







Psychological well-being in health care workers during the pandemic SARS COV-2

Bienestar psicológico en el personal de salud durante la pandemia de SARS COV-2

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ABSTRACT

Introduction: the SARS-COV-2 coronavirus, first reported in Wuhan, China. Causes the same symptoms as a cold, fever, cough, and dyspnea, sudden loss of smell and taste, and in severe cases can cause pneumonia. *Objective:* to identify the level of psychological well-being of health personnel in the city of Puebla during the SARS Cov-2 pandemic. *Methods:* a descriptive cross-sectional study was conducted. The population consisted of 119 health workers assigned to a tertiary care hospital in the city of Puebla in 2020. A sociodemographic data questionnaire was used for data collection, and the Ryff scale applied online after validation, through the application of Google Forms. *Results:* according to sex, men experience greater psychological well-being than women. Orderlies have a higher mean of psychological well-being in the population studied. In relation to marital status, divorced people have higher average psychological well-being than single people. Workers with more than a decade of service had higher psychological well-being. *Conclusions:* the level of psychological well-being of health workers in the city of Puebla during the SARS Cov-2 pandemic was identified.

Keywords: *Psychological well-being, Health personnel, Pandemic*

RESUMEN

Introducción: el coronavirus conocido SARS-COV-2, fue notificado por primera vez en Wuhan china. Esta enfermedad causa los mismos síntomas que un resfriado, fiebre, tos, disnea además de una pérdida súbita del olfato y gusto, en casos graves puede causar neumonía.

Objetivo: identificar el nivel de bienestar psicológico del personal de salud en la ciudad de Puebla durante la pandemia de SARS COV-2. **Método:** se realizó un estudio descriptivo transversal. La población está conformada por 119 trabajadores del personal de salud, adscritos al hospital de tercer nivel de atención en la ciudad de Puebla en el 2020. Para la recolección de datos se utilizó una cédula de datos sociodemográficos, y la escala de Ryff aplicado *online* previa validación, por medio de la aplicación de *GOOGLE FORMS*. **Resultados:** según sexo los hombres experimentan mayor bienestar psicológico que las mujeres. Los camilleros tienen una mayor media de bienestar psicológico de la población estudiada. En relación al estado civil la población divorciada posee mayor promedio de bienestar psicológico que los solteros. Los trabajadores con más de una década de prestación de servicios tenían mayor bienestar psicológico. **Conclusiones:** se identificó el nivel de bienestar psicológico del personal de salud en la ciudad de Puebla durante la pandemia de SARS Cov-2.

Palabras clave: Bienestar psicológico, Personal de salud, Pandemia

INTRODUCTION

SARS-COV-2 disease, also known as COVID 19 was first reported on December 31, 2019, in Wuhan, China. The so-called coronaviruses are an extensive family of viruses, these can cause disease in animals, however, also in humans.

There are different coronaviruses that can cause respiratory infections, the common cold, but also serious diseases. For example, Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).²

COVID-19 produces flu-like symptoms, including fever, cough, dyspnea, myalgia, sudden loss of smell and taste. In severe cases it can produce pneumonia, acute respiratory distress syndrome, sepsis.^{2,3}

The spread of this disease caused the World Health Organization (WHO) to declare on January 30, 2020 a health emergency of international concern, with impact on underdeveloped countries with less health infrastructure. WHO recognized COVID 19, a pandemic in March 2020.⁴

On August 12nd, 2020, the number of infections worldwide was officially counted at 20,797, 554 people infected. The U.S., Brazil and Mexico accounted for 43.6% of cumulative official COVID-19 deaths by this date.⁵

The highest global case fatality rate was reached on April 23rd, 2020 (7.28%). Mexico's figures were 492,522 confirmed cases. National pandemic deaths amounted to 52,929, which placed Mexico third in the world ranking.⁴ In the city of Puebla, Mexico, 85,469 confirmed cases were reported in May, with 12,127 deaths.⁵

This generated concern among health personnel, due to possible contagion, the subsequent death, and working conditions, which led to great work pressure. The combination of these factors generated a high risk to psychoemotional health, which affected the psychological wellbeing of health personnel.⁶

The concept of psychological wellbeing arose in the United States and was defined as a result of the development of industrialized societies and interest in living conditions.⁷ At the beginning, feeling good was associated with physical appearance, intelligence or economic aspect, but nowadays, as a result of diverse research, it is recognized that it is related to healthy practices and personal subjectivity.⁸

In general terms, it is a broad concept that includes social, subjective and psychological dimensions, as well as health-related behaviors that lead people to function in a positive way.

