequent absences, a greater number of absences from work and a lack of efficiency in their work, which makes them more of a danger than a help to the patients they have to attend to.

The most characteristic behaviours at this stage are related to a lack of energy and enthusiasm, a decrease in interest in patients, greater frustration and demotivation than in previous stages. There is a desire to put aside work to do something else, and above all a great demoralisation. They feel that they have exhausted all their emotional human resources and have nothing left to offer to others and become desensitised to problems that require help. Feelings of guilt frequently appear and they are unable to solve problems. The individual feels burned out, is fed up with work, withdraws from family and friends and sometimes sinks into depression, even in advanced cases into self-control, suicide, lacks and unpredictably. This tends to occur especially in people who are more dedicated, committed and more willing to help others.

In both the third and fourth phases, it is necessary to treat the subject in all his or her physical and psychological components.

ISSN-On line: 2524-2008 RINOE® All rights reserved.

Which professions are at risk today?

Burnout syndrome is a response to chronic work-related stress that occurs mainly in the of work environment service-oriented professions, where there is direct contact with the people for whom the work is intended. A review by Ortega and López of studies on burnout carried out in Spain and Mexico revealed that the populations on which they have worked, because they constitute a risk factor, are mostly professions linked to care or service work, such as clinical assistants, carers of geriatric patients, specialised, primary and care doctors. dental surgeons, professionals working with HIV patients, mental health and psychologists, as well as nursing professionals.

However, burnout has also been detected in other professions such as administrative and administrative assistants, sportsmen and women, teachers, special education monitors, workers in occupational and social centres, prison warders and volunteers.

Victims of burnout: Social workers, nurses, teachers and police officers are most vulnerable to being attacked by this problem. They become cynical and negative, and sometimes hostile to their clients. Others prone to burnout are air traffic controllers, as well as those dealing with life and death decisions, cardiologists and those who are required to work extreme hours, for example.

Clinical manifestations of burnout

The clinical manifestations of this syndrome are encompassed within the physical, emotional, cognitive, behavioural and social spheres. The following table summarises the main symptoms associated with burnout.

	Physical symptoms	Ŀ	Emotional symptoms	
_	Tachycardia	-	Depression	
_	Headaches	_	Helplessness	
_	Gastrointestinal	_	Hopelessness	
	disorders	_	Irritation	
_	Hypertension	_	Apathy	
_	Chronic fatigue	_	Disillusionment	
_	Respiratory disorders	_	Pessimism	
_	Sleep disturbances	-	Hostility	
		 Lack of tolerance 		
		_	Accusations against	
			clients	
		_	Suppression of	
			feelings	
			_	

ISSN-On line: 2524-2008 RINOE® All rights reserved.

	Cognitive symptoms	В	Sehavioral symptoms				
_	Loss of meaning	_	Avoidance of				
_	Loss of values		responsibilities.				
_	Disappearance of	_	Absenteeism				
	expectations	_	Maladaptive				
_	Self-concept		behaviors.				
	modification	_	Disorganization.				
_	Cognitive	_	Over-involvement				
	disorientation	_	Decision avoidance				
_	Loss of creativity.	_	Increased use of				
_	Distraction.		caffeine, alcohol,				
_	- Cynicism		tobacco and drugs				
 Generalized criticism 							
	Social sy	ymp	toms				
_	Contact avoidance						
-	Interpersonal conflicts						
_	 Family bad mood 						
_	- Isolation						
_	- Formation of critical groups						
_	- Professional avoidance						

Table 1 Symptoms associated with Burnout Syndrome

Methodological design for measuring burnout

For the purpose of measuring burnout in this research, the Maslach Brief Burnout Questionnaire (MBI) was used, however, burnout can also be measured with the Maslach Brief Burnout Questionnaire by Moreno, the Copenhagen Burnout Inventory (CBI), the Questionnaire of Medical Professional Burnout (CDPM), Wolfgang's Inventory of Stress for Health Professionals (IEPS) and the Goldberg General Health Questionnaire (GHQ-28) to mention a few.

Maslach's Brief Burnout Questionnaire (MBI)

It consists of 22 items distributed in three scales, emotional exhaustion (9 items), depersonalisation (5 items) and self-fulfilment (8 items) where subjects rate each item of the questionnaire with a likert scale in which they identify the frequency with which they have experienced the situation described. The frequency scale has 7 points ranging from 0 (never) to 6 (every day).

