



Burnout syndrome in intensive care unit health care personnel

Síndrome de burnout del personal de salud de unidad de cuidados intensivos

Paul David Zula-Riofrio

pauldzt99@uniandes.edu.ec

Universidad Regional Autónoma de Los Andes. UNIANDES, Ambato - Ecuador.

<https://orcid.org/0000-0001-9619-9285>

ABSTRACT

The objective of the research was to determine the burnout syndrome of intensive care unit health personnel. It was of descriptive type with non-experimental design, the studied population included a total of 50 people. All the respondents showed a low personal accomplishment, being a total of 100%, this according to the questions (4, 7, 9, 12, 17, 18, 19 and 21) of the questionnaire applied. In the Intensive Care Unit (ICU) of the Isidro Ayora Hospital in the city of Loja, there is a low prevalence of burnout syndrome among the health personnel analyzed, specifically 2%, which would imply that there was no evidence of professional affectations. However, one of the dimensions that most affects these professionals is low personal fulfillment.

Descriptors: psychological effects; mental stress; mental health. (Source: UNESCO Thesaurus).

RESUMEN

El objetivo de la investigación es determinar el síndrome de burnout del personal de salud de unidad de cuidados intensivos. Fue de tipo descriptivo con diseño no experimental, la población estudiada se incluyó un total de 50 personas. Todos los encuestados mostraron una baja realización personal, siendo un total del 100%, esto en función de las preguntas (4, 7, 9, 12, 17, 18, 19 y 21) del cuestionario aplicado. En la Unidad de Cuidados Intensivos (UCI) del hospital Isidro Ayora de la ciudad de Loja, se presenta una baja prevalencia del síndrome de burnout entre el personal de salud analizado, específicamente un 2% lo que implicaría que no se evidenció afectaciones a nivel profesional. Sin embargo, una de las dimensiones que más afecta a estos profesionales es la baja realización personal.

Descriptores: efectos psicológicos; estrés mental; salud mental. (Fuente: Tesauro UNESCO).

Received: 12/1/2023. Revised: 28/1/2023. Approved: 09/02/2023. Published: 01/04/2023.

Research articles section

INTRODUCTION

Recently, one of the most complex scenarios for health personnel in the countries was the pandemic. This phenomenon caused a large part of the health systems to be compromised by the magnitude of the problem it generated. According to (Torres-Toala, *et al.*, 2021), in Ecuador the pandemic caused health personnel to manifest a high prevalence of burnout syndrome, especially in the component of depersonalization and emotional exhaustion. Likewise, (Juárez-García, 2020), finds similar evidence in Mexico on medical personnel in the pandemic and warns about the possible external effects on patients (Arrogante, & Aparicio-Zaldivar, 2020), (Rodrigues, *et al.* 2017), (Motta-de-Vasconcelos, *et al.* 2018).

In this order, (Gutiérrez-Lesmes, *et al.* 2018), assures that the greatest importance of this syndrome is focused not only on the affectation on the quality of life and mental health of the professional who suffers it, but, on many occasions, because of this syndrome, the health of patients is endangered; both those who suffer it directly, as well as those who are cared for by someone who suffers it.

In relation to the aforementioned, it is important the space that the present research on Burnout syndrome intends to cover. In particular, since there is no evidence that relates studies that analyze this problem in the city of Loja, more specifically within the staff of the Intensive Care Unit (ICU) of the Isidro Ayora Hospital.

The objective of the research is to determine the burnout syndrome of intensive care unit health personnel.

METHOD

The study was descriptive with a non-experimental design, based on the information provided to a group of physicians and nurses from the same medical center, who supplied the information; cross-sectional, in that the information was collected at a specific point in time, in this case the year 2022.

The population studied included a total of 50 people who make up the health personnel of the ICU of the Isidro Ayora hospital, including physicians, nurses and auxiliary nurses. Likewise, written authorization for the collection of information was obtained from the director of the hospital's academic committee.

Regarding the instrument used for the collection of information, a structured IMB questionnaire in a systematized version, with multiple-choice questions using Google Forms (online survey), was considered for the study sample. The data obtained were processed using descriptive statistics with the SPSS V25 program.

RESULTS

The results of the research are presented:

Table 1. Frequencies and percentages according to the dimensions of Burnout Syndrome.

Dimensiones	Intensidad	Frecuencia	Porcentaje	Porcentaje acumulado
Cansancio emocional	Baja	50	100%	100%
	Media	-	-	-
	Alta	-	-	-
Despersonalización	Baja	38	76%	76%
	Media	22	22%	98%
	Alta	2	2%	100%
Realización personal	Baja	50	100%	100%
	Media	-	-	-
	Alta	-	-	-

Source: Own elaboration.

