

## WORKING CONDITIONS AND PSYCHOLOGICAL WELL-BEING IN HEALTHCARE WORKERS OF THE CESAR DEPARTMENT

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### Abstract

Healthcare professionals play a fundamental role in caring for people's health, dedicating themselves to disease prevention and promoting healthy lifestyles to maintain and improve physical and mental well-being in society. This study aims to establish a model of how the working conditions of healthcare workers in the Cesar department can predict psychological well-being. A cross-sectional predictive research design was used with a non-probabilistic sample of 216 healthcare professionals providing services in different municipalities of the Cesar department. Data collection involved the use of a form characterizing working conditions and Ryff's Psychological Well-Being Scales. Among the main findings, it was observed that seniority in the organization predicts lower psychological well-being, while not receiving personal supplies predicts higher psychological well-being. Additionally, not being affiliated with occupational risks predicts lower psychological well-being, and not having a second job predicts lower psychological well-being. It is concluded that it is important to consider these variables in the promotion of psychological well-being in the workplace.

**Keywords:** healthcare professionals, psychological well-being, working conditions.

### INTRODUCTION

The health of a society is the fundamental pillar that supports its development and well-being. In this context, healthcare professionals play a crucial role by being at the forefront of population care and attention (Mesa Vieira et al., 2020). However, it is essential to recognize that the work of these workers does not occur in a vacuum but is intrinsically linked to the working conditions they face on a daily basis (Boluarte Carbajal et al., 2020).

The Department of Cesar, located in the northern region of Colombia, represents a significant microcosm in the context of healthcare delivery. In this geographic area, healthcare professionals play a crucial



role in medical care and preventive measures, facing a series of specific challenges that can impact their psychological well-being and, consequently, the quality of care they provide (Almarales y Yaguna, 2019).


Working conditions, understood as the set of environmental, social, and organizational factors surrounding the work environment, play a critical role in the health and well-being of workers (Luengo-Martínez et al., 2020). Aspects such as workload, institutional support, workplace safety, and professional development opportunities are crucial elements that directly influence the work experience and, consequently, the mental and emotional health of healthcare workers (Kaburi et al., 2019; Bostan et al., 2020).

The meta-analysis conducted by Caicedo-Fandiño, (2019) regarding working conditions and quality of life of healthcare workers in Latin America highlighted concerning issues such as contractual and precarious labor conditions, salary dissatisfaction, limited availability of resources and tools, as well as excessive workload. It also emphasized the lack of a sufficiently deep approach in health quality assurance systems; in Colombia's unique healthcare system, this issue is mainly addressed through the establishment of minimum requirements in terms of competencies and occupational safety. It is assumed that employees of the institutions must meet these minimums, leaving working conditions as a criterion of the healthcare institutions themselves.

Another aspect of working conditions that is closely examined concerning employee satisfaction and well-being in healthcare is remuneration corresponding to hours worked. Studies have shown that an increase in working hours leads to a deterioration in the mood of workers, as it also requires time for personal or family activities. However, in some cases, working more than 8 hours is associated with lower dissatisfaction compared to those employees who worked between 4 and 8 hours. This could be explained by the relationship with salary compensation, as working more hours provides a greater opportunity to increase income (Romero-Polo, et al., 2021).

The type of contract, turnover, years of work in the same institution, or maintaining two jobs simultaneously are other working conditions studied in relation to employee satisfaction and well-being in healthcare. The study conducted by Ferraz-Mesa (2020) with surgical instrument technicians in Murcia, Spain, established that fixed contracts are generally minimally prominent in percentages compared to temporary contracts and other types of contracts that do not guarantee job stability, putting employee satisfaction at risk. Regarding turnover, the study supports the presence of an effect where performance takes causal priority over overall satisfaction, and this, in turn, influences organizational effectiveness indicators such as organizational commitment and turnover. Although there are theoretical bases to consider that seniority and pressure to produce could act as mediators, the results of the analysis do not corroborate these effects.

Regarding years of seniority in the workplace, this is explained by the institution's need to retain qualified and experienced staff as support. It is also observed that a minority of these employees have a second job, and this is more related to economic interest. This study concludes that sociodemographic and work conditions influence work quality and that psychological well-being, evaluated in terms of dimensions such as "somatic symptoms," "anguish and insomnia," "social dysfunction," and "severe



depression," approaches an optimal level of Psychological Well-Being for these professionals (Ferraz Mesa, 2020).

