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Research Article

# BURNOUT SYNDROME OF OPERATING THEATRE NURSING STAFF AND RELATED PERSONAL AND OCCUPATIONAL FACTORS, MONTEVIDEO, URUGUAY.

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## **ABSTRACT**

The objective of this research is to describe the link between the middle and high levels of the Burnout Syndrome as well as the related personal and occupational factors of nursing staff who work in an operating theatre in the city of Montevideo, Uruguay. The method applied was quantitative, descriptive, and cross-sectional, with non-probabilistic sampling by convenience, according to inclusion criteria; it was carried out over October-December 2015. The bioethical aspects were preserved in accordance with to the Declaration of Human Rights of Helsinki, and the research was conducted in compliance with the decree of the Ministry of Health as to research on human subjects; also, the voluntary nature of participation was respected, and informed consent was requested. The findings obtained were that the age of the nursing professional with high and medium burnout syndrome fluctuates between 40 - 59; the older the person, the acuter the syndrome is. The sex of the nursing staff with the syndrome is female. As to the marital status, individuals tend not to live with a permanent partner and have one child. The higher the seniority, the higher the probability of suffering the syndrome, and seniority is also connected with having worked at the operation theatre for shorter periods than 10 years. Working at multiple jobs is a dominant occupational factor for the presence of the syndrome. It is concluded that middle and high level burnout syndrome in nursing staff, who work in areas of an operating theater, is closely linked to occupational and personal factors described by scientific evidence, for exposure to chronic stress at work.

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# INTRODUCTION

The Burnout Syndrome concept was released in the mid 70s, by Freuden berger in the United States. This syndrome arises as a result of an individual's exposure to chronic job stress, which is defined as the lack of correspondence between the demands of work and a worker's available resources to perform/face them (Harrison, 1978).

In general, it has been argued that this situation generates a negative impact on workers' health, who displays physical and psychological evidence (1). This is why the Burnout Syndrome is related to psychosocial risks at work. In the 80s, descriptions of this phenomenon were made, after the social, cultural and organizational changes that took place in the field of work, and which account for the expansion of the syndrome to such extent that it became a problem affecting job performance and organizational success. Consequently, it also has an impact

on the quality of health care services and health professionals. Currently, the Burnout Syndrome is defined in a complex manner by different explicative models; one of them is the three-dimensional model developed by Maslach and Jackson (2005) which assesses 3 dimensions: emotional exhaustion (lack of physical and emotional energy to confront the daily work, accompanied by a sensation of "emptiness" and the feeling that the emotional resources are exhausted, consumed, with sense of apathy and lack of interest in connection with work), depersonalization (development of negative feelings and attitudes, added to cynicism toward the object people of their job) and lack of personal fulfillment at work (the tendency to make negative self-assessment, causing a direct impact on individuals' ability to perform their task and on the people they work for). The syndrome may affect health and work, with three different levels of intensity as

described below: low, medium and high. Professionals affected by low burnout syndrome are capable of generating strategic resolution measures and can effectively cope with stress. Professionals affected by middle and high levels suffer health and occupational problems. (2)

Recent research has connected the syndrome with psychosocial factors, such as the organization of work, position, task completion, and performance. Also, the working environment affects workers' performance and health. These psychosocial factors can be broken down in personal and occupational factors. The former are responsible for an individual's involvement with the community, they are acquired and developed through the years, for instance: age, marital status, the number of children, sex; the latter refer to an individual at their place of work, their working condition, position, seniority, remuneration, among others.

Over the years, the International Labor Organization (ILO) has been particularly interested in studying the syndrome in health professionals. In 2007 it declared that it is essential to human dignity to have freely chosen, fulfilling and productive employment. Work allows individuals to be economically independent, actively participate in the community and provide their family with a decent standard of living. This organization has declared that workers' health must be considered in political agendas. In Uruguay, the Ministry of Public Health has specially focused on two aspects connected with health care quality in their "Health Goals 2020": one is the link between a health team and their target population, and the other one is directing health organizations toward a system centered on the needs of people and communities. Therefore, workers health as a whole, in terms of population, is one of the strategic lines of action with a view to universal coverage. This is reflected in new modalities of state health policies which approach workers' health in terms of prevention of diseases and health promotion; with emphasis on lifestyles and healthy work environments. (5)

