



Research Article

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Fear of COVID-19 and Job Stress in Nursing Professionals in Lima, Peru

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Abstract

COVID-19 pandemic made the importance of nursing care within the healthcare environment visible. The lack of this human resource is essential to provide direct care to patients in meeting basic needs and specialized care for health recovery. However, the new disease brought a lot of fear and fear of getting sick or dying from COVID-19, causing various human responses or emotional problems. The study's objective was to determine the relationship between fear of COVID-19 and work stress in nursing professionals in hospital institutions in Lima. The sample consisted of 515 nursing professionals working in the various hospital services of health institutions in Lima. The fear of COVID-19 scale (7 items) and Work Stress scale (12 items) were used. It was concluded that the greater the fear of COVID-19, the greater the work stress in nursing professionals, since the results obtained indicated an excellent and positive relationship (0.779) between these variables.

Keywords: Fear of COVID-19, work stress, nursing professionals, hospital setting

1. Introduction

COVID-19, known as coronavirus, is an infectious disease caused by the SARS-CoV-2 virus. It produces flu-like symptoms, including fever, dry cough, dyspnea, myalgia, and fatigue. In severe

cases, it can cause pneumonia, acute respiratory distress syndrome, sepsis, and septic shock that can lead to the death of those infected. There is no specific treatment yet, and the main therapeutic measures are to relieve symptoms and maintain stable vital functions (World Health Organization, 2020).

Along these same lines, COVID-19 is a disease that has destabilized health systems worldwide, highlighting the lack of human and material resources to deal with emergency and pandemic situations. Madewell et al., (2020). In this sense, according to statistics, they report that there are approximately 28 million nursing professionals in the world, of which 8.4 million work in the region of the Americas. This professional group represents 56% of the health workforce. However, the pandemic has highlighted the need to strengthen professional skills, abilities, and attitudes to deal with health emergencies, disasters, and pandemics that affect the planet (Cassiani et al., 2020).

Likewise, nursing professionals have suffered contagion from the coronavirus and human losses, colleagues within their work environment (Blanco-Daza et al., 2022; David et al., 2021). Even though they used the safety protection equipment to face the 8, 10, and 12 continuous hours taking care of the patients. These events have caused significant environmental tension and stress for the entire health team. Given this scenario, the impact of the consequences of severe cases of patients with COVID-19 in critical areas has resulted in nurses presenting feelings of fear of getting sick and fear of COVID-19, deteriorating the emotional aspect caused due to work stress, mental load, anxiety, sleep disturbance among other physical and psychological manifestations during the working day (WHO/PAHO, 2020).

In this sense, fear of COVID-19 is defined as the perception of a feeling of anguish caused by the risk of contracting the contagious coronavirus disease (Alkhamshi et al., 2021; Håkansson & Claesdotter, 2022; Meller et al., 2022; Metin et al., 2022; Siddiqi et al., 2022). In 2019, in Wuhan, China, a progressive clinical picture of severe respiratory distress, fever, myalgia, and fatigue was reported, caused by a new coronavirus (SARS-CoV-2), which spread rapidly and became a pandemic (Monterrosa-Castro et al., 2020).

There is no doubt that patient care is a hazardous activity. For this reason, nursing is a science and art of care based on human values that encourage the provision of health and/or disease services in the different stages of life, even at the expense of one's own life, to preserve human life (Jimenez & Meneses, 2015).

The pandemic caused a health crisis that generated stress and even panic throughout the world population. In the case of health professionals, when living the experience of interacting directly with the patient with COVID-19, they experienced feelings of fear of acquiring the disease and dying due to the infection (Vijay & Sharma, 2020). Some authors indicate the psychological impact of the epidemic on uninfected people, being significant in the morbidity of mental health problems (Sim et al., 2010). Health workers usually fear getting infected and infecting their families, friends, or colleagues. Likewise, health professionals experience stress, anxiety, or depression symptoms with long-term psychological implications (Xiao, 2020). These emotional health problems in times of pandemic are evidenced in the study of Kang et al. (2020), who pointed out that health professionals have reported significant rates of depression, anxiety, insomnia, and stress in the current COVID-19 epidemic.