Psychological well-being encompasses a wide range of dimensions that go beyond the absence of mental disorders, including aspects such as job satisfaction, sense of purpose, resilience, and quality of life at work (Trudel-Fitzgerald et al., 2019). Understanding the relationship between working conditions and psychological well-being in healthcare professionals is not only relevant for improving their quality of life but also for optimizing the care provided to the community (Garcia-Torres et al., 2021).


Various studies have been conducted regarding the psychological well-being of healthcare professionals. For instance, Yáñez-Ramos y Moreta-Herrera (2020) in their study with clinic and hospital workers in Ecuador highlighted notable dimensions such as life satisfaction, positive and negative affect, and psychological well-being in these professionals. However, there are disparities in the Negative Affect factor, with higher intensity observed among nursing staff compared to doctors. They also concluded that psychological well-being is a predictor of job well-being.

For Veliz Burgos, et al., (2018), well-being is characterized by experiencing satisfaction and fulfillment in life, supported by a state of health that encompasses the emotional, physical, and psychological aspects. This implies being satisfied with one's life while predominantly experiencing positive emotions, such as happiness, and enjoying both mental and physical health. In this sense, psychological well-being stands as a significant indicator of mental health, and its assessment holds crucial practical utility for diagnosing and preventing potential problems in this area.

Therefore, through Ryff's Psychological Well-Being Scale, a group of nurses in the Lagos region of Chile was evaluated, observing that, although most dimensions show a high level, areas of positive relationships and autonomy reflected a higher percentage in the low level. These findings suggest that the perception of well-being is influenced by individual characteristics, where individual performance translates into satisfaction and success, while communication interactions, teamwork, and the balance between dependence and autonomy are perceived with greater difficulty. One out of every five nursing professionals presents a low overall level of psychological well-being.

At this point, we also analyze research that aims to establish the relationship between variables such as working conditions and levels of psychological well-being in healthcare professionals. For example, Córdoba (2019) presents findings in his study demonstrating that deficient working conditions, which do not reach an optimal level, can have a negative impact on psychological well-being at work. These conditions encompass physical, contractual, labor, and personal development aspects of individuals. This suggests that when the work environment offers favorable conditions, there is a positive association with workers, who experience higher expectations and positive emotions, as well as a decrease in fatigue and alienation. As with the socio-labor climate, it is essential to gather information to determine whether this relationship is maintained only in terms of covariation or if working conditions act as facilitators of psychological well-being in the workplace.

Luengo-Martínez et al., (2020) argue that the working conditions of healthcare professionals in public hospitals are marked by considerable emotional and workloads. The work environment is characterized



by the need to perform multiple tasks simultaneously, the limited appraisal of performance, as well as the lack of support and deficit of respect from supervisors (Castro Méndez, 2018). Almarales and Yaguna (2019) indicate in their study that factors such as salary compensation, the limited appreciation of the professional role, and the perception of monotonous tasks contribute to generating job dissatisfaction and increase vulnerability to psychological risks in healthcare professionals.

It is also necessary to review the research by McGowan et al., (2013), in which it was found that unrealistic working conditions, characterized by staff shortages, long working hours, and irregular breaks, contributed to a feeling of disillusionment and underestimation among healthcare professionals.

Additionally, in the course of referenced studies, techniques and strategies applied in the organizational context to promote psychological well-being among healthcare personnel are established. From the professional training of doctors, the importance of continuously integrating activities promoting psychological well-being in students' curriculum was emphasized. This approach focuses on recognizing the capabilities and achievements of students, contributing to a more rewarding training experience and, subsequently, a more satisfying professional life (Delgado Domínguez, et al., 2020).


One of the most widely used techniques for promoting psychological well-being among healthcare staff is mindfulness. The meta-analysis conducted by (Lévano de la Cruz & Obando, 2020) demonstrated that in all reviewed evidence, this third-generation cognitive technique was effective in reducing stress levels and achieving improvements in physical health conditions and psychological well-being of workers.

In addition to mindfulness, evidence of interventions such as dialectical behavioral therapy to compassion cultivation training is reported. This includes administrative training, acceptance and commitment therapy, promotion of a healthy diet, yoga practices, use of the tree of life, establishment of committees for the reconciliation of personal and work life, nutritional counseling, incorporation of physical exercise, encouragement of positive words, application of cognitive behavioral therapy, participation in dance sessions, performance of self-awareness exercises, use of written narratives, application of appreciative inquiry, discussions on common sources of meaning, and stress management in clinical practice. This includes the development of mind-body skills and the use of visualizations (Sánchez Zambrano, et al., 2021).

