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# Psychosocial Factors Related to Job Satisfaction in Nursing Staff: A Systematic Review

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## **SUMMARY**

**Objective:** To identify the psychosocial factors that affect the job satisfaction of nursing staff during the Covid-19 pandemic.

**Methodology:** According to the search carried out in the database, 180 articles were found, of which 140 articles were excluded. Therefore, 16 articles were evaluated based on critical reading and the reading of the titles and abstracts of which the eligibility criteria were included were used as a start, followed by the use of the FLC 3.0 web platform, systematic reviews, with the use of the "Critical Appraisal Skills Programme" (CASPe) program, was used as a start.

**Results:** Job satisfaction in nursing staff is fundamental, since the quality of patient care depends on it, and also that the staff work properly during their workday. It is important to verify and guarantee adequate working conditions for nursing professionals, to minimize the effects that a pandemic can bring. In the same way, it will help the preparation of future scenarios in relation to a pandemic, and therefore increase job satisfaction.

**Conclusions:** It is recommended to identify psychosocial factors (anxiety, fear of contagion, burnout syndrome, stress, etc.) affecting nursing staff job satisfaction during the Covid-19 pandemic.

**Keywords:** Job Satisfaction; Pandemic; Covid-19, Nursing Staff; Psychosocial Factors; Situational Factors

**Abbreviations:** SL: Job Satisfaction; P: Pandemic; C19: Covid-19 (C19); PE: Nursing Staff; PF: Psychosocial Factors, SF: Situational Factors

# Introduction

The novel coronavirus disease (COVID-19) is the infection of the respiratory tract caused by variants of Sars-Cov2, was first reported on Tuesday, January 7, 2020, by the CDC of China (Center for Disease Control and Prevention), after on December 31, 2019 the municipal health commission of Wuhan City in Hubei province, reported 27 cases of a type of pneumonia of unknown etiology. On

30 January 2020, the Director-General of the WHO (World Health Organization) declared the situation a Public Health Emergency of International Concern [1-3]. The pandemic has put a lot of pressure on health systems and workers due to the proportion of infected patients who need quality health services, which increased the demand for it, in turn generating immense pressure on the

provision of frontline health personnel and, on the other hand, the availability of biomedical equipment and supply of supplies [3-5]. Nursing professionals are often subjected to psychosocial factors, understanding these as those conditions that occur in a work situation directly related to the organization of work, their social environment such as: work content, workload, work Emotional, motivation, role conflict and task completion, these risks have frequently been linked to health problems, workplace accidents, low job satisfaction, low job commitment, burnout and workload-related stress [6-8]. In relation to the above, studies conducted in 2020 in Peru showed that job satisfaction is related to the factors to which nurses are subjected.

Job satisfaction is defined as a state of pleasure ability and fulfillment experienced by nurses in their workplace, which increases self-confidence, communication and mental health. It is also related to salary allocation, institutional policies and personal characteristics [7-9]. Studies such as those carried out in Valencia Spain and in Zagazin Egypt, where 92 nurses and 420 study subjects were included respectively, analyzed the psychosocial risks of these professionals and the relationship between the perception of Covid-19. In which a direct relationship was found between work stress and satisfaction, the results refer that nurse in general report feeling high emotional work and work overload, thus highlighting

these two psychosocial risks above all others. This highly stressful work environment resulted in job dissatisfaction with a tendency to leave work in the future. For all the above, we can contribute to the development of intervention programs that help guarantee the health and psychological well-being of nurses, especially in situations with this complexity and transcendence as a health crisis of the magnitude of a pandemic that we are currently experiencing due to Covid-19 [4,9-12]. Through the literature review, the following study objective was proposed, which is to identify the psychosocial factors that affect the job satisfaction of nursing staff during the Covid-19 pandemic.