It is consistent with how to face daily challenges, ways to handle them, learn from them and deepen the meaning of life. ⁸

Psychological well-being is currently defined by the development of capabilities and personal growth. The individual shows indicators of positive functioning, so it can be considered the precursor of Positive Psychology models. ⁸

The psychological well-being of health personnel is influenced by many factors. Health care workers spend most of their time providing care to others, yet they do not seem to take care of themselves. ⁹

The authors recognize the importance of conducting studies based on the psychological well-being of health personnel. Accordingly, they propose to identify the level of psychological well-being of health personnel in the city of Puebla during the SARS-COV-2 pandemic.

METHOD

A cross-sectional descriptive study was carried out. The population consisted of 119 health care workers assigned to a tertiary care hospital in the city of Puebla in 2020. A sociodemographic data questionnaire was used to collect personal information from the participants. It was based on information related to the variables sex, age, marital status, length of service, work time, profession and work area.

To measure the psychological well-being of the study population, the Riff psychological well-being scale was applied. ¹⁰ It consists of 39 items with response options from 1 to 6. The response 1 is equivalent to a response of totally disagree and 6 is equivalent to totally agree.

The scale evaluates 6 dimensions proposed by Ryff: self-acceptance, autonomy, positive relationships with other people, personal growth, mastery of the environment, and purpose in life. This instrument was validated by the authors of the study prior to application; reliability was very high, the result obtained for Cronbach's alpha was 0.76.

It had the ethical support of the Regulations of the General Health Law on Health Research. ¹¹ Approval was requested from the Institute for Advanced University Studies. The objective of the study was explained to the participants. Anonymity, confidentiality of the information, and consent was obtained from the individual.

RESULTS

Women constituted 67.2% of the study population. 57.8% of people were single and 71.4% reported having been employed for between 1 and 5 years. 62% percent of the participants worked the morning shift. With regard to professions, nursing personnel is the most represented with 46.2%. The second most represented job was stretcher-bearer with 17.6%.

The highest percentage (22.7%) of the analysis units work in the emergency area. Another result obtained is that most of the participants (68.9%) work in the public health sector.

In the application of the Riff psychological well-being scale, the difference between men and women was sought by means of the Mann Whitney U statistic. There was a slight divergence in the means of men and women. Men have greater psychological well-being than women. However, looking at the probability result associated with the test statistic, ($p0.436 > p.05$) indicates that there is no difference between the two sexes, Table 1.

Table 1. Distribution of health personnel, according to psychological well-being and sex. Third level care hospital in the city of Puebla. 2020

Sex	Average of Psychological Well-being	Mann Whitney U
Male	138	p=0,436
Female	135,7	

n=119

People who mentioned being divorced have a higher psychological well-being with an average of 142.5. They were followed by those who possess a common-law relationship with 139.3 mean psychological well-being. Table 2.

Table 2. Distribution of health personnel according to psychological well-being and marital status. Third-level care hospital in the city of Puebla. 2020

Marital Status	Mean Psychological Well-being
Single	135,5
Married	136,32
Divorced	142,5
Unmarried	139,3

In relation to the years of service, it can be observed that people with between 11 and 20 years of service had the highest average psychological well-being. They reached an average of 138.2. Table 3.

Table 3. Distribution of health personnel, according to psychological well-being and years of service in the third level care hospital in the city of Puebla. 2020

Years of service	Mean Psychological Well-being
1-5	136,4
6-10	135,6
11-20	138,2

People working the morning shift had the highest level of psychological well-being. They obtained an average of 136.5. Table 4.

