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ORIGINAL

Work-related stress and resilience among nursing staff at a hospital in Cajamarca - Perú

Estrés laboral y resiliencia en personal de enfermería de un nosocomio de Cajamarca - Perú

Ariana Isabel Llaja Ocas[1] ✉, Victoria Aricela Malca Valderrama[1] ✉, Luz Zarahi Monteza Coronado[1] ✉, Miriam Adelis Leyva Chávez[1] ✉

[1]Universidad Nacional de Cajamarca. Perú.

Corresponding Author Ariana Isabel Llaja Ocas ✉

ABSTRACT

Objective: determine the relationship between work stress and the resilience of nurses at a hospital in Cajamarca during the month of March 2025. To identify the levels of both variables and the personal factors that influence them.
Method: a quantitative, non-experimental, cross-sectional, and correlational study, the sample of which was 115 nursing professionals selected through simple random probability sampling. The Nursing Stress Scale questionnaire (α=0,92) and the Wagnild and Young Resilience Questionnaire (α=0,905) were used.
Results: the evaluated relationship yielded a value (RS=-0,083, p=0,379) and an association (p=0,816). 81,7 % of respondents exhibited a low level of stress and 47 % a high level of resilience. A significant relationship was found between gender and resilience (p=0,002), as well as between employment status (p=0,043) and educational level (p=0,029) and work stress.
Conclusions: work stress is not statistically significantly related to resilience among nursing staff at a hospital in Cajamarca in 2025. Gender is significantly associated with higher levels of resilience, while employment status and educational level are significantly associated with work stress.

Keywords: Work Stress; Resilience; Nursing Staff.

RESUMEN

Objetivo: determinar la relación entre el estrés laboral y la resiliencia de los enfermeros de un nosocomio de Cajamarca durante el mes de marzo de 2025. Identificar los niveles de ambas variables y los factores personales que influyen en ellas.
Método: estudio cuantitativo, no experimental, transeccional y correlacional, cuya muestra fue 115 profesionales de enfermería seleccionados a través de un muestreo probabilístico aleatorio simple. Se empleó el cuestionario de Escala de Estresores Laborales "Nursing Stress Scale" (α=0,92) y el Cuestionario de Resiliencia de Wagnild y Young, (α=0,905).
Resultados: la relación evaluada arrojó un valor (p=0,816) y una asociación (RS=-0,083, p=0,379). El 81,7 % de los encuestados exhibió un nivel bajo de estrés y el 47 % un nivel alto de resiliencia. Se halló una relación significativa entre el género y la resiliencia (p=0,002) así como entre la condición laboral (p=0,043) y el nivel educativo (p=0,029) con el estrés laboral.
Conclusiones: el estrés laboral no guarda relación estadísticamente significativa con la resiliencia en el personal de enfermería de un nosocomio de Cajamarca durante el año 2025. El género se asocia

significativamente a niveles superiores de resiliencia, mientras que la condición laboral y el nivel educativo están asociados significativamente al estrés laboral.

Palabras clave: Estrés Laboral; Resiliencia; Personal de Enfermería.

INTRODUCTION

Work stress is defined according to Buitrago-Orjuela et al.[1] as a psychosocial problem that occurs in the work environment when individuals are unable to cope with and adapt to work demands, triggering a physiological response that affects both their physical and mental health. Although this phenomenon is not exclusive to any profession, continuous and prolonged exposure to the condition makes nurses the group most prone to it.[2] This, combined with other stressful conditions investigated, including excessive workload, insufficient support from superiors,[3] and excessive supervision of their duties, increases this risk.[4] Thus, globally, the presence of work-related stress in nurses varies. For example, a study conducted in Brazil found a prevalence of approximately 74 %,[5] while in Peru, an intermediate stress range of 54 % to 63 % has been recorded.[6,7] These figures are worrying, as Izadi et al.[8] identified that the prevalence of work-related stress in nurses affects their ability to provide effective care, thus reducing the quality of service. Likewise, Díaz Hernández et al.[9] found that it negatively influences their quality of life, whether in their environment, psychological or physical well-being.