# **Materials and Methods**

Systematic review from the qualitative paradigm, supported by the PRISMA guideline [13]. Systematic articles of meta-analysis were considered for the search, and it was also carried out with the search strategy, in relation to the question formulated type IOP. For the process of analysis and preparation of the search, a table was made with terms in natural language according to each of the elements of the structured question, these were translated into an indexed and controlled vocabulary through the Descriptor in Health Sciences (DeCS) [14], the Medical Subject (MeSH) [15] as well as free terms, to have a controlled language for effective search. These terms were raised in English, Spanish and Portuguese. (Table 1).

**Table 1:** Terms translated into indexed language.

ELEMENTS	ENGLISH	SPANISH	PORTUGUESE
P Patient or Problem Nurses during the Covid-19 pandemic	Nursing Staff*	Personal de Enfermería***	Recursos Humanos de Enfermagem*
I Intervention Psychosocial factors Factor* Health Situation*		Factores situacionales*** Situación de Salud*	Fatores* Situação de Saúde*
R Result Job satisfaction Job Satisfaction*		Satisfacción en el Trabajo*	Satisfação no Emprego*

Note: Source: Own elaboration through the consultations of \*DeCS; \*\*Mesh; Free term.

The inclusion criteria were considered, which were considered articles with primary level design: observational, case-control trials, as well as analytical; with secondary design: systematic reviews of meta-analyses, analytical narratives, among others. Similarly, articles published with an age of no more than 5 years, without language limits, containing terms according to the structured question, where the population studied is focused on adult patients with confirmed diagnosis with Covid-19, that the objective focuses on the beneficial and mentions the nursing staff who attended patients with Covid-19 on the front line. As exclusion criteria, they considered those articles that presented little validity, based on expert opinions, based on studies with neonates, paediatrics, and animals, to which the full text was not accessible and those that were duplicated. To continue with the search strategy, Boolean operators AND and OR, positional operators SAME and WITH, were used, using a combination with the translated terms. In relation

to the documents found, it was not limited to the language within the search, retrieval of articles and publications. Subsequently, the selection of the articles was made by reading titles and abstracts that adhered to the search and the application of eligibility and exclusion criteria.

## Search Strategy

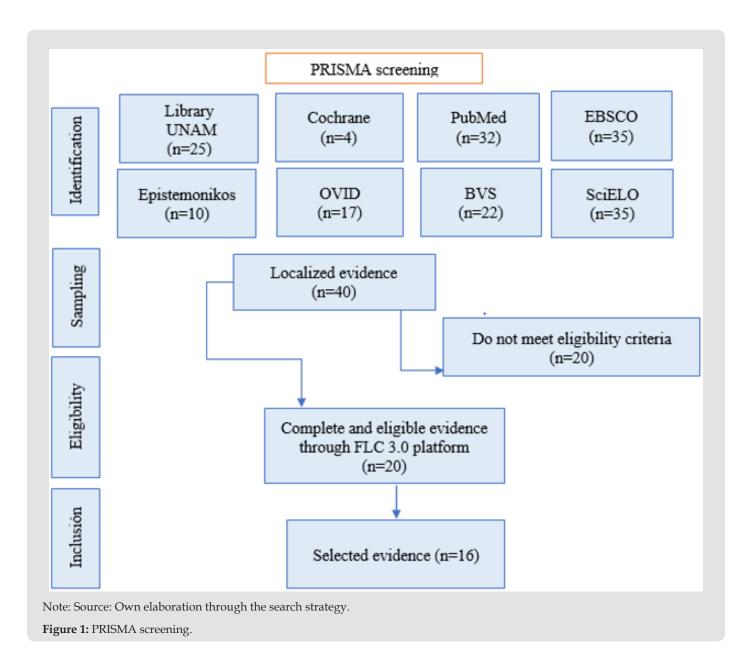
A query of the information in databases was analyzed in the period from August 25, 2022 to October 28, 2022, 25 articles of interest were found through the databases: Cochrane, Epistemonikos, Tripdatabase, EBSCO and Ovid; virtual libraries: UNAM Digital Library, Virtual Health Library (VHL), National Library of Medicine of the United States (PubMed); electronic journals: Scielo, Medigraphic, Elsevier. Having the documents, a reverse search was carried out in these articles whose reading was of great support to the question posed. For this, the bibliographies

