



# Working conditions, satisfaction and job stress in nursing in the face of the COVID-19 pandemic: a voice that must be heard

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Abstract. - The COVID-19 pandemic has caused the death of millions of people in the world, including health personnel, with Mexico being one of the countries with the greatest loss of human resources. Specifically, nursing professionals in the city of Tijuana, Baja California, were subject to early exposure to COVID-19, which caused stress and job dissatisfaction as a consequence of their working conditions. Likewise, the personnel reported feeling insecure as a result of the social phenomenon characterized by negative exposure in social networks, discrimination, rejection, verbal and physical aggression. Although the professionals demonstrated a great capacity to adapt and cope with these conditions, it is important to note that this capacity did not necessarily imply health wellbeing.

Keywords: Working conditions, Job satisfaction, Job stress, Nursing, COVID-19.

#### 1. Introduction

The coronavirus pandemic (COVID-19), caused the death of millions of people around the world including health personnel (Trilla, 2020). According to data from the Pan American Health Organization, in the first wave, Mexico was the country with the greatest loss of health human resources worldwide (Holshue et al., 2020), with Tijuana, Baja California being the most affected municipality in this regard. This can be attributed to both the geographic and demographic characteristics of this entity, since it is the third largest municipality in the country with more than 1.7 million inhabitants. In addition, it is considered the busiest border in the world, bordering with California, United States.

In context, it is possible to think that Tijuana could have been subjected to an earlier exposure to COVID-19 than the rest of the country, this associated to the importation of cases from California,



since, in the first wave, Tijuana reported the highest number of deaths at the national level (170 deaths), with the highest mortality rate (17.3 per 100,000 people), being almost 6 times more than the national rate (3.1 per 100,000 people), (Friedman et al., 2020).

If we analyze the problem in depth, these figures are quite predictable since the health personnel in Tijuana, like the rest of the world, faced the pandemic with a shortage of medical supplies and lack of infrastructure, which speaks of weakened health systems (Oliveira et al., 2021). This, without leaving aside the social phenomenon that experienced was throughout Mexico, characterized by discrimination, rejection, verbal and physical aggression, which was even exposed in social networks, leaving a negative message in society far from reality, regarding the work done by health professionals in the face of the pandemic. Nursing professionals demonstrated a great capacity to adapt to the situations of the work and social environment; however, it is important to establish that this capacity did not necessarily imply health well-being.

The manuscript describes the working conditions, job satisfaction and job stress experienced by nursing personnel during the first wave of the COVID-19 pandemic, findings that are described from the perspective of the personnel themselves. Finally, the impact of the pandemic on the health well-being of nursing personnel is described.

### 1.1 Topic Development

Although well-being and health are two words that seem synonymous, in reality they have considerable differences, this can be seen in the definition of health given by the World Health Organization (WHO), being "a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity" (World Health Organization [WHO], 2014, p. 1). This definition includes the term wellbeing which has a broader scope, as it encompasses several axes that are closely linked to quality of life, economic and social wellbeing, as well as professional personal wellbeing or (Alcántara, 2008).

Despite the fact that health well-being is one of the most precious assets, along with love, family union, work or professional success, it has been affected in nursing personnel over the years by social, economic and political factors. With regard to social factors, we can highlight those that are inherent to the individual, related to family problems and/or friction between work groups, due to exhausting working hours and work overload. Political and economic factors have led to informal hiring, low wages and lack of job and social security (Zárate et al., 2020, p. 36).

These factors were exacerbated during the COVID-19 pandemic, due to the precarious working conditions of Nursing around the world such as shortage of professionals, personal protective equipment, technological tools and continuous training actions.



Consequently, in addition to affecting the productivity of the organization and the quality of care offered to users, it had and continues to have a significant negative impact on the health well-being of the nursing professional, which unfortunately has been left in the background (Cassiani et al., 2020).

The previously described phenomenon can be explained through Betty Neuman's systems theory, which refers to the fact that well-being exists when the person interacts in harmony with his/her environment, and his/her needs are satisfied (Neuman & Fawcett, 2011, p. 12), which did not happen with the Tijuana Nursing professionals. This was confirmed in a recent research conducted in the region by the Fundación Enfermera Delia Ruíz Rivas based on this theory.