All of these interventions actively involved healthcare personnel, including doctors, nurses, support staff, and administrative personnel. Taking into account these antecedents, the main objective of the present study is to investigate the influence of working conditions on the psychological well-being of healthcare workers in the Department of Cesar.

## 1. METHOD AND MATERIALS

For the execution of this research, a non-experimental quantitative study with a cross-sectional and predictive scope was conducted. Predictive research between working conditions and psychological well-being is important for understanding the relationship between these two aspects and promoting healthy work environments.



Descriptive scope was used to assess the specific variables by determining their frequency. Additionally, a correlational analysis was performed between psychological well-being and working conditions. While it is true that it does not establish direct causal relationships, it provides information that allows for the identification of patterns and trends that can be useful in understanding the phenomenon.

### **Participants**

The population of this study consisted of healthcare workers working in the department of Cesar in public and private healthcare institutions. The sample was selected through non-probabilistic convenience sampling using a snowballing technique. A total of 219 workers participated, ranging in age from 22 to 63 years, with an average age of 38.7 years and a standard deviation of 9.3 years.

### **Instruments**


To gather information, a questionnaire about working conditions was used to investigate personal and occupational data of healthcare professionals. In relation to the variable of psychological well-being, the Ryff scale proposed by Dierendonck (2004) was used, which consists of six scales and 39 items. Participants responded to these items using a 6-point scale ranging from "totally disagree" to "totally agree."

### **Procedure**

To execute the project, the first step was to review previous research related to the proposed topic. Following this, an assessment of instruments for measuring psychological well-being was conducted, and then the survey on working conditions was constructed and validated through expert judgment (3 judges). Once the instruments were selected, digitization was carried out, giving significant importance to informed consent. After this, healthcare workers were contacted, and instructions for the snowballing technique were provided to healthcare workers in the department of Cesar. Once the information was collected, a purification process was carried out to include only the sample that met the requirements. Subsequently, data analysis was performed, starting with descriptive results, followed by correlational analyses, and finally, the design of the predictive model. The report was then consolidated, highlighting the main findings and conclusions.

### **Data Analysis**

For the description of socio-labor variables and the dependent variable, a descriptive analysis of relative frequencies was conducted. Likewise, an association analysis was performed using the chi-squared test between psychological well-being and dichotomous and nominal variables, which allows for verifying the association between two categorical variables in cross-tabulation tables based on the difference between observed and expected frequencies (Agresti, 2018). Similarly, for the relationship between the level of psychological well-being and ordinal predictor variables, Kendall's Tau B or coefficient of concordance was used, which allows for evaluating the classification relationship in non-parametric ordered data and ordinal variables (Akoglu, 2018). Finally, to determine which socio-labor variables predicted psychological well-being, an ordinal regression analysis was used. This is a statistical technique used to analyze the relationship between an ordinal dependent variable (a variable with ordered



categories, but not necessarily equidistant) and one or more independent (predictor) variables that can be both categorical and numerical (Arkes, 2019).

### **Ethical Considerations**

For the execution of this project, what is stipulated in Resolution 8430 of 1993 issued by the Ministry of Health in Colombia was taken into account to guarantee compliance with scientific and technical standards for health research. In addition to this, informed consents were obtained, and confidentiality of information was ensured, in compliance with the guidelines established to safeguard the execution of the study and the rights of the participants.

## **2. Results**

Table 1 displays the descriptive results regarding the socio-labor variables included in the study, as well as their association or correlation with the level of psychological well-being of the included workers. The female gender predominates, with nearly half of the workers falling within the 28 to 40 age range. Almost half of the participants are single, and nearly half of them live with a partner, either in a common-law union or through marriage. In terms of educational level, completed technical and university degrees are predominant. The most frequent professions were nursing assistant, nurse, and therapist.