of the retrieved articles were used, it was considered that they are mentioned in several articles previously and that they have had an adequate acceptance by the authors. These articles were selected through critical reading to determine the level of evidence and degree of recommendation. This discarded those that did not focus on nursing staff satisfaction in the relationship of care for Covid-19 patients during the pandemic. To synthesize the evidence found, the Centre for Evidence-Based Medicine, Oxford (OCEBM) scale was used to evaluate and establish the degrees of recommendation according to the level of evidence.

#### Results

Based on the search performed, we found 180 articles of which 140 articles were excluded. Therefore, 40 articles were evaluated

based on critical reading and were used as a start, the reading of the titles and abstracts of which the eligibility criteria were included then to evaluate the quality of the evidence, in the same way the use of the FLC 3.0 web platform was considered. Finally, we included 16 (100%) articles with quality, whose designs were systematic review 2 (20%) and cross-sectional studies were 14 (80%) (Figure 1). The remaining 20 were eliminated for not meeting quality criteria. The analysis of the evidence of the studies found and selected, prior to a critical reading, exposes the level and degree of recommendation through the scales according to the National Health and Medical Research Council, Sackett Classification of Evidence and the Centre for Evidence-Based Medicine, Oxford (OCEBM), which can identify that the evidence found is feasible for use by the scientific method (Table 2) [16-24].



**Table 2:** Synthesis and interpretation of evidence, year. (n=16).

Scale: OCEBM				
Evidence/year	Design	Level	Degree	Conclusion
1. Psychosocial Risks, Work Engagement, and Job Satisfaction of Nurses During COVID-19 Pandemic [6].	Cross-sectional observational and descriptive	IV NHMRC.	С	The main results of the study show that nurses in general feel that they have to do a lot of emotional work and that they have a heavy workload, highlighting these two psychosocial risks above all others. The data suggest that job satisfaction is inversely related to these psychosocial risks (role conflict and interpersonal conflict) and to psychosomatic problems. In the variables of psychosocial risks, job satisfaction is negatively correlated with the conflict of roles (r = -0.547; page <0.01) and psychosomatic problems (r = -0.380; pags <0.01).
2. Nurses' occupational satisfaction during Covid-19 pandemic [12].	Cross-sectional observational and descriptive	IV NHMRC.	С	Nurses who cared for patients who tested positive for Covid-19 had significantly lower job satisfaction than others (β = -0.48, pags = .009). Most of the sample reported a lack of personal protective equipment (PPE). Nurses who experienced a lack of PPE reported lower job satisfaction than those who did not (3.4 vs. 3.8, pags=.039).
3.Work stressors and satisfaction in Peruvian nurses during the COVID-19 pandemic [7].	Cross-sectional observational and descriptive	IV NHMRC.	C	The inferential analysis performed on the components of occupational stressors allowed to establish a direct and significant relationship between the environmental factor (p<0.01) and personnel (p<0.05) with job satisfaction. The average level of stress observed in environmental, work and personal factors would be directly related to the temporality of the study, carried out between the months of August and September 2020, date on which the nursing staff adapted to the stressful situations that arose since the beginning of the COVID-19 pandemic, related to poor communication between colleagues, as well as work overload.