On the other hand, resilience is an active form of adaptation and improvement in the face of stressful situations and misfortunes, thus enabling healthcare professionals to cope with the demands of their work.[10] For nursing staff, this ability is relevant because their work involves performing various activities that can be affected by factors such as staff shortages, time constraints, or emergencies.[11] These conditions lead to high levels of stress, making resilience a key factor in maintaining quality care.[12] It is also important to note that nurses make up approximately 60 % of the professional workforce in the healthcare sector. Both well-being and adaptability have a significant impact on clinical care and the effectiveness of the healthcare system in general.[12] In this sense, resilience not only facilitates adaptation to stressful working conditions, but also enables nurses to cope with the challenges of working with the human factor, promoting emotional stability and continuity of service.[13] However, it is essential to recognize that the exhaustion and difficulties experienced by nurses have a direct effect on patient safety and organizational outcomes.[14] In fact, the well-being of these professionals has been linked to their attendance at work, which influences staffing levels and, therefore, the service provided.[12] In this context, research such as that by Lee et al.[15] shows that developing resilience would be an effective way for nursing teams to face various challenges, such as the SARS-CoV-2 pandemic, in addition to the negative impact on their well-being.

The interaction between stress generated in the work environment and the resilience response observed in nursing professionals has been investigated in different countries. A study conducted in Palestine during the COVID-19 health contingency noted a moderate negative correlation between the two variables, highlighting how resilience influences nurses' ability to cope with work demands, thus maintaining patient safety and competence in the care provided.[16] Similarly, Ccorahua et al.[17] conducted research in a Peruvian hospital, where they noted that the findings show a statistically significant relationship between both variables in nursing professionals. It should be noted that both studies were conducted during the pandemic, where there were relevant factors such as increased working hours and the constant fear of contracting COVID-19. Thus, Badu Eric et al.[18] found that nurses in Australia use organizational resources such as support services, leadership, and role modeling to develop resilience in the face of moderate to high levels of stress. Similarly, Wu et al.[19] pointed out that resilience could counteract the prevalence of stress and the repercussions of factors.

In light of the above, this research is important because the relationship between work-related stress among nurses and their resilience in the city of Cajamarca is currently unknown, as this relationship was studied and documented during the pandemic. Furthermore, the study has a social impact, since it has been pointed out that the development of resilience in nurses facilitates adaptation to various circumstances, allowing them to cope adequately with work-related stress[20] and reducing its impact on their family, work, and social lives. This will prevent problems such as burnout, job abandonment, and psychological exhaustion among nurses,[13,14] thus improving the provision of their services and creating a more stable family environment, preventing job loss and the development of economic difficulties. The practical and mpact of the study lies in the fact that the findings obtained can be used to support future research and workplace management. Based on this, it is necessary to address the following question: To what extent is work-related stress related to the resilience of nurses at a hospital in Cajamarca during the month of March 2025?

Based on the above, it is essential to verify the hypothesis that there is a relationship between work stress and resilience among nurses at a hospital in Cajamarca during March 2025. To this end, the main objective is to determine the relationship between work stress and resilience among nurses at a hospital in Cajamarca

during March 2025, as well as to identify stress levels, resilience levels, and personal factors that influence both variables.

METHOD

This study was basic research, as its purpose was to increase existing knowledge.[21] It was developed using a quantitative approach, because numerical data collection was used to answer the research question and test the hypothesis.[21] In addition, it follows a non-experimental design, as both variables were monitored and measured in their usual setting without requiring the intervention of the researcher. It is also a cross-sectional study, in which data were collected in a single period of time, and a correlational study, as it seeks to establish the degree of relationship between stress and resilience in nurses at a hospital in Cajamarca during March 2025.[22] A total of 163 people were included in the population, comprising 87 nursing technicians and 76 registered nurses who work at a hospital in the city of Cajamarca. These professionals perform multiple tasks in different areas of the hospital, directly caring for patients and adapting to different working conditions. The sample consisted of a total of 115 nursing professionals, established using the corresponding formula for finite statistical populations, considering 95 as the confidence level percentage, 5 as the margin of error percentage, and 50 as the population proportion percentage, which were chosen through a probabilistic sampling using a simple random selection procedure.