The current problems that health professionals face today, primarily focus on multiple work areas, which have attention, concentration and dedication levels, plus increased responsibility and work overload. They are expected to respond to rapid changes in health care, which result from scientific and technological advances, epidemiological profile and highly demanding health institutions. This responds among other aspects, in addition to the requirements of the economy, new occupational competencies and high standards of organizational quality. Professionals are obliged to meet and adapt to these demands, all of which implies an additional factor of stress. Therefore, the exposure to these psychosocial risk factors can affect these professionals' health and performance and have consequences and/or social, economic and sanitary impacts. (6)

Nursing staff is no exception since it is one of the groups with the highest occurrence rate of burnout syndrome. Therefore, it is one of the most studied professional groups in the world. Nursing staff is pivotal in health institutions governance and management. Scientific evidence reveals that the main situations nursing staff are exposed to in an operating theater are high level of stress and tension given their responsibility linked to complex processes of the surgical area, continuous contact with

patients in critical situations, the latters' lack of cooperation due to their serious condition, taking care of often terminal and/or contagious diseases and proximity with pain and death. In addition, there is work overload related to the shortage of staff and having several jobs, few periods of rest, rotating shift system and the increasingly demanding expectations of nursing staff in terms of their performance quality. Along with these factors, there are new models of professional practice, changes in vocational training programs, new socio-demographic profiles, and a steadily increasing demand for nursing services by users, family, and the community. (7,8).

Therefore, the overall objective of this research is "Describing the link between middle and high levels of Burnout Occupational Syndrome and the personal and labor factors of nursing staff who work in an operating theatre in the city of Montevideo, Uruguay." The specific objectives are 1- Determining the level of burnout syndrome of nursing staff. 2- Characterizing the population according to their social, demographic and occupational variables.

#### **METHOD**

**Research Design.** Quantitative, descriptive, cross-sectional study, with non-probabilistic sampling by convenience according to inclusion criteria; over the October-December 2015 period.

**Sampling and sample size.** The universe was "all the nursing staff working in the operating theatres" (N=22), of a public hospital of the SNIS (Integrated National System of Health) in the city of Montevideo - Uruguay. The Sample consisted of "all the nursing staff that met the inclusion criteria" (n=10).

The inclusion criteria were: having a degree in nursing, being part of the hospital's payroll of the operating theatre, having more than one year seniority, voluntarily taking part in this research, giving their consent to participate, having Occupational Burnout Syndrome (OBS) at medium or high level, according to the MBI (Maslash Burnout Inventory). The exclusion criteria were: nursing staff who were absent during the data collection stage, due to disease or incidental personal problems.

The occupational burnout syndrome was evaluated in terms of frequency and intensity in accordance with the (MBI) Maslash Burnout Inventory. This questionnaire consists of 22 items, grouped in 3 sub-scales: emotional exhaustion (9 items), depersonalization (5 items) and personal achievement (8 items). Medium and high scores on emotional exhaustion, depersonalization, and low scores in personal fulfillment at work reveal the existence of the syndrome. The "personal and occupational factors of nursing staff" were evaluated using a questionnaire validated by Aguilar and Gutierrez (2007).

**Dependable variables** are connected with the dimensions of the burnout syndrome: emotional exhaustion, depersonalization and lack of personal fulfillment at work. **Independent variables** are related to personal and occupational factors.

**Data collection.** Letters requesting authorization were presented in order to carry out the research at the Technical and Nursing Directorates of the Hospital, in the city of Montevideo, Uruguay. After the corresponding authorizations had been given by the Technical and Nursing Directorates, and the Ethics Committee, the research instruments were self-administered, after the study subjects had voluntarily and formally agreed to

participate. The collection period was October and December of 2015.

**Data analysis.** A descriptive approach was used. Data were processed using statistical package IBM SPSS version 23.0, in Spanish, and measures of central tendency were used.

Ethical considerations. The research study preserved the bioethical aspects according to the Declaration of Human Rights of Helsinki, was governed by Decree No. 379/08 of the Ministry of Public Health; respected the voluntary nature and applied the principles of autonomy, beneficence, non maleficence and justice. Verbal and written consent was requested from each nurse/or member of nursing staff to participate in the research, where it was clearly stated that the participant could leave the study at any time. The record kept on the measuring instruments was anonymous, a file number only known to the principal investigator was used. However, the

research tasks carried out did not involve physical, psychological or occupational affectations of individuals.

#### FINDINGS AND DISCUSSION

Out of a total of 22 questionnaires, we selected 10 that met the inclusion criteria and were correctly answered.