4. Effect of Emotional Intelligence and Psychosocial Risks on Burnout, Job Satisfaction, and Nurses' Health during the COVID-19 Pandemic [4].	Cross-sectional observational and descriptive	IV NHMRC.	С	The data from this research point to a protective effect of emotional intelligence against the adverse effects of psychosocial risks such as burnout, psychosomatic complaints, and a favorable effect on job satisfaction.
5. Factors Affecting Job Satisfaction of Nurses during the Covid-19 Pandemic at Kwaingga Regional General Hospital, Keerom Regency [16]	Cross-sectional observational and descriptive	IV NHMRC.	С	The results show that the factors that influenced nurses' job satisfaction during the Covid-19 pandemic at Kwaingga Hospital were work motivation (p-value = 0.003 <0.05; PR = 33.00 (95% CI: 3,919 - 277,887)), the higher the level of work motivation of nurses, the higher the level of job satisfaction.
6.Resilience, Occupational Stress, Job Satisfaction, and Intention to Leave the Organization among Nurses and Midwives during the COVID-19 Pandemic [17].	Cross-sectional observational and descriptive	IV NHMRC.	С	The current study showed that nearly 25% of the sample reported high turnover intent, and a similar proportion reported low job satisfaction. Resilience was related to nurses' job satisfaction. Resilience ( $\beta$ = 0.17) and number of workplaces ( $\beta$ = 0.11) were positively related to job satisfaction, indicating that the greater the resilience, the greater job satisfaction.
7. Occupational stress, job satisfaction, and intent to leave: nurses working on front lines during COVID-19 pandemic in Zagazig City, Egypt Randa M. Said1 & Dalia A. El-Shafei2 [18].	Cross-sectional observational and descriptive	IV NHMRC.	С	More than half of the nurses (51.0%) at Zagazig Fever Hospital (ZFH) reported a low level of satisfaction. The type of hospital and its related workload were the most significant predictors of all outcomes.
8. Relationships Between Job Satisfaction of Operating Room Nurses and Hospital's Compliance with Protective Guidelines During the Covid-19 Pandemic: A Cross-Sectional Study, Iran Armin Fereidouni [19].	Cross-sectional observational and descriptive	IV NHMRC.	С	Optimizing infrastructure, improving management decisions, and increasing human resources in a crisis can affect the quality of performance and job satisfaction of operating room nurses. The researchers suggest that health system managers can contribute to the safety and efficiency of existing human resources by taking steps to increase job satisfaction.
9. Mental health in health professionals in the face of Covid-19: a systematic review [20].	Systematic review	III NHMRC.	В	Stress, anxiety, and sleep problems can lead to an increase in psychosocial factors. Doctors and nurses were the most researched health professionals. This fact is justified by the role of these professionals in the first line of care for patients with COVID-19.

10. Impact of COVID-19 on nurses [21].	Systematic review and meta-analysis (OR 0.94; CI 95%; 0.33-2.67).	III NHMRC.	В	Study participants frequently reported mental impacts such as anxiety, depression, discouragement, and a feeling of obligation to work. Meta-analyses included psychological distress variables, and no association was found between psychological distress and being a first-line health professional (OR 0.94; 95% CI 0.33-2.67). The mental health of nurses has been negatively affected by the Covid-19 pandemic.
11. Job satisfaction and its relationship with burnout among nurses working in COVID-19 wards: a correlational descriptive study [22].	Cross-sectional study	III NHMRC.	В	Most nurses working in COVID-19 wards had a sick leave job satisfaction and high burnout.
12. Difficulties and fears of nurses facing the COVID-19 pandemic in Brazil [10].	Exploratory and qualitative study.	IV NHMRC.	С	The overload of work, high due to the pandemic, is already affecting the mental health of these professionals. In addition, they fear the accelerated advance of COVID-19 in Brazil, due to the absence of standardized treatment.
13. Concern about the spread of COVID-19 and workload as predictors of anxiety in Peruvian nurses [23].	Cross-sectional cohort	IV NHMRC.	С	Concern about the spread of COVID-19 and workload predict anxiety in Peruvian nurses. This research confirms the need for good working conditions, adequate hours, individual protection among other resources, with the consequent psychological support for nurses who are on the front line of the response to COVID-19.
14. Telemedicine During COVID-19 Response: A Welcome Shift for Younger Female Healthcare Workers [24].	Exploratory study	IV NHMRC.	С	Employees at this medical center that had the ability to work from home during the COVID-19 pandemic, particularly younger women, reported fewer stress, less exhaustion, and more satisfaction, maintaining work efficiency and team cohesion.
15. Levels of stress, anxiety, and depression in the initial phase of the COVID-19 outbreak in a population sample from northern Spain [9].	Transverse exploratory- descriptive study	IV NHMRC.	С	Notably, young people showed higher levels of stress than older individuals in this sample. The situation of unprecedented confinement of the Spanish population, it is very important to treat the psychological factors. It is key to analyze the effects produced by the COVID-19 crisis on people's mental health.