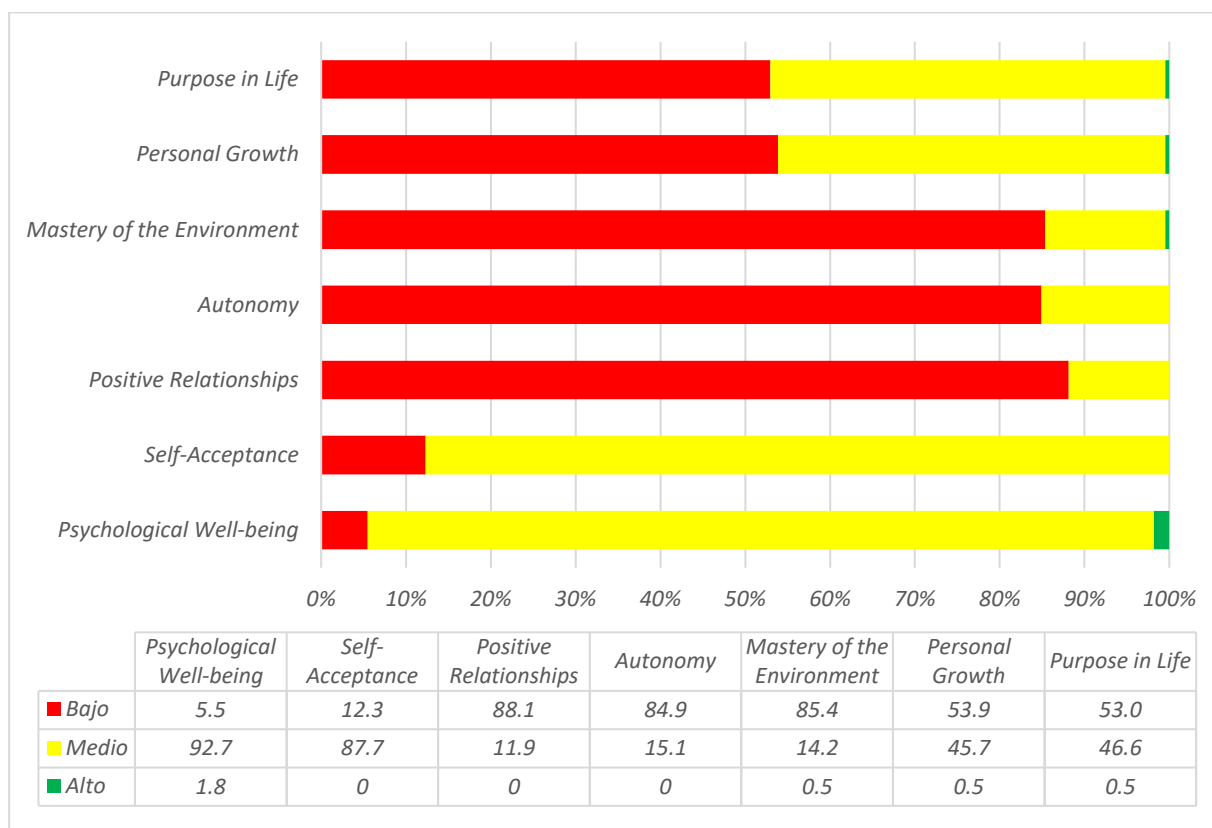
Slightly more than half of the participants earn between 1 and 1.5 times the minimum wage, and 51.6% of participants are not satisfied with their salary. Permanent employment or direct labor contracts are prevalent in half of the participants. Regarding tenure in the position and organization, just over a quarter of the participants have been in their roles for less than a year, although one-fifth of them have been in their roles for over 9 or 10 years. The distribution of participants across different areas or services where they work was more evenly spread; thus, the highest percentage barely exceeds 10%, corresponding to the emergency service. As for shifts, almost half of the participants have a rotating schedule between day and night shifts, and one-third work only during the day. Two-thirds of the participants do not receive uniforms, and three-fifths do not receive personal protective equipment (PPE). The vast majority of workers are enrolled in health and pension funds; however, a third of them are not enrolled in occupational hazard insurance. Just over half of the participants receive transportation subsidies. One-third of the sample works overtime, and one-fifth of the sample has a second job.

Figure 1 depicts the percentage distribution of participants according to their psychological well-being. In the overall assessment, it is evident that the vast majority (92.7%) of participants have a moderate level of psychological well-being, 5.5% have a low or deficient level, and 1.8% have a high level. However, when examining the dimensions, several of them show problematic levels of psychological well-being. In this way, over 85% have a low level of well-being in terms of environmental mastery, autonomy, and positive relations. Similarly, slightly more than half of the participants have a low level in terms of purpose in life and personal growth.



Figure 1

Level of Psychological Well-being and Its Dimensions



Note. n=219.

On the other hand, as observed in Table 1, it is evident that there were no significant correlations or associations between occupational well-being and any of the socio-labor variables or working conditions.