On the other hand, the Nursing Stress Scale was used to measure work stress, with a Cronbach's alpha of 0,92.[23] This questionnaire consists of 34 questions that were evaluated with 4 alternatives on a Likert scale, where 0 is "never" and 3 is "very often," with a minimum score of 0 and a maximum score of 102. Scores below 34 indicated low stress; between 35 and 68 points, moderate stress; and between 69 and 102, high stress. [23] Likewise, the instrument used to measure resilience was the Wagnild and Young Resilience Questionnaire, which has a Cronbach's alpha of 0,905.[5] This questionnaire has 25 items evaluated with 7 alternatives on a Likert scale, where 1 represents "strongly disagree" and 7 represents "strongly agree." The lowest score was 25 and the highest was 175. The results were classified as follows: a score of 25 to 120 indicates a low level of resilience; between 121 and 145, a medium level of resilience; and between 146 and 175, a high level of resilience.[24]

Descriptive statistics were used to process the research data in order to calculate the percentages corresponding to the levels of both variables from the values obtained. At the same time, descriptive inferential statistics were applied, using the Kolmogorov-Smirnov test ($p<0,05$) to evaluate the distribution of data values. As normality was not achieved, it was decided to use Spearman's Rho correlation coefficient with a statistical value of $p < 0,05$ to find the degree and direction of the correlation between the variables. In addition, analytical inferential statistics were performed using the Chi-square test, with a confidence parameter of 95 % and a statistical value of $p < 0,05$ to find the hypothesis test between the variables and their personal factors. The data were recorded using Excel 2021, while the tests were calculated using the statistical program SPSS 27.

Regarding the application of surveys, verbal consent was obtained from the individuals selected for their voluntary collaboration in the study. Consequently, the data provided will be kept confidential and used only for academic purposes. At the same time, the project was funded solely by the authors, and no conflict of interest was presented.

RESULTS

In figure 1, the most represented age group was 31 to 40 years old, with 40,9 %, and the most represented gender was female, with 85,2 %. On the other hand, the majority of the population surveyed are single, representing 40,9 %. In terms of educational level, nursing technicians predominate with 54,8 %, and of the entire sample studied, there is a higher frequency in the area of hospitalization, representing 27 %. Similarly, in relation to employment status, there is a prevalence of contract workers over permanent employees, at 67 %, and the most common length of service is 1 to 5 years, at 40,9 %.

On the other hand, figure 2 indicates that, of the nursing staff surveyed, 81,7 % have a low level of stress and, finally, 18,3 % suffer from regular stress.

Similarly, figure 3 shows that 47 % of the nursing staff surveyed report high resilience, 45,2 % report medium resilience, and only 7,8 % of the staff surveyed report low resilience.

Figure 4 shows the relationship between work stress and resilience, with a confidence level of 95 % and a margin of error of 5 %, concluding that, among the variables, the correlation is very weak negative (RS = -0,083; p = 0,379), as well as insignificant. In other words, it is not possible to determine the direction that one variable takes with respect to another. As for their relationship using the chi-square test, it was also not shown to be statistically significant (p = 0,816). Likewise, it can be seen that the most high ity obtained among nursing staff (40 %) has a low level of stress with high resilience.

In this case, figure 5 indicates that 47 % of the nursing staff surveyed have high resilience, with staff aged 31 to 40 predominating in comparison with the other age groups. On the other hand, gender is a significant personal factor with respect to the resilience variable, exhibiting a significance (p = 0,002).