Table No. 1, shows with regards to personal factors that: 50 % of nursing staff are aged between 50-59 and the other 50% between 30-49. The prevailing sex is female by 90%. With regards to the civil status. 60 % have no partner in all 3 categories (single, divorced and widow) while the remaining 40% is married. As to the number of children, 70 % has 1 child. In connection with technical factors, 80% answered their professional seniority was between 11-25 years, and in terms of their seniority in the service, 70 % was between 2-10 years. In connection with having several jobs, 70% had 2 jobs.

TABLE NO.1 PERSONAL AND OCCUPATIONAL FACTORS OF NURSING STAFF WITH HIGH AND MEDIUM LEVELS OF OCCUPATIONAL BURNOUT SYNDROME

Personal and occupational factors	Occupational burnout syndrome level					
	Medium		High		TOTAL	
	N°	%	N°	%	N°	%
AGE						
30-39	1	10	1	10	2	20
40-49	1	10	2	20	3	30
50-59	4	40	1	10	5	50
Total	6	60	4	40	10	100
SEX						
Female	6	60	3	30	9	90
Male	1	10	0	0	1	10
Total	7	70	3	30	10	100
Civil Status						
Single	1	10	1	10	2	20
Marri ed	3	30	1	10	4	40
Divorced	1	1020	0	0	1	10
Widow	2	70	1	10	3	30
Total	7		3	30	10	100
NUMBER OF CHILDREN						
None	0	0	0	0	0	0
1 child	5	50	2	20	7	70
2 children	2	20	1	10	3	30
More than 2 children	0	0	0	0	0	0
Total	7	70	3	30	10	100
PROFESSIONAL SENIORITY						
2-10 years	2	20	0	0	2	20
11-25 years	5	50	3	30	8	80
Total	7	70	3	30	10	100
IN-SERVICE SENIORITY						
2-10 years	5	50	2	20	7	70
11-25 years	2	20	1	10	3	30
Total	7	70	3	30	10	100
SEV ERAL JOBS						
1 job	2	20	1	10	3	30
2 jobs	5	50	2	20	7	70
More than 2 jobs	7	70	3	30	10	100
Total						

It is noted that the older the person, the higher the level of the syndrome; is highlighted that in the age range between 40 to 49, the level is high, while in the age ranges above and below, the syndrome level is medium. This finding behaves differently to the evidence (Atance, 2007) (9), which has demonstrated the existence of a period of

increased vulnerability for the appearance of the syndrome located at the beginning of the professional life, which is linked to the transition from professional idealization to the actual work environments.

With regard to sex, there are high and medium levels of the syndrome in the female sex, which agrees with

scientific evidence, in the first place, because the job is "female," with broad historical background and social roots. In this research, it was difficult to infer from OBS male's behavior because men were only 10 % of the individuals studied.

Secondly, it is noted that the social role of women with their double burden, meaning being responsible for family and work, is determinant. This is also connected to the tendency of not having any children or having a single child.

With regards to marital status, findings have agreed with the model presented by Leiter, since  $60\,\%$  of the individuals in this research do not have a permanent partner, in all three categories.

Having several jobs is not one of the most studied variables, but the authors found it relevant to consider its relationship with the syndrome. In the first place, because it is an occupational feature of nursing staff in our country, particularly due to low wages. Secondly, because it generates long working days, which in addition to rotating shift systems, do not help combine individuals' work, family life and personal leisure time. This research confirms this trend, which is associated with average and high levels of the syndrome by 70%.

With regards to seniority, findings agree with those of Seclen and Darras, (2009) (10), Bethlehem - Loreto (2006) (11) that indicate that the older the seniority, the higher the frequency of the syndrome. However, there is no relation to seniority in service since according to the research, the syndrome is more frequent in nursing staff with less than 10 years working in the operating theatre. This phenomenon can be explained by inadequate professional training in the area and lack a specialization curriculum in the country.

#### CONCLUSIONS

The age of the nursing staff with high and medium levels of burnout syndrome fluctuates between 40 - 59; in other words, the older the individual, the higher the probability of suffering the syndrome. The syndrome impacts on female nursing staff. With regard to marital status, it affects people who do not share their daily life with a permanent partner and have a single son. The presence of the syndrome increases with seniority and relates to a seniority in the service of fewer than 10 years of continuous work. Having several jobs is a dominant occupational factor in the presence of the syndrome.

Finally, it is concluded that the middle and high levels of the burnout syndrome in nursing staff who work in the areas of an operating theater are closely linked to occupational and personal factors, described by scientific evidence, due to exposure to chronic stress at work.

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