This research made it possible to identify the factors that had a negative effect on the health well-being of personnel in the locality, where social factors such as changes in lifestyle, separation from loved ones, anguish at the thought of going to work related to the fear of personal and/or family contagion, confinement and social discrimination were the main stressors that led to instability.

This research allowed us to identify the factors that had a negative effect on the health well-being of the personnel in the locality, where social factors such as changes in lifestyle, separation from loved ones, anguish at the thought of going to work related to the fear of personal and/or family contagion, confinement and

social discrimination were the main stressors that led to instability.

According to the results, in the work environment, the factors that added to this problem and that favored job dissatisfaction and stress were lack of knowledge, changes in work teams, work overload, hasty entry of inexperienced and emergent personnel hospital reconversion. Not to mention the fact of having to provide intensive care to colleagues who became ill and unfortunately passed away, as well as the perceived lack of job protection that led to a sense of job disappointment.

The instability of the health well-being of professionals in Tijuana was manifested by a decrease in vitality, alterations in mental health and social function, as a result of the presence of anxiety and depression. There were even those who debuted with one or more Chronic Non-Communicable Diseases (NCDs) such as obesity, diabetes systemic mellitus and arterial hypertension. Despite the fact that the personnel with these diseases were considered vulnerable and for safety reasons had to remain at home, a high percentage had to return to work due to the lack of personnel.

Systems theory refers to the fact that the environment, in this case the workplace, has an important influence on the individual. The latter is due to the fact that work is not only an activity with productive purposes, but also a generator of a sense of belonging and identity and therefore contributes to the development



of the person (Neuman & Fawcett, 2011, p. 8). For this reason, working conditions play a fundamental role because they are related to all those physical, social and administrative factors that affect the work environment and directly affect the worker. With all that was experienced during the pandemic, it can be inferred that nursing personnel had to face a major problem.

This is why the science of care, as nursing is known, for the first time has to raise its voice and take care of itself, that is, take care of the professional caregiver. This means that, although working conditions play an important role in the health of the worker and although this relationship is not always linear, health well-being depends on the way in which professionals respond personally to the demands of work, as well as the resources that the organization makes available to its workers.

Therefore, in order to rebuild the health well-being of nursing personnel after the COVID-19 pandemic, it is essential to work on the physical and emotional aspects in conjunction with the work environment. The aim is for the nursing professional to be able to enjoy life and at the same time to face in a better way the problems that are inherent to the person and his/her profession, either by making decisions, dealing with and adapting to difficult situations or dialoguing about his/her needs and desires.

It is important to consider that, in general, people's lives and circumstances change

continuously, therefore, their character, thoughts and feelings also fluctuate. Sometimes it is normal to feel discomfort such as sadness, worry, fear or uneasiness. But these types of feelings become a problem when they begin to hinder daily life for a prolonged period of time. Therefore, they must be identified and treated early and effectively.

# 1.1.1 Searching for Strategies

On the other hand, nursing leaders must together with the relevant work authorities to generate strategies to improve the conditions of the work environment, where the latter offers the possibility to develop and achieve job satisfaction. This is so that workers have access to or possess a fair economic reward, as well as work and personal resources that turn work demands into a source of learning that produces job satisfaction, giving meaning to the work performed.

# 1.1.2 Work overload

One of the main problems in the city of Tijuana is that most personnel work between 40 and 60 hours per week, similar to working conditions in other countries (Rendón et al., 2020). This can be attributed to the lack of personnel and the need for nurses to work two shifts to improve their income, causing physical and emotional overload, negatively influencing their wellbeing.



### 1.1.3 Contractual Status

During the pandemic, nursing personnel were hired on an emergency basis in the city, 47.7% of whom had a non-permanent contractual situation, i.e., temporary or fee-based. These personnel experienced stress and job dissatisfaction with respect to the work area to which they were subjected assigned, being to circumstances that constantly challenged their capacities for emotional coping, containment and resilience: the existence of great emotional pressure in the areas of direct care, ethical and moral dilemmas (Buitrago et al., 2021).