Table 1

Descriptive Results of Socio-Labor Variables and Association with Psychological Well-being

Variable	Frequencies	X <sup>2</sup> /Tau B (value p)
<b>Gender</b>	F=79.5% M=20.5%	1.18 (.554)
<b>Age</b>	Up to 27 years=29.7% 28 to 40 years=49.8% 41 to 50 years=24.2% More than 50 years=9.6%	.026 (.684)
<b>Marital Status</b>	Married=16.9% Divorced=1.4% Separated=5.5% Single=46.1% Common-law marriage=28.8% Widowed=1.4%	2.09 (.996)
<b>Education Level</b>	Incomplete technical degree=1.4% Complete technical degree=39.7% Incomplete technology degree=0.5% Complete technology degree=5%	-.073 (.241)

	Incomplete university degree=1.4%	
	Complete university degree=31.5%	
	Incomplete postgraduate degree=3.2%	
	Complete postgraduate degree=17.4%	
<b>Profession</b>	Support areas=4.6%	22.1
	Nursing assistant=30.1%	(.139)
	Nurse=16.9%	
	Billing=1.4%	
	Pharmacy=7.8%	
	Specialist doctor=5%	
	General doctor=6.4%	
	Therapist=12.3%	
	Other=15.5%	
<b>Salary</b>	Less than 1 minimum wage=1.8%	-.003
	1 to 1.5 minimum wages=54.3%	(.241)
	1.5 to 2 minimum wages=13.2%	
	2 to 4 minimum wages=23.3%	
	More than 4 minimum wages=7.3%	
<b>Type of Contract/Vinculation</b>	Don't know=1.8%	6.98
	Other=8.7%	(.858)
	Worker cooperative=7.3%	
	Temporary services company=11.4%	
	Permanent or direct hire=50.2%	
	Contractor=11.9%	
	Self-employed=8.7%	
<b>Years in Position</b>	One year or less = 29.7%	-.022
	2 to 3 years = 23.3%	(.723)
	4 to 8 years = 25.6%	
	9 or more years = 21.5%	
<b>Years in the Organization</b>	One year or less = 26.9%	-.071
	2 to 4 years = 32%	(.251)
	5 to 9 years = 17.8%	
	10 years or more = 23.3%	
<b>Service/Area</b>	Administrative and user support = 6.8%	39.7
	Ambulance/transport = 8.7%	(.229)
	Surgery = 4.6%	
	External consultation = 7.3%	
	Coordination = 0.9%	
	Hemodialysis and hemodynamics = 0.5%	
	Home care/internal assistance = 1.8%	
	Hospitalization = 16%	
	Others = 10.5%	
	Pediatrics = 1.4%	
	Psychosocial/psychology = 6.8%	
	Public health = 1.8%	
	Pharmaceutical service = 5.9%	
	Diagnostic services and laboratory = 3.2%	
	Therapies and rehabilitation = 7.3%	
	ICU (Intensive Care Unit) = 6.8%	
	Emergencies = 13.7%	
	Vaccination/immunization = 2.7%	
<b>Shift</b>	Daytime (morning and afternoon) = 37.4%	6.23
	Morning = 7.3%	(.795)
	Night = 0.5%	
	Daytime rotation = 6.4%	
	Daytime and nighttime rotation = 46.1%	
<b>Receives Supplies</b>	Yes = 36.1%	2.33
	No = 63.9%	(.311)
<b>Receives Personal Protective Equipment (PPE)</b>	Yes = 18.7%	.44
	No= 81.3%	(.800)





<b>Is Affiliated with Health Care</b>	Yes = 97.3% No= 2.7%	.48 (.784)
<b>Is Affiliated with Pensions</b>	Yes = 96.8% No= 3.2%	.57 (.752)
<b>Is Affiliated with Occupational Hazards</b>	Yes = 64.4% No= 35.6%	.39 (.823)
<b>Receives Transportation Subsidy</b>	Yes = 55.3% No= 44.7%	.76 (.682)
<b>Works Extra Hours</b>	Yes = 36.5% No= 63.5%	3.22 (.198)
<b>Is Satisfied with Salary</b>	Yes = 48.4% No= 51.6%	2.94 (.229)
<b>Has Another Job</b>	Yes = 18.3% No= 81.7%	.14 (.931)

Note: X2 was used when the socio-labor variable was dichotomous or nominal. Kendall's Tau B was used when the socio-labor variable was ordinal.

In Table 2, the results of the ordinal regression analysis are presented. While the Pearson goodness-of-fit value is not adequate, as  $p < .001$ , the Deviance and X2 values indicate that there is a good fit of the model to the data. Furthermore, the Nagelkerke R-squared value indicates that the model explains 55.65% of the data variability. Upon reviewing each variable included in the model, only 4 variables were found to be significant predictors.