On the other hand, in Brazil, Ferreira, Thalise, and Pereira (2020) supported the various difficulties and fears that nurses have experienced concerning the high risk of infection and lack of access and use of personal protective equipment work overload, among others, have revealed emotional problems. It should be noted that professionals in this health area lack support and attention, which raises the level of fear, anxiety, insecurity, and uncertainty to face the future. In Chile, Cruz, Astres, Aliaga, and Cristina (2021) indicate that, within the health field, the lack of supplies and an unsafe work environment have been perceived. Fear is a denominator related to fear of not knowing about the disease, getting infected, or transmitting the disease, especially in family members, generating stress, anxiety, and emotional exhaustion.

In addition, Olivia & Chavarry (2021) maintain that in the COVID-19 pandemic, health

professionals are developing various emotional and physical problems, work exhaustion, work overload, and fear of contagion of the disease and their relatives.

Work stress can cause effects on the individual, such as being increasingly anxious and irritable; being unable to relax or concentrate; having difficulty thinking logically and making decisions; enjoying your work less and less and feeling less and less committed to it; feeling tired, depressed, and restless; have difficulty sleeping, suffer from severe physical problems. Likewise, it can cause effects on entities such as increased absenteeism, less dedication to work, increased staff turnover, deterioration of performance and productivity; increased unsafe work practices and accident rates; increase in user and customer complaints; adverse effects on staff recruitment; increased legal problems in the face of lawsuits filed and legal actions taken by workers suffering from stress; deterioration of the institutional image both among its employees and abroad (Azcona, Guillen, Melendez, & Pastrana, 2016).

International studies in Colombia (Monterrosa-Castro et al., 2020) indicate that out of every 7 health professionals who presented some anxiety or work stress in the COVID-19 pandemic, fear was the common denominator. In addition, Carrillo-Garcia et al. (2016) expressed that nursing professionals have a moderate level of perception of work stressors, which is why they highlight the lack of control in decision-making the need to learn to improve their work performance continuously.

There is no doubt that the work stress of nurses in the case of Colombia during the pandemic differs between rural and urban areas (Kang et al., 2020).

It should be noted that the stress experienced by many nurses who work in critical areas increases exponentially during the pandemic due to the uncontrollable advance of the disease, the high risk of contagion, mortality, and the presence of sequelae (Pujadas, Pérez, & García-Pazo, 2020). Nursing professionals are generally subject to stress factors, such as staff shortages that entail a workload, work in rotating shifts, and the consequent alteration in the pace of work with problematic users, contact with illness, pain, and death, conflicts, and role ambiguity, among others. The role of the chemotherapy nurse is essential and fundamental within the teams of critical areas, and therefore they must have preparation both personally and professionally that allows them to carry out their work efficiently; they must be able to relate to the interdisciplinary team to be able to coordinate and optimize efforts directed to each patient (Carrillo-Garcia et al., 2016).

Peru is one of the countries most affected worldwide by the COVID-19 infection, with a high morbidity and mortality rate. Due to the high demand for these health services, the system's collapse resulted. This situation resulted in frustration and desolation in patients-family and health personnel. The pandemic caused moments of pain that were shared in the face of suffering in critical areas (Flores, Soto, & De La Cruz-Vargas, 2021). In addition, Carrasco, Castillo, Salas, and Reyes (2020) maintained that work stress in nursing professionals reached a medium level, with environmental, work, and personal stressors predominating.

Finally, this research, in addition to assessing exposure to fear and work stressors in the face of the pandemic, also considers other indicators as a response to fear and stress in COVID-19. It is necessary to use tools to measure this problem and adopt preventive measures, which allow mitigating the collateral effects in the emotional field of health professionals, especially nursing professionals who work in healthcare areas and directly care for patients diagnosed with COVID-19.

2. Methodology

This study has a quantitative, correlational, cross-sectional approach, with a non-experimental design. The sample consisted of 515 nursing professionals who work in the various hospital services of health institutions in Lima. The technique used was non-probabilistic convenience sampling. Nursing professionals who work in the various services of hospital institutions in Lima, where patients with COVID-19 are cared for, were included in this research. The instrument was developed by (Monterrosa-Castro et al., 2020) to assess the presence of fear of COVID-19 contagion. This instrument has seven items, and a good validity and reliability (Cronbach's alpha of 0.82. intraclass

correlation of 0.72). Each question was answered through a Likert-type Scale with five options, and points are assigned as follows: strongly disagree = 1; disagree = 2; neither agree nor disagree = 3; agree = 4; and strongly agree = 5. The authors of the original version did not indicate the cut-off point. The first three options were considered negative responses and the other two positives.