Table 1 shows the frequencies and percentages corresponding to each of the dimensions (Emotional Fatigue, Depersonalization and Personal Accomplishment) and according to their intensity (Low, Medium and High). With regard to emotional fatigue, it is observed that it presents a low intensity, accumulating the total of the respondents, that is, a total of 100%. This shows that there is low emotional fatigue among the ICU staff of the Isidro Ayora hospital. In the second dimension, which comprises depersonalization, a total of 38 members reported low depersonalization, i.e. 76%; 22 reported medium depersonalization, i.e. 22% and 2 reported high depersonalization, comprising a total of 2% of ICU members. This shows that a large part of the ICU members presented low depersonalization, more specifically 76%.

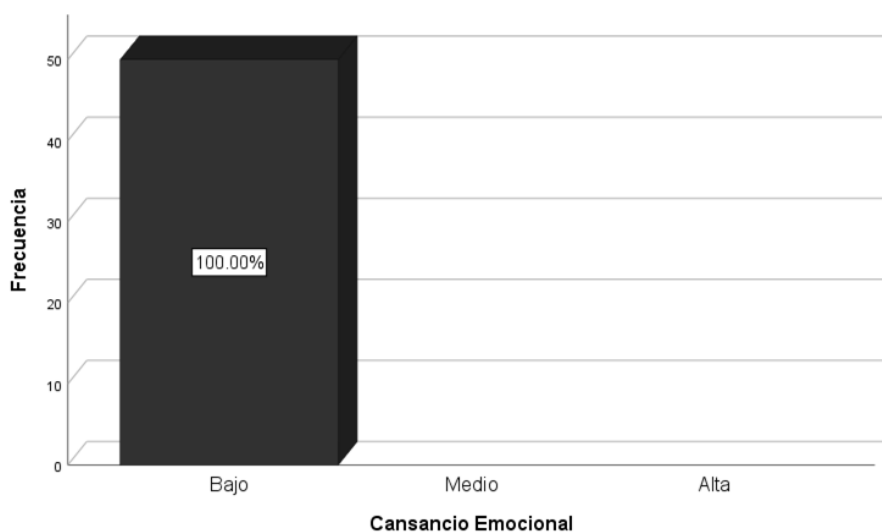


Figure 1. Percentage of emotional fatigue according to its intensity. Source: Own elaboration.

Figure 1 shows that 100% of the respondents presented low emotional fatigue when considering questions (1, 2, 3, 6, 8, 13, 14, 16 and 20) of the questionnaire applied to ICU staff at Isidro Ayora hospital.

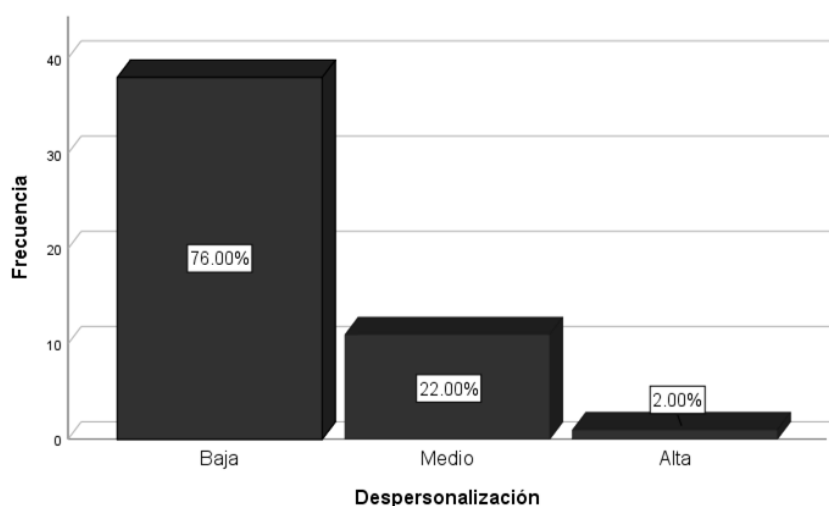


Figure 2. Percentage of depersonalization according to its intensity. Source: Own elaboration.

Figure 2 shows that, similar to the first dimension, the majority, 76% of the respondents reported low depersonalization. This is according to the questions (5, 10, 11, 15 and 22) of the questionnaire applied. On the other hand, only 2% showed high depersonalization.