Burnout facilitating variables

Facilitating variables can be socio-demographic, personality and coping variables. Among the former, which are of interest for this project, are gender, age, marital status, whether or not there are children, seniority in the job and in the profession.

As for gender, men score higher on PD than women, other results are inconclusive and appear to be influenced by study characteristics (samples, instruments, country, culture). Such differences are conditioned by the socialisation processes for male and female roles and by the profiles and requirements of different occupations. Older age seems to be associated with less Burnout, perhaps because these professionals have developed better coping skills and more realistic career expectations.

With respect to marital status, most authors have found that married people experience less Burnout, although it seems to be rather the socio-familial support received by the spouse, and marital satisfaction/dissatisfaction that seems to influence.

Family life may make subjects more adept at dealing with others and their problems. It has been found that subjects with children are older, more mature, have a more stable lifestyle and a different work perspective, those without children use work more as a source of social life, become overly involved with people in the work environment and the risk of Burnout increases. In relation to seniority in the role and in the profession, the results are similar to those of age: professionals are younger and inexperienced, so they have a higher risk of Burnout.

Type of research

The research was descriptive and cross-sectional. To achieve the objectives, two self-administered assessment instruments were used and presented in a sealed envelope to the first, second and third year family medicine health workers who voluntarily participated in the research. Anonymity and confidentiality of the data obtained by the research was ensured at all times. Each envelope was assigned a number and was given randomly to each participant. The instruments were administered during November 2022 and January 2023.

Population

The research population consisted of 124 nurse participants working in a public health organisation in the state of Morelos.

Data collection instrument

Two instruments were used: a questionnaire of socio-demographic and work-related aspects and the Maslach Burnout Inventory.

Socio-demographic questionnaire

It contains nine questions that collect sociodemographic and occupational variables that, according to several studies, are relevant in relation to the vulnerability to develop burnout syndrome. The socio-demographic variables collected are: age, sex, marital status and number of children. The work variables are: area of work, length of service, workload, type of contract.

Maslach Burnout Inventory

The Maslach Burnout Inventory is the most widely used to assess the frequency and intensity of work burnout in the healthcare context. Of the different versions of the Maslach Burnout Inventory, the classic version for human services professionals (MBI-HSS) was administered. It measured:

- 1. Emotional exhaustion. This subscale consists of nine items describing feelings of being overwhelmed and emotionally exhausted at work. According to the Spanish commercial version of the questionnaire, the following maximum reference values are established for interpreting each of the dimensions:
 - a. Depersonalisation. This subscale is made up of five items that describe an impersonal response and lack of feelings towards the subjects of attention or service. Maximum score 54, it is directly related to the level of burnout.
 - b. Self-fulfilment at work. Eight-item subscale describing feelings of competence and successful accomplishment at work towards others. Maximum score 48 and is inversely related to the level of burnout.

ISSN-On line: 2524-2008 RINOE® All rights reserved.

The twenty-two items are written in the form of statements referring to the attitudes, emotions and feelings that the professional shows towards work and towards the recipients of his or her service (patients). The items can be rated on a Likert-type scale, in which the subject scores the question with which he/she experiences the feelings that make up the syndrome. The frequency range consists of seven adjectives from "never" (0) to "every day" (6).

Subjects with burnout syndrome will be those who score high on Depersonalisation and Emotional Exhaustion and negative on Personal Accomplishment.

Variables and categories

The variables and categories used in the study are listed below.

Variables	Categorías
Age	Young people 25-30 years
1-8-	Middle age 31-40 years
	Mature 41-50 years
	Seniors 51-60 years
Sex	Female
	Male
Civil status	Single woman
	Married
	Divorcee
	Free Union
Number of children	Zero
	One
	Two
	Three
	Four
	Five or more
Work area	Emergencies
	External consultation
	Others
Hiring type	federal square
	state square
	Contract
	Intern substitute
	Stripe list
Antiquity	Under 10 years old
	From 10 to 20 years
	Over 20 years
Extra workload	Yes
	No
Maslach Inventory	emotional exhaustion
Dimensions	Depersonalization
	Personal fulfillment at work
Burnout level	High
	Half
	Low

Table 2 Variables and categories used in the study

Statistical treatment

The data analysis was carried out using the SPSS version 26 statistical package. A descriptive statistical study was carried out, consisting mainly of the calculation of percentages, means and standard deviation for each of the variables. As for the inferential analysis, contrast studies were carried out between the different groups of variables, depending on the nature of the variables and the characteristics of the contrast groups. The statistical treatment was carried out the 95% confidence level. Pearson's correlation test was used to determine the relationship between two quantitative variables to find significant relationships between the variables for the following purpose:

- a) To determine whether the two variables are correlated, i.e. whether values of one variable tend to be higher or lower for higher or lower values of the other variable.
- b) To be able to predict the value of one variable given a given value of the other variable.
- c) To assess the level of agreement between the values of the two variables.