Seniority in the organization predicts lower psychological well-being ( $\beta = -1.33$ ,  $p < .05$ ), not receiving personal equipment predicts higher psychological well-being ( $\beta = 3.08$ ,  $p < .05$ ), not being affiliated with occupational risks predicts lower psychological well-being ( $\beta = -2.05$ ,  $p < .05$ ), and not having a second job predicts lower psychological well-being ( $\beta = -2.78$ ,  $p < .05$ ). On the other hand, not receiving PPE and not working additional hours were close to being significant negative predictors with p-values of .065 and .075.

Table 2

Results of the ordinal regression model with predictor variables of psychological well-being.

		Estimation	Desv. Error	Wald	p	IC 95% Lower Limit	Upper Limit
Umbral	[PsychologicalWellBeingLevel = 1.00]	-10.692	15.214	.494	0.482	-40.511	19.127
	[PsychologicalWellBeingLevel = 2.00]	2.952	15.100	.038	0.845	-26.643	32.547
	Educational Level	-0.393	0.377	1.089	0.297	-1.132	0.345
	Hours in the Workday	-0.073	0.166	.191	0.662	-0.398	0.253
	Age	0.783	0.656	1.426	0.232	-0.502	2.069
	Seniority in the Organization	-1.334	0.682	3.825	0.050	-2.672	0.003
	Seniority in the Position	0.921	0.711	1.680	0.195	-0.472	2.314
	Monthly Salary	0.123	0.782	.025	0.875	-1.409	1.656
	[Provision=No]	3.085	1.246	6.132	0.013	0.643	5.527
	[Provision=Yes]	0 <sup>a</sup>					
	[PPE=No]	-2.651	1.425	3.463	0.063	-5.444	0.141
	[PPE=Yes]	0 <sup>a</sup>					
	[Health Affiliation=No]	0.586	3.756	.024	0.876	-6.776	7.948
	[Health Affiliation=Yes]	0 <sup>a</sup>					
[Pension Affiliation=No]	1.897	3.974	.228	0.633	-5.892	9.686	



	Estimation	Desv. Error	Wald	p	IC 95%	
					Lower Limit	Upper Limit
[Pension Affiliation=Yes]	0 <sup>a</sup>					
[Occupational Risks Affiliation=No]	-2.053	0.998	4.229	0.040	-4.010	-0.096
[Affiliated to Occupational Risks=Yes]	0 <sup>a</sup>					
[Transportation Allowance=No]	-1.462	1.355	1.165	0.281	-4.117	1.193
[Transportation Allowance=Yes]	0 <sup>a</sup>					
[Additional Hours=No]	-2.092	1.174	3.173	0.075	-4.393	0.210
[Additional Hours=Yes]	0 <sup>a</sup>					
[Satisfied with Salary=No]	0.375	1.063	.124	0.724	-1.709	2.460
[Satisfied with Salary=Yes]	0 <sup>a</sup>					
[Second Job=No]	-2.788	1.467	3.610	0.047	-5.664	-0.088
[Second Job=Yes]	0 <sup>a</sup>					
[Gender=Female]	1.351	1.509	.802	0.370	-1.606	4.309
[Gender=Male]	0 <sup>a</sup>					
[Marital Status=Married]	0.260	12.077	.000	0.983	-23.410	23.931
[Marital Status=Divorced]	3.217	14.315	.051	0.822	-24.840	31.274
[Marital Status=Separated]	-1.063	12.162	.008	0.930	-24.899	22.773
[Marital Status=Single]	-1.137	12.029	.009	0.925	-24.714	22.439
[Marital Status=Cohabiting]	-0.186	12.052	.000	0.988	-23.808	23.436
[Marital Status=Widowed]	0 <sup>a</sup>					
[Profession=Support Areas]	1.571	3.537	.197	0.657	-5.361	8.502
[Profession=Nursing Assistant]	2.026	2.838	.509	0.475	-3.536	7.588
[Profession=Nurse]	2.520	2.695	.874	0.350	-2.762	7.802
[Profession=Billing]	5.092	11.604	.193	0.661	-17.652	27.835
[Profession=Pharmacy]	-4.693	2.873	2.668	0.102	-10.325	0.938
[Profession=Specialist Doctor]	-0.455	2.956	.024	0.878	-6.249	5.339
[Profession=General Doctor]	3.743	4.516	.687	0.407	-5.109	12.595
[Profession=Other]	1.295	2.205	.345	0.557	-3.027	5.617
[Profession=Therapist]	0 <sup>a</sup>					
[Service or Area=Administrative and User Care]	1.983	4.065	.238	0.626	-5.986	9.951
[Service or Area=Ambulance/Transport]	1.742	9.967	.031	0.861	-17.794	21.278
[Service or Area=Surgery]	-1.629	3.766	.187	0.665	-9.010	5.751
[Service or Area=Outpatient Consultation]	2.889	4.422	.427	0.514	-5.779	11.556
[Service or Area=Coordination]	-4.294	9.441	.207	0.649	-22.797	14.209
[Service or Area=Hemodialysis and Hemodynamics]	-2.680	21.804	.015	0.902	-45.416	40.055
[Service or Area=Homecare/Internal Assistance]	6.260	4.325	2.095	0.148	-2.216	14.736
[Service or Area=Hospitalization]	1.310	3.422	.147	0.702	-5.397	8.017
[Service or Area=Others]	4.319	3.593	1.445	0.229	-2.723	11.361
[Service or Area=Pediatrics]	0.920	6.210	.022	0.882	-11.251	13.091
[Service or Area=Psychosocial/Psychology]	2.696	4.141	.424	0.515	-5.420	10.811
[Service or Area=Public Health]	6.345	3.954	2.575	0.109	-1.404	14.094
[Service or Area=Pharmaceutical Service]	3.145	4.192	.563	0.453	-5.070	11.361
[Service or Area=Diagnostic Services and Laboratory]	0.203	4.142	.002	0.961	-7.916	8.322
[Service or Area=Therapies and Rehabilitation]	3.449	4.200	.675	0.411	-4.782	11.680
[Service or Area=Intensive Care Unit (ICU)]	3.381	4.138	.668	0.414	-4.728	11.491