16. Nursing, pandemic, and compassion fatigue: a general reflection on 2020 [11].	Qualitative reflection	III NHMRC.	В	It is a priority to evaluate and guarantee optimal working conditions for nursing professionals, not only to mitigate the effects of the current contingency, but also in preparation for future scenarios for which they are not yet prepared. Diagnosing and intervening in alterations such as compassion fatigue is necessary in order to improve quality of life
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#### Discussion

Different studies have shown that the COVID-19 pandemic has been an extremely stressful health care crisis for nurses, for this reason, it is important to identify the factors that can explain the positive and negative causal effects that may arise from this situation and promote or alleviate these effects, however, this practice is limited due to the research deficiency and the low number of populations studied. According to the evidence found, psychosocial factors such as role conflict, poor communication, work overload and motivation affect the job satisfaction of nursing staff during the Covid-19 pandemic. Espinoza-Guerra and [25] others in a sample of 100 workers (30% men and 70% women), present a significant negative correlation between the components of psychosocial risk and job satisfaction in their respective dimensions, that is, the higher the level of psychosocial risk perceived at work, the lower the level of job satisfaction. This also coincides with a study conducted in Slovenia that compared the pre-pandemic period with the pandemic period also showed a decrease in job satisfaction in a sample of health professionals, along with a significant experience of individual occupational burnout symptoms in 2020. Occupational burnout is known to be a reaction to long-term emotional and interpersonal stressors in the workplace [26].

Similarly, in the evidence found, resilience was identified as a benefit, emotional intelligence as a protective factor Other previous evidence indicates a positive relationship between resilience and job satisfaction among nurses was previously reported in the literature [27]. This is understandable, as resilience allows you to maintain efficient operation and cope with difficulties. It also allows us to achieve development goals and is related to mental health and well-being. Resilient people perceive stressful situations as challenging and treat failures as normal outcomes. The evidence also indicates that when nurses are not satisfied in their workplace, the level of stress they experience is variable and can negatively affect job performance and its direct impact on the patient. In this way, stress risk management would represent a strategy that would solve problems that arise in the workplace, which are intended to

contribute to the health of the worker. For the above, taking into account some experiences that are carried out in other countries, it is necessary that programs in emotional management and risk perception can be implemented.

# Conclusion

Once the topic was finished, it has been possible to conclude the importance of identifying the psychosocial factors that affect the job satisfaction of nursing staff during the Covid-19 pandemic. The evidence demonstrates the multiple factors or conditions directly that each of them presented in the pandemic, in which the main ones that became known as psychosocial factors were anxiety, fear of contagion, burnout syndrome, stress, among others. It is important to address job satisfaction in nursing staff, as the quality of patient care will depend on it, and that staff work properly during their workday. Also, it is relevant to verify and guarantee adequate working conditions for nursing staff, to minimize the effects that a pandemic can bring, therefore, it will help the preparation of future scenarios in relation to a pandemic. Therefore, the following recommendations are presented:

- 1) Develop strategies to increase job satisfaction for nurses on the front lines of a future pandemic.
- 2) Timely detect staff who are presenting psychosocial or emotional factors when having contact with patients with an illness and have started as a pandemic.
- 3) Have a specific rest area at the time of the change of work environment for staff who are on the front line with Covid-19 patients in pandemic.
- 4) Implement work motivation sessions, talks or stress management to reduce psychosocial problems that may arise.
- 5) Apply job satisfaction instruments to each of the nurses to determine what psychosocial factors they are presenting, to improve their mood, emotions, feelings that could develop in a future pandemic.

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