Results

Descriptive analysis

Socio-demographic characteristics

The results of the statistical analyses carried out on the variables Age, Sex, Marital status and Number of children are detailed below.

Age

The sample was divided into age ranges according to four dimensions:

Label	Age range	Frequency	
Youths	21-30 years	36	
Middle age	31-40 years	46	
Mature	41-50 years	27	
Greater	51-60 years	15	

Table 3 Age ranges

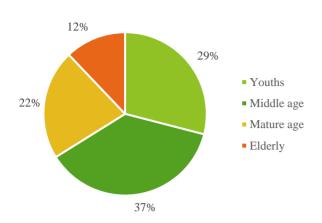


Figure 1 Percentage frequency of age ranges

The percentage age distribution was as follows: young people aged 21-30 years constitute 29% of the sample, middle-aged people aged 31-40 years represent 37% of the sample, mature people aged 41-50 years represent 22% of the sample, while older people aged 51-60 years represent only 12% of the sample.

Marital status

It is represented by 4 categories as can be seen in the following table.

Civil status	Frequency
Single	27
married	76
divorced	7
free Union	14

Table 4 Relative frequency by marital status

Regarding marital status, the results tell us that single women constitute 22% of the sample, married, 61%, who constitute the majority, divorced, 6% and common law, 11%.

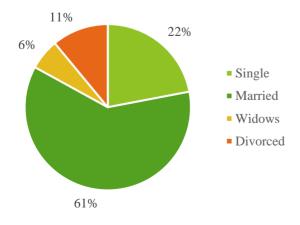


Figure 2 Percentage frequency of civil status

Job characteristics

The results of the statistical analyzes carried out on the variables Work area, Type of hiring, Seniority in position and Workload are detailed below.

Work area

Regarding the percentages obtained in terms of the work area in which the nurses participating in the research worked at the time of application of the instrument.

Work area	Frequency
External consultation	104
Emergencies	17
another area	3

Table 5 Relative frequency of the work area

We have that 84% belong to the outpatient area, 14% in the emergency area and 2% in another area.

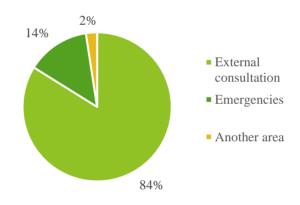


Figure 3 Percentage frequency of the work area

Hiring type

Regarding the type of hiring, which speaks to us at a given moment about job stability.

Hiring type	Frequency
federal square	45
state square	26
By contract	53

Table 6 Relative frequency by type of contract

We found that 36% have federal positions, 21% have state positions, and 43% work under contract.

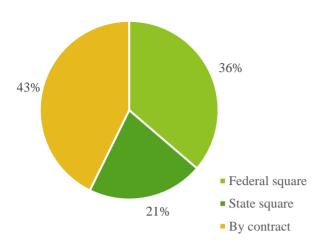


Figure 4 Percentage frequency by type of contract

Length of service

Regarding the years of seniority in the position, they are shown in ranges from less than 10, from 10 to 20 and more than 20.

Length of service	Frequency
Less than 10	83
from 10 to 20	40
More than 20	1

Table 7 Relative frequency by seniority in the position

We have that 67% of the nurses have been working for less than 10 years, while 32% have been working in the same position for 10 to 20 years, only 1% answered that they have been in service for more than 20 years.

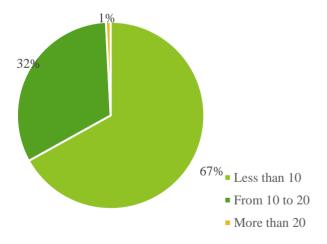


Figure 5 Percentage frequency of seniority in the job

Extra workload

When nurses were asked if they have an additional job to what they do in the current organization, 85% answered yes and 15% said no.

Maslach Burnout Inventory (M.B.I.)

In this section, the three possible ways of interpreting burnout syndrome are studied: for each dimension of the inventory (averages), in a more globalized way (degrees) and by pattern analysis (levels).