For the occupational stress variable, the instrument was applied in the Spanish version created by García-Izquierdo in 1993, and it was carried out by taking items from an extensive instrument created by Hock (14) in 1988 to explore Burnout Syndrome ("feeling left or melted"). The Occupational Stress Symptoms Questionnaire is applied in various work environments, including health professionals. Questionnaire of psychosomatic problems consists of 12 Likert-type items, in which the answers are scored as follows: never = 1 point, hardly ever = 2, a few times = 3, sometimes = 4, with relative frequency = 5 and very often = 6. The sum establishes the presence of work stress: 0-12 points = no symptoms of stress; 13-24 = No symptoms of stress, but in the alarm phase; 25-36 = mild stress; 37-48 = moderate stress, 49-60 = high stress; and more than 60= serious stress. A score equal to or greater than 25 indicates the presence of work stress. High scores indicate a greater psychosomatic response, which corresponds to a higher stress level.

The data collection was carried out through the google form, where the informed consent was placed as the first part, to access the questionnaire and fill it out. In this way, the ethical principles of autonomy, privacy, confidentiality, and justice have complied. This questionnaire was shared through various virtual platforms and closed Facebook groups on social networks. Immediately generating a database in Excel was analyzed through the statistical program IBM SPSS Statistics version 26.

The frequency table was used to present the descriptive results, and the Spearman's Rho statistic was used for the inferential analysis.

3. Results

Table 1: Relationship between fear of COVID-19 and work stress in nursing professionals of the hospital institutions in Lima

			Fear of COVID-19	Work Stress
Spearman's rho	Fear of COVID-19	Correlation coefficient	1,000	.779**
		Next (2-sided)	.	,000
		N	515	515
	Work stress	Correlation coefficient	.779**	1,000
		Next (2-sided)	,000	.
		N	515	515

Table 1 shows a relationship between the Fear of COVID-19 and work stress; this can be seen in the sig bilateral value of less than 0.01 ($p < 0.01$) due to the double asterisk. Likewise, there is an excellent and positive relationship between the variables since the value found is 0.779. This expresses that the greater the fear of COVID-19, the greater the work stress in nursing professionals.

Table 2: Prevalence of the presence of fear of COVID-19 and the levels of work stress in nursing professionals of the hospital institutions in Lima

			Work stress					Total
			Alarm phase	Mild stress	Moderate stress	High stress	Severe stress	
Fear of Covid 19	Without fear	Count	2	65	62	10	0	139
		% of the total	0.4%	12.6%	12.0%	1.9%	0.0%	27.0%
	very little fear	Count	0	4	61	61	6	132
		% of the total	0.0%	0.8%	11.8%	11.8%	1.2%	25.6%
	moderate fear	Count	0	1	8	104	15	128
		% of the total	0.0%	0.2%	1.6%	20.2%	2.9%	24.9%
	Very afraid	Count	0	0	two	55	59	116
		% of the total	0.0%	0.0%	0.4%	10.7%	11.5%	22.5%
Total		Count	2	70	133	230	80	515
		% of the total	0.4%	13.6%	25.8%	44.7%	15.5%	100.0%

Table 2 shows the percentages in the presence of fear of COVID-19 and the levels of work stress, highlighting the levels of high and severe stress when there is moderate to great fear.

Table 3: Level of fear of COVID-19 in nursing professionals of the hospital institutions in Lima

Level of fear	Frequency	Percentage
Without fear	139	27.0%
Very little fear	132	25.6%
Moderate fear	128	24.9%
Very afraid	116	22.5%
Total	515	100.0%

Table 3 shows the level of fear of COVID-19 of nursing professionals in hospital institutions in Lima. Likewise, 57.4% of those surveyed show moderate and great fear of COVID-19, and only 27% are not afraid.