Table 4. Distribution of health personnel, according to psychological well-being and work shift. Third level care hospital in the city of Puebla. 2020

Work Shift	Mean Psychological Well-being
Morning	136.7
Afternoon	135.23
Cumulative workday	142
Night	130.5
Cumulative shift night	137

Corresponding to the profession it was shown that stretcher-bearers have a higher mean of psychological well-being with 149.3 followed by physiotherapists, social workers and chemists who exhibited an average between 138 and 139 psychological well-being. Nursing staff had the lowest average with 134.4 mean.

It turned out that in the type of care, health personnel working in public institutions had a higher mean with a 137 average followed by private with 135 average. When contrasting the level of psychological well-being, while the area of work that has a higher psychological well-being is the government area.

DISCUSSION

The health personnel during the pandemic had a greater confrontation with stress. The study showed that most of them were women. Something similar happens in other research conducted on psychological well-being.^{7,8,10-15} It is mentioned that the population at the national level is made up of women, who experience lower average psychological well-being in relation to men. This is consistent with the findings of the present study.

Divorced health personnel were found to have higher average psychological well-being. This does not agree with Suarez.¹⁶ The levels found according to marital status, it was found that in married and single people the most frequent levels are regular and very good. He affirms that family experiences play an important role since this participation promotes greater well-being. Married or cohabiting persons show greater psychological well-being compared to single people.

In terms of length of service, 53.38% of the participants with the highest average psychological well-being were in the period 3 months to 1 year according to Suarez.¹⁶ Which does not agree with the present study. It can be observed that people who have between 11 to 20 years of service, resulted to have the highest average of psychological well-being.

In a private institution of higher education in San Juan de Pasto,¹⁷ the relationship between psychological well-being and job satisfaction in administrative or government personnel was evaluated. It showed a significant correlation of the variables. An adequate level of job satisfaction can be a determining predictor in the psychological well-being of workers. This is consistent with this study, since the highest level of psychological well-being was found in the government area.

However, it does not coincide with the findings of another study.¹⁸ It shows that the highest percentage of administrative personnel reveals a negative or unpleasant emotional state in their perception of their work experiences, and therefore, a low percentage of psychological well-being.

Several authors suggest that the analysis of the role of psychological well-being in a private institution of higher education could be considered the essential basis. It provides indicators for future research.^{16, 17}

To that extent, all the results converge on one idea: psychological well-being has a great impact on the physical and mental health of individuals in the private health institution. It is also a significant factor that improves productivity and the development of personal and social relationships. Giving greater importance to the psychological well-being of healthcare personnel.^{16,17}

The results do not agree when corroborated in the context where the research was carried out. The type of care provided to health personnel working in public institutions has a higher average than in private institutions. Psychological well-being includes indicators of the various work conditions relevant to satisfaction, motivation and commitment. These are substantial in personal and organizational success, intervene in the performance of the collaborators for the effective development of the institution.

Conducting similar studies on health personnel, especially nursing personnel, would serve to compare the results obtained and to plan improvement strategies that could be disseminated at the national level in health institutions. There is no national precedent that explores the relationship of the variables in a sample similar to the present investigation.

CONCLUSIONS

This study identified the level of psychological well-being of health personnel in the city of Puebla during the SARS COV-2 pandemic. Attached to a tertiary care hospital by 2020. This contributed to the elaboration of researches that recognize in a broader way which are the factors that influence psychological well-being.

AUTHORSHIP CONTRIBUTION

Katerinne María José Ríos Martínez: Conceptualization, Research, Methodology, Data curation, Visualization, Writing - original draft.

Francisco Javier Arroyo Cruz: Supervision, Writing - original draft, Writing - revision and edition.

Cristobalina Miranda Flores: Writing - revision and edition.

Leticia Cordero Díaz: Writing - revision and edition.

Luis Ángel León López: Writing - revision and edition.

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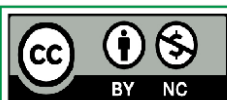
CONFLICT OF INTERESTS

The authors declare no conflict of interests.

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