Degrees of burnout	emotional exhaustion	Depersonalization	Personal fulfillment at work	
Low	<18 punts	<5 punts	>40 punts	
Half	19-26 punts	6-9 punts	34-39	
			punts	
High	>27 punts	>10 punts	<33 punts	

Table 8 Rating of the three dimensions of Burnout²¹

Maslach inventory dimensions

The averages obtained by the nurses in the three dimensions of the Maslach Inventory are presented below.

Dimensions of Burnout	Scores n=124	
emotional exhaustion	9.62	
Depersonalization	3.31	
Personal fulfillment at work	41.87	
Burnout level	Alto	

Table 9 Scores obtained in the three dimensions of the Maslach Inventory

Regarding the work-related variables, it was found that there are no significant differences between the three dimensions of burnout and the work area variable.

Burnout levels

According to the results found and taking the previous table as a reference, we have that the average of the sample corresponds to a low level of burnout, because in the three dimensions of burnout they scored low in the three percentiles.

	Percentiles	emotional exhaustion	Depersonalization	Personal fulfillment at work	
ſ	25	4	0	40	Low
ſ	50	7	1.5	44	Low
ſ	75	14	6	48	Low

Table 10 Scores for the three dimensions of the Maslach Inventory and level of burnout according to the three main percentiles

In all percentiles we notice low levels in the dimensions of emotional exhaustion, depersonalization and personal fulfillment at work, except in the 75th percentile in which depersonalization has a low level, however, the sum of the three scores of said percentile of Either mode indicates a level of burnout that ranges from low to medium.

Prevalence of Burnout in the population studied

77 nurses do not present any burnout, 16 a little, 11 medium and 20 a lot, none of them being extremely burnout.

Labor variables

Below, the results obtained in the average scores are presented according to the dimensions of emotional exhaustion, depersonalization and personal fulfillment at work, correlated with the labor variables work area, type of hiring, seniority and extra workload.

Work area

Regarding the work area, the results indicate that there are no significant variations in the results obtained in the three dimensions of burnout due to working in the emergency department, outpatient clinic or another.

Variable	Emergenciesn =17	External consultationn= 104	Othe rs =3	Pearson correlati on
emotional exhaustion	10.75	9.44	9.50	049
Depersonalizat ion	3.84	3.25	2.00	060
Personal fulfillment at work	42.65	41.88	35.25	072

Table 11 Results of the Mean Correlations between Burnout Dimensions and Work Area

Hiring type

The type of hiring, which is related to job stability, according to the results obtained, was not significant for the scores in the three dimensions of burnout.

Variable	State SquareN=26	Federal Plazan=45	Contract n=52	Pearson correlation
emotional exhaustion	8.89	8.35	11.05	.099
Depersonalization	2.65	3.70	3.76	.089
Personal fulfillment at	41.54	42.45	42.21	006
work				

Table 12 Results of the Mean Correlations between Burnout Dimensions and Type of Hiring

ISSN-On line: 2524-2008 RINOE® All rights reserved.

Antiquity

The number of years they have worked as nurses was inversely significant, in a bilateral correlation at the 0.05 level, which indicates that there is an inverse relationship between the number of years worked and the levels of emotional exhaustion, that is, the more years have been worked on, the lower level of burnout occurs in the aspect of emotional exhaustion.

Variable	Ten or less yearsn=83	From 10 to 20 yearsn=40	Pearson correlation		
emotional exhaustion	10.33	9.00	140*		
Depersonalization	3.65	3.00	089		
Personal fulfillment at work	41.60	42.10	023		
* The correlation is significant at the 0.05 level (two-sided)					

Table 13 Results of the Mean Correlations between Burnout Dimensions and seniority

Extra workload

The fact that the majority of nurses have another job in addition to the one they carry out at the Ministry of Health does not constitute a significant variable for the scores obtained in the three dimensions of burnout.

Variable	He has no other job n=19		Pearson correlation
emotional	9.37	11.00	.067
exhaustion			
Depersonalization	3.22	3.77	.045
Personal	41.89	41.77	005
fulfillment at work			

Table 14 Results of the Mean Correlations between Burnout Dimensions and the existence or not of an extra workload

Conclusions

The results obtained in this study allow us to reach the following conclusions:

- 1. 77% of the nursing population did not present burnout at any of its levels.
- 2. Regarding the burnout dimensions, we found that, in emotional exhaustion, the average was (9.62), depersonalization (3.31) and personal fulfillment at work (41.87), which implies that the levels burnout obtained in each dimension are within the low range.