Table 4: Level of fear of COVID-19 in nursing professionals of the hospital institutions in Lima

Level of work stress	Frequency	Percentage
Alarm phase	2	0.4%
Mild stress	70	13.6%
Moderate stress	133	25.8%
High stress	230	44.7%
Severe stress	80	15.5%
Total	515	100.0%

Table 4 shows the various phases of stress. It shows that 86% of the interviewees, that is, more than three quarters, have moderate, high, and severe stress. Also, only 14% are in the alarm phase and have mild stress.

4. Discussion

In Peru, COVID-19 is a significant problem due to the shortcomings and difficulties of infrastructure human and material resources in the health sector to provide care to society in emergency or pandemic situations. The study's general objective was to determine the relationship between fear of COVID-19 and work stress in nursing professionals in hospitals in Lima. The results show a positive relationship between the variables; this is expressed that the greater the fear of COVID-19, the greater the work stress in nursing professionals. The results match (Ortega Malla et al., 2021), who found that nursing professionals had a high level of fear, predominantly by gender, which reached 50% related to mortality. On the other hand, (Monterrosa-Castro et al., 2020) found that 37.1% presented symptoms of fear of COVID-19.

Also, some studies, such as (Olivia & Chavarry, 2021), maintain that it is necessary to reinforce care aimed at nursing professionals in the emotional field and carry out preventive actions to improve the work environment in times of COVID-19. In this way, (Cruz et al., 2021), states that fear is an emotional expression framed by uncertainty, lack of COVID-19 disease, fear of contagion, fear of direct contagion to their family and social environment, and inadequate working conditions, this creates situations of stress, anxiety, insecurity, and psycho-emotional exhaustion.

In the case of the study, it is evident that fear persists in nursing professionals as the disease evolves due to the insecurity of not having the human, material, and infrastructure resources to provide holistic care in suitable environments. Fear is associated with the limitations and deficiencies of health establishments due to the lack of budgets for hospital management. Likewise, the disease

still has an unexpected etiology and evolution, which means that health professionals aware of this reality still feel that the fight against this disease that is suffering worldwide has not yet ended. On the other hand, nursing professionals have been working continuously with this fear, but they are still struggling in search of overcoming this health crisis. In addition, nurses by vocation are trained with the theoretical support of Florence Nightingale, who like 200 years ago in the Crimean War, left the legacy of persistence and love for the life of the human being, an example of work replicated today to attest to the human greatness that nursing professionals can offer in their jobs, often leaving their family environment to follow the path of care as a science and art of a value that transcends time.

On the other hand, the work of nursing professionals requires continuous training of professional skills, which means that in daily professional practice, they need the support of preventive actions to deal with the emotional and spiritual aspects to deal with the unique, holistic care that faces the pain, suffering, and risks involved in direct work in patient and family care.

Regarding the level of work stress in nursing professionals in hospitals in Lima, it was found that mild work stress was 13.6%, followed by moderate work stress 25.8%, and high and severe work stress. 60.2%. These results can be compared with the study (Carrasco et al., 2020) found that the nursing professionals obtained a medium level. In addition, (Aldazabal, 2020) indicated that stress in nurses prevailed at a low level with 47.1%, followed by the medium at 42.2% and high at 10.8%. These results from 2020 to 2021 show statistical figures that are increasing vertiginously.

In this sense, stress is also associated with environmental, work, and personal stressors (Carrasco et al., 2020). These statements also coincide with what (Aldazabal, 2020) expressed, who indicated that nursing professionals in the hospital setting present stress caused by the physical, psychological, and social environment that leads to raising emotional problems. Although it is true, stress is a problem that has deteriorated the emotional health of health professionals, especially nurses, caused by situations of uncertainty and pain due to human losses during the fight against an illness. In addition, if the COVID-19 infection continues, it continues to evolve, persisting latent fear, generating stress, becoming risk indicators threatening the quality of life of occupational health.

5. Conclusions

Finally, it is essential to highlight the work of health professionals, specifically nursing professionals, who expose their lives during the pandemic by providing direct and indirect care to patients, supporting them in the presence of fear and loneliness that this disease causes. It should be noted that fear continuously induces increased stress, causing risks of presenting future health problems.

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