# 1.1.4 Labor Recognition

Regarding compensation, at the national level, the President of the Republic informed that a COVID bonus would be granted to nursing personnel working in the first line of care, and that Merit Notes would also be given in an extraordinary way to the personnel who integrated the COVID-19 patient care teams (Government of Mexico, 2020). However, in Tijuana this was not the case in all cases; there were health professionals who did not receive such compensation, either because they worked in private institutions or because in some public institutions these bonuses were raffled and were not granted to 100% of the staff, generating dissatisfaction and stress, as well as low perception of labor protection.

# 1.1.5 Obesity and its Relationship with the Work Environment

One aspect to highlight is that there was a significant difference between the physical activity of nursing personnel in private and public institutions; this difference may be due to the guidelines and requirements of these institutions as part of their hiring or to the fact that the personnel hired in the private sector are recent graduates and younger, so that their energy and desire to gain work skills and abilities lead them to perform greater physical activity and a greater number of functions in the labor field, in addition to having a contractual situation that does not have a fixed contract.

These data may be different from the staff of public institutions where they have a stable job and are only limited to their activities, in this sense age plays a fundamental role since in public institutions you can find older and more experienced nursing staff.

The causes of overweight and obesity are fundamentally determined by an increase in the intake of caloric foods rich in sugars and fats, coupled with a generalized decrease in physical activity, generating an energy imbalance (Barnett, 2017); this in turn influenced by genetic, behavioral, psychological and physical and social environment factors.

In this sense, nursing personnel are not exempt from overweight and obesity, considering them as a vulnerable group with a frequency that increases in those



who are not sufficiently active, in those who increase the consumption of meals during working hours and in those who work night or rotating schedules, being the age groups from 25 to 34 years old the most frequent with overweight and from 45 to 55 years old with obesity (Verón & Auchter, 2020).

In 2022 the Centers for Disease Control and Prevention (CDC), indicated that as people's weight increases to overweight and obesity levels also increase the risks of suffering or developing NCDs such as DM2, HTN, heart disease, among others (Centers for Disease Control and Prevention, 2022; Colosia et al., 2013; National Institutes of Health, 2022; Shariq & Mckenzie, 2020).

### 1.1.6 Social Discrimination

An important sociocultural difference is the way in which the world's population reacted to health personnel during the pandemic, from countries that revered nursing personnel as heroes and where every night the cities resounded with a massive applause in gratitude to health personnel, valuing the risk to their own lives to attend and save the population to countries like Mexico, where some people even children saw nursing personnel as "dirty", "infected" and as a potential risk to their health; For this reason, they did not wait for verbal and physical aggressions and mistreatment, even denying them access to transportation services.

Discrimination was more than evident, so that social networks and national and

international newspapers did not stop exposing the different cases that were presented (Abuabara, 2020). These facts were generators of labor and social stress that depended largely on the capabilities and resources of the worker to cope with them, as well as their culture and personal situation outside of work. It is important to remember that psychosocial factors at work can become dysfunctional negative conditions that can provoke a maladaptive response. Therefore, discrimination can be considered as a psychosocial risk factor (Montes-Berges & Ortúñez, 2021).

# 1.1.7 Health Well-Being and its Relationship to Job Satisfaction and Perception of Job Protection

It was observed that job satisfaction and the perception of job protection increase the health well-being of Tijuana professionals, since the higher the job satisfaction and perception, the greater the improvement in general health, physical role, vitality and social function.

On the other hand, the perception of job disappointment and job stress decrease the worker's health well-being, becoming a risk factor for their physical and mental health, affecting the worker's general health, social function and emotional role. Therefore, the health well-being of the worker depends significantly on his or her job satisfaction and the conditions in which he or she works.

According to the data found, more than 95% of the participants presented medium job satisfaction, with a predominance of job-related stress and interpersonal relationships with colleagues. Although job satisfaction in general is not different among the participating health institutions, it can be seen that there is a variation according to the work pressure and work monotony experienced in each institution, also including the professional competencies of the staff.

In relation to social well-being, it can be said that general health is the dimension most affected, followed by the vitality and mental health of the worker. In this sense, the working conditions experienced by workers are related to their physical function, either because of the activities they perform or the work area in which they work. Likewise, the work area in which they work is related to the physical role (techniques and procedures), the emotional aspect, mental health and work seniority; it should be noted that work seniority directly involves or affects the worker's vitality, mental health, work category and area of work of the personnel, making them more vulnerable with respect to their physical wellbeing.