- a) There are no significant relationships between the three dimensions of burnout and the age variable, they do not have a significant relationship in this regard.
- b) There are no significant differences between the three dimensions of burnout and the sex variable, which tells us that being a woman does not directly impact the prevalence of burnout syndrome, given that they are exposed to the same risk conditions for developing the syndrome.
- c) There are no significant relationships between the three dimensions of burnout and the marital status variable, that is, they present the same risk of developing burnout syndrome in single, married, divorced or cohabiting nurses.
- d) Regarding the work-related variables, it was found that there are no significant relationships between the three dimensions of burnout and the work area variable, that is, the fact that the nurses are working in the emergency department, consultation area. external or in any other, does not have a significant relationship to present or not the syndrome.
- e) The job stability that in the registered sociodemographic variables was worked on as the type of hiring of the nurses: nurse with a state position, with a federal position, by contract, as a substitute for an intern or on a line list, were not significant for the levels. of burnout that occurred.
- f) Seniority, that is, the number of years that nurses have worked, classifying it as less than five years or more than five years, was not a significant factor in developing the syndrome.

g) The fact that the nurses had one or more than one job was significant in developing the syndrome.

The research reveals the scant relationship between sociodemographic variables and the prevalence of burnout syndrome in nurses and requires further analysis of the data to form the epidemiological profile of the 23% of nurses who did present some level of burnout. burnout and more due to the double position factor or 3 jobs times the number of work hours.

Suggestions

The fact that the results of this study indicate that just under a quarter of nurses present some level of burnout does not mean that they no longer constitute a population with a high risk of developing the syndrome, as demonstrated by studies carried out in other latitudes.

Similar studies must be carried out in other populations of nurses in the entity, to detect cases of vulnerability to suffering from said syndrome and in this way, take the necessary measures at the individual, organizational and social level to confront it.

It is important that as preventive measures the characteristics of the syndrome, its causes and consequences are disseminated among the population dedicated to health-related tasks, given that, paradoxically, they are one of the most vulnerable to suffering from it.

The above to avoid conditions such as:

- tension headache
- muscle cramps and spasms back
- neck and shoulder
- pain
- jaw
- tension
- chronic pain
- migraine
- cold hands and feet
- high pressure
- skin problems
- allergies
- asthma
- arthritis
- digestive disorders
- stomach pains and cramps
- constipation

ROQUE-NIETO, Nohem, PÉREZ-MAYO, Augusto Renato and RODRÍGUEZ-BAHENA, Beatriz Lizbeth. Burnout and health personnel in Morelos. Journal-General Economics. 2023

RINOE® All rights reserved.

ISSN-On line: 2524-2008

- diarrhea
- frequent colds
- infectious diseases
- cancer
- metabolic dysfunctions
- heart attacks and circulatory problems
- irregular heart rhythm
- insomnia
- fatigue
- respiratory irregularities
- rapid breathing
- overfeeding
- alcohol or drug abuse
- sexual problems
- anxiety
- depression
- Just to mention a few.

Gratitude

We thank the Head of the Directorate of the Faculty of Nursing (2022-2025) for the funding granted for the publication of this research.

Financing

Financing: This work has been financed by the Head of the Directorate of the Faculty of Nursing of the Autonomous University of the State of Morelos

References

- 1. Pines, A., & Aronson, E. (1988). Career burnout: Causes and cures (pp. xiv, 257). Free Press.
- 2. Rodriguez-Marin, J. (1998). Psicología Social de la Salud. INFORMACIO PSICOLOGICA, 67, Article 67. https://www.informaciopsicologica.info/revista/article/view/733
- 3. GIL-MONTE, P. R., (2003). Burnout syndrome: ¿síndrome de quemarse por el trabajo, desgaste profesional, estrés laboral o enfermedad de Tomás? Revista de Psicología del Trabajo y de las Organizaciones, 19(2), 181-197. http://www.redalyc.org/articulo.oa?id=23 1318052004
- 4. Freudenberger, H. J. (1974). Staff Burn-Out. Journal of Social Issues, 30(1), 159–165. https://doi.org/10.1111/j.1540-4560.1974.tb00706.x

5. Pines, A., & Kafry, D. (1978). Occupational tedium in the social services. Social Work, 23(6), 499–507. https://doi.org/10.1093/sw/23.6.499