	Estimation	Desv. Error	Wald	p	IC 95%	
					Lower Limit	Upper Limit
[Service or Area=Emergency Department]	0.663	3.462	.037	0.848	-6.122	7.448
[Service or Area=Vaccination/Immunization]	0 <sup>a</sup>					
[Type of Employment=Unknown]	0.380	3.490	.012	0.913	-6.460	7.220
[Type of Employment=Other]	-1.253	2.540	.243	0.622	-6.232	3.726
[Type of Employment=Associated Work Cooperative]	0.163	2.891	.003	0.955	-5.504	5.829
[Type of Employment=Temporary Services Company]	-1.533	2.591	.350	0.554	-6.610	3.545
[Type of Employment=Permanent or Direct]	0.179	2.463	.005	0.942	-4.648	5.006
[Type of Employment=Contractor]	-0.598	2.782	.046	0.830	-6.051	4.855
[Type of Employment=Independent]	0 <sup>a</sup>					
[Shift=Day Shift (Morning and Afternoon)]	-1.594	6.141	.067	0.795	-13.630	10.442
[Shift=Morning Shift]	-3.868	6.653	.338	0.561	-16.909	9.172
[Shift=Night Shift]	-8.033	22.564	.127	0.722	-52.258	36.191
[Shift=Rotating Day Shift]	-1.147	6.328	.033	0.856	-13.550	11.256
[Shift=Rotating Day and Night Shift]	-4.937	6.189	.636	0.425	-17.067	7.194
[Shift=Afternoon Shift]	0 <sup>a</sup>					


Note. Goodness of fit for the model: Pearson=537.9 ( $p=.000$ ), Deviance=68.8 ( $p=1.0$ ),  $X^2=68.8$  ( $p=.252$ ).

Cox and Snell  $R^2=.252$ , Nagelkerke  $R^2=.556$ , McFadden  $R^2=.481$ .

### 3. Discussion

This study presents relevant findings regarding the working conditions of healthcare professionals in the department of Cesar, located in the northern region of Colombia. This includes doctors, nurses, and other healthcare and administrative staff, the majority of whom are women. They fall within the stages of emerging and middle adulthood, with the predominant age range being from 28 to 40 years. Additionally, most of them have completed university or technical education. Their employment contracts are divided between fixed-term and temporary contracts, with the majority earning between 1 and 1.5 times the minimum wage, which is related to a significant portion of employees being dissatisfied with their compensation. These conditions are not only applicable to the Colombian healthcare system and the working conditions of healthcare professionals; they also extend to other contexts, as demonstrated by the study of Ferraz Mesa (2020) in Spain. This study highlights that fixed-term contracts in the healthcare sector only slightly outweigh temporary contracts, which generates uncertainty about job stability and jeopardizes employee satisfaction.