Thus, it can be seen that occupational health directly affects the well-being of workers, from the perception of their work and the generation of stress in it, so that when there is little job satisfaction the worker may also perceive little protection in their work, which could generate stress and anguish in going to work, aspects that may contribute to the high probability of developing non-communicable diseases that affect their well-being and health.

### 2. Conclusions

The results found incite the authorities of the institutions to work on continuous improvement strategies where occupational health and well-being of workers is managed, as well as physical health, emotional and mental health aspects, among others; this in order to reduce occupational stress and reduce the risks that this entails in the worker's health according to the stipulations of NOM-035-STPS-2018 (NOM, 2018) where it is mentioned that psychosocial risk factors should be identified and the work environment and conditions should be carry out prevention measured to actions to control measures and psychosocial risks, in addition to favoring the work environment (Secretaría de Gobernación, 2018).

Therefore, it is suggested to consider the working conditions, work areas and other variables of the work environment of the nursing staff that directly influence the occupational health and well-being in health of the worker as fields of study, considering this as a safe place to maintain optimal well-being and reduce health risks.

This in turn will indirectly contribute to provide optimal quality care and warmth to users, where the risks of work stress, anxiety about going to work or low work perception are not conditions that affect the welfare and health of workers and users. In addition, it would be important to start working on action strategies to care for, reduce or promote well-being and



occupational health in the work areas. It is hoped that the results reported will contribute to a positive change for the health of the nursing profession.

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# References

- Abuabara, Y. C. (2020). Ataque al personal de la salud durante la pandemia de Covid-19 en Latinoamérica. *Acta Médica Colombiana*, *45*(3). <u>https://doi.org/10.36104/AMC.202</u> <u>0.1975</u>
- Alcántara Moreno, G. (2008). La definición de salud de la Organizacion Mundial de la Salud y la interdisciplinariedad. *Sapiens, Revista Universitaria de Investigación, 9*(1), 93–107.
- Barnett, R. (2017). Obesity. *The Lancet*, *389*(10069), 591. <u>https://doi.org/10.1016/S0140-</u> <u>6736(17)30273-8</u>
- Buitrago Ramírez, F., Ciurana Misol, R., Fernández Alonso, M. del C., & Tizón, J. L. (2021). Pandemia de la COVID-19 y salud mental: reflexiones iniciales desde la atención primaria de salud española. *Atención Primaria*, *53*(1), 89–101.

https://doi.org/10.1016/j.aprim.202 0.06.006

- Carlsson, M. (2020). Self-reported competence in female and male nursing students in the light of theories of hegemonic masculinity and femininity. *Journal of Advanced Nursing*, *76*(1), 191–198. https://doi.org/10.1111/jan.14220
- Cassiani, S. H. D. B., Munar Jimenez, E. F., Umpiérrez Ferreira, A., Peduzzi, M., & Leija Hernández, C. (2020). La situación de la Enfermería en el mundo y la Región de las Américas en tiempos de la pandemia de COVID-19. *Revista Panamericana de Salud Pública, 44*(4), 1. https://doi.org/10.26633/RPSP.202 <u>0.64</u>
- Centros para el Control y la Prevención de Enfermedades. (2022). *Efectos del Sobrepeso y la Obesidad en la Salud.* <u>https://www.cdc.gov/healthyweigh</u> <u>t/spanish/effects.html</u>
- Colosia, A. D., Palencia, R., & Khan, S. (2013). Prevalence of hypertension and obesity in patients with type 2 diabetes mellitus in observational studies: а systematic literature Diabetes, review. Metabolic Syndrome and Obesity: Targets and Therapy, 6, 327-338. https://doi.org/10.2147/DMSO.S513 <u>25</u>
- Friedman, J., Calderón-Villarreal, A., Bojorquez, I., Vera Hernández, C., Schriger, D. L., & Tovar Hirashima, E. (2020). Excess Out-of-Hospital Mortality and Declining Oxygen Saturation: The Sentinel Role of Emergency Medical Services Data in the COVID-19 Crisis in Tijuana,



Mexico. *Annals of Emergency Medicine*, *76*(4), 413–426. <u>https://doi.org/10.1016/j.annemerg</u> <u>med.2020.07.035</u>