- 6. Burn-Out—Stages of Disillusionment in the Helping Professions, 70184 (Office of Justice Programs 1980). https://www.ojp.gov/ncjrs/virtual-library/abstracts/burn-out-stages-disillusionment-helping-professions
- 7. Freudenberger, H. J., & Richelson, G. (1980). Burn-out: The high cost of high achievement. Garden City, N.Y.: Anchor Press.
- 8. Malakh-Pines, A., Aronson, E., & Kafry, D. (1981). Burnout: From Tedium to Personal Growth. Free Press.
- 9. Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. En Evaluating stress: A book of resources (pp. 191–218). Scarecrow Education.
- 10. Brill, P. L. (1984). The need for an operational definition of burnout. Family and Community Health, 6(4), 12–24.
- 11. Cronin-Stubbs, D., & Rooks, Ca. (1985). The stress, social support, and burnout of critical care nurses: The results of research. Heart & Lung: The Journal of Critical Care, 14(1). https://pubmed.ncbi.nlm.nih.gov/3844003
- 12. Shirom, A. (1989). Burnout in work organizations. https://www.semanticscholar.org/paper/B urnout-in-work-organizations.-Shirom/7f2d7cf0aa70099f2ac6f0420d549 4f857ba134e
- 13. Moreno Jiménez, B., Oliver Hernández, C., & Aragoneses, A. (1991). El "burnout", una forma específica de estrés laboral. Manual de psicología clínica aplicada, 1991, ISBN 8432307114, págs. 271-280, 271-280. https://dialnet.unirioja.es/servlet/articulo? codigo=5179010

ISSN-On line: 2524-2008 RINOE® All rights reserved.

- 14. P Peris, M. D. (2002). El número 7±2 como explicación cognitiva (LMCP) del síndrome de burnout y de PTSD. Ponencia presentada en la Jornada de Debate Multidisciplinar sobre Mobbing. Universitat Jaime I de Castellón.
- 15. Párraga Sánchez, J. M. (2006). Eficacia del programa I.R.I.S. para reducir el síndrome de burnout y mejorar las disfunciones emocionales en profesionales sanitarios
 [Http://purl.org/dc/dcmitype/Text,
 Universidad de Extremadura].
 https://dialnet.unirioja.es/servlet/tesis?codigo=595
- 16. Gil-Monte, P. R. (1999). Perspectivas teóricas y modelos interpretativos para el estudio del síndrome de quemarse por el trabajo. anales de psicología. https://www.um.es/analesps/v15/v15_2pd f/12v98_05Llag2.PDF
- 17. Macías, A. B., Soto, R. C., & Corral, M. G. A. (2007). SÍNDROME DE BURNOUT: UN ESTUDIO COMPARATIVO ENTRE PROFESORES Y MÉDICOS DE LA CIUDAD DE DURANGO. https://upd.mx/librospub/inv/sinburnout.p df
- 18. López Ríos, F., & Ortega Ruiz, C. (2004). El burnout o síndrome de estar quemado en los profesionales sanitarios: Revisión y perspectivas. International journal of clinical and health psychology, 4(1), 137–160. https://dialnet.unirioja.es/servlet/articulo?codigo=795272
- 19. Caballero Martín, M. A., Bermejo Fernández, F., Nieto Gómez, R., & Caballero Martínez, F. (2001). Prevalencia y factores asociados al burnout en un área de salud. Atencion Primaria, 27(5), 313–317. https://doi.org/10.1016/S0212-6567(01)79373-0
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1997). Maslach Burnout Inventory: Third edition. En Evaluating stress: A book of resources (pp. 191–218). Scarecrow Education.

- 21. Rubio Jiménez, J. C. (2003). Fuentes de estrés, Síndrome de Burnout y Actitudes disfuncionales en Orientadores de Instituto de Enseñanza Secundaria [Http://purl.org/dc/dcmitype/Text, Universidad de Extremadura]. https://dialnet.unirioja.es/servlet/tesis?cod igo=1494
- Graue Wiechers, E., Álvarez Cordero, R., 22. & Sánchez Mendiola, M. (s/f). El Síndrome de "Burnout": La despersonalización, el agotamiento emocional y la insatisfacción en el trabajo como problemas en el ejercicio de la medicina y el desarrollo profesional. [Seminario El Ejercicio Actual de la Recuperado Medicina]. el 18 septiembre de 2023. de http://www.facmed.unam.mx/sms/seam2k 1/2007/jun 01 ponencia.html.

ISSN-On line: 2524-2008 RINOE® All rights reserved.