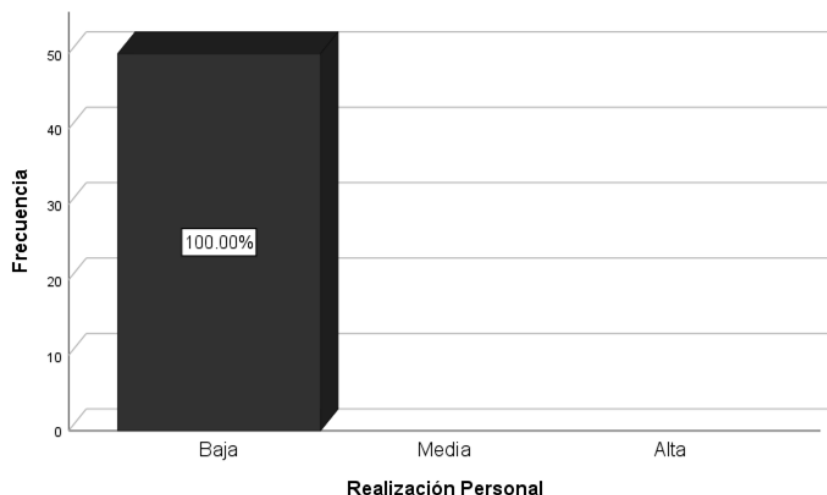


Figure 3. Percentage of personal fulfillment according to its intensity. Source: Own elaboration.

In Figure 3, all respondents showed low personal fulfillment, being a total of 100%. This is according to the questions (4, 7, 9, 12, 17, 18, 19 and 21) of the questionnaire applied.

Table 2. Presence or absence of Burnout Syndrome

	Frecuencia	Porcentaje	Decisión
Una dimensión	49	98%	Ausencia del síndrome
Dos o más dimensiones	1	2%	Presencia moderada-severa del síndrome
Total	50	100%	

Source: Own elaboration.

Once the dimensions of burnout syndrome have been observed in the members of the ICU of the Isidro Ayora Hospital, it is necessary to determine whether there is a tendency or absence of the syndrome. For this purpose, the Maslach Burnout Inventory (MBI) questionnaire assures that it is necessary to fulfill at least two of the three dimensions considered within professional burnout (emotional exhaustion-high, depersonalization-high and personal fulfillment-low) to ensure that the individual presents a tendency to present burnout syndrome. On the other hand, if the respondent only presents an alarming intensity considered within the dimensions, he/she will be classified as not having burnout syndrome.

In this regard, only one member of the ICU of the Isidro Ayora Hospital in the city of Loja fulfilled this categorization, presenting burnout syndrome, the rest presented absence of the syndrome because they only presented one of the three dimensions at most. Table 2 shows the criteria considered for this statement. Only 2% showed a moderate-severe presence of burnout syndrome.

DISCUSSION

The conditions of the work-hospital environment and the dynamics between departments have made it a profession of risk and greater propensity to suffer Burnout syndrome. In Ecuador, several investigations have been developed (in specific cities), which have been oriented to different professions, especially to health personnel (Torres-Toala, *et al.*, 2021). In general, burnout syndrome presents low levels among the health personnel of the ICU of the Isidro Ayora hospital, where personal fulfillment is low in 100% of the personnel analyzed, which places it as one of the dimensions with the greatest impact. Regarding the rest of the dimensions, these were



located within the low intensity, with medium depersonalization with 22% being the one that differs from emotional exhaustion.

In Ecuador, different prevalences have been reported in health professionals working in different areas: (Vivanco-Vivanco, *et al.* 2018), presenting an absence of the syndrome in the cantons of Cariamanga, Catamayo and Macará in the province of Loja; (Castillo-Soto, *et al.* 2019), with 86.5% in the city of Machala, with women presenting a higher prevalence; (Vinueza-Veloz, *et al.* 2021), at the national level with a sample of 224 physicians, these presented 90% of medical and nursing staff presented moderate-severe SB during the pandemic; (Rosales, *et al.* 2020), with 10% in medical students in Ambato. This shows that for the most part there is a low level of burnout syndrome among the different professionals that make up the public and private health system in Ecuador.

CONCLUSION

In the Intensive Care Unit (ICU) of the Isidro Ayora Hospital in the city of Loja, there is a low prevalence of burnout syndrome among the health personnel analyzed, specifically 2%, which would imply that there was no evidence of professional level affectations. However, one of the dimensions that most affects these professionals is low personal fulfillment. For this reason, it is important to pay attention to the health personnel and avoid possible externalities or negative impacts on the users of the service in the hospital of the city of Loja.