Another notable factor among the evaluated healthcare professionals is that one-third of them require working overtime, and one-fifth of the sample has another job. This aligns with the findings of Romero-Polo et al. (2021), who established that employees in clinics and hospitals work more than 8 hours to compensate for their salary. The more hours worked, the greater the increase in compensation. In the case of the participants in this research, healthcare personnel require additional alternate jobs to supplement their salaries, with which they are not content.



Regarding levels of Psychological Well-being (PW), 92.7% of the respondents have a medium level of overall PW. This is a consistent finding in the studies of Yánez-Ramos & Moreta-Herrera (2020) and Veliz Burgos et al. (2018). The latter points out that the perception of well-being is influenced by individual performance, which translates into satisfaction and success. This explains why, despite the complex circumstances of some working conditions, the general results of psychological well-being in healthcare personnel tend to lean towards medium and high levels.

Conversely, the specific review of the dimensions of Psychological Well-being makes it evident that there are low levels in factors such as environmental mastery, autonomy, positive relations, purpose in life, and personal growth. This coincides with the results of the research by Veliz Burgos et al. (2018), where the areas of positive relations and autonomy showed a higher percentage in the low level. This is explained from the perspective that these dimensions involve communication interactions, teamwork, and the balance between dependence and autonomy, which are perceived with greater difficulty.


Finally, in relation to predictors, it was identified that seniority in the organization, not being affiliated with occupational risks, and not having a second job predict lower psychological well-being among healthcare employees, as highlighted in the study by Córdoba (2019). They pointed out that deficient working conditions in terms of physical, contractual, labor-related, and personal development aspects have a negative impact on psychological well-being at work. Additionally, Almarales & Yaguna (2019) indicate that elements such as the level of remuneration, the lack of recognition of the professional role, and the perception of repetitive tasks are factors that affect job dissatisfaction, increasing susceptibility to psychological risks among healthcare professionals.

## CONCLUSION

The conducted study analyzed the working conditions and their relationship with the level of psychological well-being of healthcare professionals. In terms of participant characteristics, a predominance of females was observed, with most falling within the age range of 28 to 40 years. Nearly half were unmarried and cohabiting. In terms of education, completed technical and university levels were the most frequent. The most common professions were nursing assistants, nurses, and therapists. Regarding income, over half of the participants earned between 1 and 1.5 times the minimum wage, and more than half were dissatisfied with their salary. Direct employment with the organization was predominant.

Regarding seniority in the position and organization, it was found that a quarter of the participants had less than a year of experience, but a fifth had more than 9 or 10 years. In terms of work areas, the distribution was equitable, with the emergency department being the most represented. In relation to shifts, almost half had a rotation between day and night shifts, and a third only worked during the day. Most workers did not receive supplies or personal protective equipment (PPE). The majority had health and pension fund affiliation, although a third were not affiliated with occupational risks. Over half received transportation subsidies, and a third worked overtime or had another job.

The results of psychological well-being showed that the majority of participants had a medium level, while a small percentage had low or deficitary levels, and high levels were also present. However, when



analyzing the dimensions of psychological well-being, it was observed that several of them showed problematic levels, such as environmental mastery, autonomy, positive relations, purpose in life, and personal growth. Regarding the association between job well-being and sociolaboral variables and working conditions, no significant correlations were found in the study.

The ordinal regression analysis showed that four variables were significant predictors of psychological well-being. Seniority in the organization was associated with lower psychological well-being, while not receiving personal supplies, not being affiliated with occupational risks, and not having a second job were associated with higher psychological well-being. In addition, not receiving personal protective equipment and not working additional hours were close to being significant negative predictors.

### **Considerations and limitations**

Among the limitations of the study is the sampling method used, as it was not possible to obtain the sample randomly, and there were clinical areas and professions that were not evaluated. The study was only conducted in one department of Colombia, and it would be significant to collect data at a regional level.

### **Contribution of the authors**

MMTV: Theoretical review and conceptualization; MPRM: Methodological design guidance; LKJR: Information analysis and processing; AA: Responsible for writing and style correction; CPD: Article visualization.

### **Funding**

This study received funding from the Popular University of Cesar for the publication process.

### **Informed consent statement**

All participants provided their informed consent prior to the data collection, in accordance with current legal regulations.

### **Data availability statement**

To access the data from this study, a request can be made by contacting the corresponding author.

### **Conflicts of interest**


The authors declare no conflicts of interest. The sponsors did not participate in the conception of the study, data collection, analysis or interpretation, manuscript writing, or the decision to publish the results.


## **ACKNOWLEDGEMENT**

To the Popular University of Cesar, National Higher Education Corporation CUN and the healthcare service provider institutions of the Department of Cesar.

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