- Gobierno de México. (2020). *IMSS y SNTSS informan sobre acciones en beneficio de los trabajadores de la salud.* <u>http://www.imss.gob.mx/prensa/a</u> <u>rchivo/202006/ComunicadoConjun</u> <u>to</u>
- Holshue, M. L., DeBolt, C., Lindquist, S., Lofy, K. H., Wiesman, J., Bruce, H., Spitters, C., Ericson, K., Wilkerson, S., Tural, A., Diaz, G., Cohn, A., Fox, L., Patel, A., Gerber, S. I., Kim, L., Tong, S., Lu, X., Lindstrom, S., ... Pillai, S. K. (2020). First Case of 2019 Novel Coronavirus in the United States. *New England Journal of Medicine*, *382*(10), 929–936. https://doi.org/10.1056/nejmoa20 01191
- Montes-Berges, B., & Ortúñez Fernández, M. E. (2021). Efectos psicológicos de la pandemia covid 19 en el personal del ámbito sanitario. *Enfermería Global*, *20*(2), 254–282. <u>https://doi.org/10.6018/eglobal.42</u> <u>7161</u>
- National Institutes of Health. (2022). *Sobrepeso y obesidad*. <u>https://www.nhlbi.nih.gov/es/salu</u> <u>d/sobrepeso-y-obesidad</u>
- Neuman, B., & Fawcett, J. (2011). *The Neuman Systems Model* (Fifth Edit). Pearson Education.
- Oliveira, K. K. D. de, Freitas, R. J. M. de, Araújo, J. L. de, & Gomes, J. G. N. (2021). Nursing Now and the role of nursing in the context of pandemic

and current work. *Revista Gaúcha de Enfermagem*, *42*(spe), e20200120. https://doi.org/10.1590/1983-1447.2021.20200120

Organización Mundial De La Salud [OMS]. (2014). Documentos básicos. *Organización Mundial De La Salud*, 1– 217.

> https://www.who.int/es/about/go vernance/constitution

- Prosen, M. (2022). Nursing students' perception of gender-defined roles in nursing: a qualitative descriptive study. *BMC Nursing*, *21*(1), 1–11. <u>https://doi.org/10.1186/s12912-</u> <u>022-00876-4</u>
- Rendón Montoya, M. S., Peralta Peña, S. L., Hernández Villa, E. A., Hernández Pedroza, R. I., Vargas, M. R., & Favela Ocaño, M. A. (2020). Síndrome de burnout en el personal de Enfermería de unidades de cuidado crítico y de hospitalización. *Enfermería Global*, *19*(3), 479–506. <u>https://doi.org/10.6018/eglobal.39</u> 8221
- Secretaría de Gobernación. (2018, October 22). *NORMA Oficial Mexicana NOM-035-STPS-2018, Factores de riesgo psicosocial en el trabajo-Identificación, análisis y prevención.* <u>https://www.dof.gob.mx/nota\_det</u> <u>alle.php?codigo=5541828&fecha=23/</u> <u>10/2018#gsc.tab=0</u>
- Shariq, O. A., & Mckenzie, T. J. (2020). Obesity-related hypertension: a review of pathophysiology, management, and the role of metabolic surgery. *Gland Surgery*, *9*(1), 80–93.



https://doi.org/10.21037/GS.2019.1 2.03

Trilla, A. (2020). Un mundo, una salud: la epidemia por el nuevo coronavirus COVID-19. *Medicina Clínica*, *155*(6), 272.

https://doi.org/10.1016/j.medcli.20 20.05.015

- Verón, A. M. I., & Auchter, M. C. (2020). Sobrepeso y obesidad en el personal de Enfermería del Instituto de Cardiología de Corrientes. Año 2017. *Notas de Enfermería, 20*(35), 30–38. <u>https://pesquisa.bvsalud.org/portal /resource/pt/biblio-1119040</u>
- Zárate Grajales, R. A., Ostiguín Meléndez, R. M., Castro, A. R., & Valencia Castillo, F. B. (2020). Enfermería y COVID-19: la voz de sus protagonistas. In E. N. de E. y O. F. de A. y Diseño (Ed.), ENFERMERÍA Y COVID-19: la VOZ de SUS protagonistas.