FINANCING

Non-monetary

CONFLICT OF INTEREST

There is no conflict of interest with persons or institutions linked to the research.

ACKNOWLEDGMENTS

Universidad Regional Autónoma de Los Andes. UNIANDES, Ambato - Ecuador.

REFERENCES

- Arrogante, O., & Aparicio-Zaldivar, E. G. (2020). Burnout syndrome in intensive care professionals: relationships with health status and wellbeing. *Síndrome de burnout en los profesionales de cuidados intensivos: relaciones con la salud y el bienestar. Enfermería intensiva*, 31(2), 60–70. <https://doi.org/10.1016/j.enfi.2019.03.004>
- Castillo-Soto, Gladys, Romero, Lucy, Cajías-Vasco, Paul, & Escobar-Segovia, Kenny. (2019). Identificación del Síndrome de Burnout en personal médico del área de emergencias en un hospital de segundo nivel en Machala-Ecuador [Identification of Burnout Syndrome in emergency medical personnel in a second level hospital in Machala-Ecuador]. *Ciencia Y Salud Virtual*, 11(2), 79–89. <https://doi.org/10.22519/21455333.1282>
- Gutiérrez-Lesmes, Oscar., Loba-Rodríguez, Nelly, & Martínez-Torres, Javier. (2018). Prevalencia del Síndrome de Burnout en profesionales de enfermería de la Orinoquia colombiana, 2016 [Prevalence of Burnout Syndrome in nursing professionals in the Colombian Orinoquia, 2016]. *Universidad Y Salud*, 20(1), 37–43. <https://doi.org/10.22267/rus.182001.107>
- Juárez-García, Arturo. (2020). Síndrome de burnout en personal de salud durante la pandemia COVID-19: un semáforo naranja en la salud mental [Burnout syndrome in healthcare personnel during the COVID-19 pandemic: An orange traffic light in mental health]. *Revista de la Universidad Industrial de Santander. Salud*, 52(4), 432-439. <https://doi.org/10.18273/revsal.v52n4-2020010>
- Motta-de-Vasconcelos, Eduardo, & Figueiredo-De-Martino, Milvia. (2018). Predictors of burnout syndrome in intensive care nurses. *Preditores da síndrome de burnout em enfermeiros*



de unidade de terapia intensiva. *Revista gaucha de enfermagem*, 38(4), e65354.
<https://doi.org/10.1590/1983-1447.2017.04.65354>

- Rodrigues, Claudia, Martins-Rodrigues, Filgueira, Euzébia-Pereira, Viviane, & Sousa, Paulo. (2017). Patient safety and nursing: interface with stress and Burnout Syndrome. *Revista brasileira de enfermagem*, 70(5), 1083–1088. <https://doi.org/10.1590/0034-7167-2016-0194>
- Rosales, Yury, Mocha-Bonilla, Julio, & Pedro-Ferreira, José. (2020). Síndrome de Burnout en estudiantes de la Universidad Técnica de Ambato, Ecuador [Burnout syndrome in students of the Technical University of Ambato, Ecuador]. *Enfermería Investiga*, 5(2), 37.
- Torres-Toala, Fausto Gady, Irigoyen-Piñeiros, Verónica, Moreno, Andrea, Ruilova Coronel, Erika, Casares-Tamayo, Jimmy, & Mendoza-Mallea, Mariuxi. (2021). Síndrome de Burnout en profesionales de la salud del Ecuador y factores asociados en tiempos de pandemia [Burnout syndrome in health professionals in Ecuador and associated factors in times of pandemic]. *Revista Virtual de la Sociedad Paraguaya de Medicina Interna*, 8(1), 126-136. <https://doi.org/10.18004/rvspmi/2312-3893/2021.08.01.126>
- Vinueza-Veloz, Andrés, Aldaz-Pachacama, Nelson, Mera-Segovia, Carlota, Tapia-Veloz, Estephany, & Vinueza-Veloz, María. (2021). Burnout syndrome among Ecuadorian medical doctors and nurses during COVID-19 pandemic. *Correo Científico Médico*, 25(2).
- Vivanco-Vivanco, María, Sánchez-León, Carmen, Maldonado-Rivera, Ruth, & Erique-Ortega, Elsa. (2018). Síndrome de burnout en profesionales de la salud en instituciones públicas y privadas: un análisis en la provincia de Loja-Ecuador [Burnout syndrome in health professionals in public and private institutions: an analysis in the province of Loja-Ecuador]. *Revista Boletín Redipe*, 7(11), 179–194.

Bajo la Licencia Creative Commons 4.0 de Reconocimiento-NoComercial-CompartirIgual 4.0