Variable		Frecuencia	Porcentaje
	20 a 30 años	21	18,3
	31 a 40 años	47	40,9
Edad	41 a 50 años	29	25,2
	51 a más años	18	15,7
	Total	115	100
	Masculino	17	14,8
Género	Femenino	98	85,2
	Total	115	100
	Soltero(a)	47	40,9
	Casado (a)	31	27
Estado civil	Divorciado (a)	7	6,1
	Viudo (a)	2	1,7
	Conviviente	28	24,3
	Total	115	100
	Si	90	78,3
Tiene hijos	No	25	21,7
	Total	115	100
	Técnico (a) de enfermería	63	54,8
Nivel educativo	Licenciado(a) de enfermería	52	45,2
	Total	115	100
	Emergencia	30	26,1
	Hospitalización	31	27
	Centro obstétrico	25	21,7
	Centro quirúrgico	8	7
Área de trabajo	Consultorios externos	10	8,7
	Central de esterilización	5	4,3
	Diagnóstico por imágenes	3	2,6
	Unidad de seguros	3	2,6
	Total	115	100
	Nombrado(a)	38	33
Condición laboral	Contratado(a)	77	67
	Total	115	100
	Menos de 1 año	1	0,9
	1-5 años	47	40,9
Tiempo de servicio	6-10 años	25	21,7
	Más de 10 años	42	36,5
	Total	115	100

Figure 1. Distribution of nursing staff in a hospital in Cajamarca by personal characteristics

Estrés laboral	Frecuencia	Porcentaje (%)	Porcentaje acumulado (%)
Bajo estrés	94	81.7	81.7
Estrés regular	21	18.3	100
Alto estrés	0	0	100
Total	115	100	

Figure 2. Distribution of work stress by level in nursing staff at a hospital in Cajamarca, 2025

Resiliencia	Frecuencia	Porcentaje (%)	Porcentaje acumulado (%)
Baja resiliencia	9	7.8	7.8
Resiliencia media	52	45.2	53
Alta resiliencia	54	47	100
Total	115	100	

Figure 3. Distribution of resilience and its levels in nursing staff at a hospital in Cajamarca, 2025

		Resiliencia							Total		Chi cuadrado Valor de p	Coeficiente de correlación de Sperman Valor de p
		Baja resiliencia		Resiliencia media		Resiliencia alta						
		N	%	N	%	N	%	N	%			
Estrés laboral	Bajo estrés	7	6,1%	41	35,7%	46	40,0%	94	81,7%		0,816	-0,083
	Estrés regular	2	1,7%	11	9,6%	8	7,0%	21	18,3%			
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%		p=0,665	p=0,379

Figure 4. Relationship between work stress and resilience of nursing staff at a hospital in Cajamarca, 2025

Variable	Ítem	Resiliencia						Total		Chi cuadrado Valor de p
		Baja resiliencia		Resiliencia media		Alta resiliencia				
		N	%	N	%	N	%	N	%	
Edad	20 a 30 años	3	2,6%	8	7,0%	10	8,7%	21	18,3%	
	31 a 40 años	1	0,9%	22	19,1%	24	20,9%	47	40,9%	
	41 a 50 años	4	3,5%	14	12,2%	11	9,6%	29	25,2%	5,541
	51 a más años	1	0,9%	8	7,0%	9	7,8%	18	15,7%	p= 0,476
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%	
Género	Masculino	5	4,3%	6	5,2%	6	5,2%	17	14,8%	12,889
	Femenino	4	3,5%	46	40,0%	48	41,7%	98	85,2%	p=0,002*
Total		9	7,8%	52	45,2%	54	47,0%	115	100,00%	
Estado civil	Soltero(a)	4	3,5%	21	18,3%	22	19.10%	47	40,9%	
	Casado(a)	1	0,9%	17	14,8%	13	11,3%	31	27,0%	
	Divorciado(a)	0	0,0%	3	2,6%	4	3,5%	7	6,1%	4,66
	Vuido(a)	0	0,0%	1	0,9%	1	0,9%	2	1,7%	p=0,793
	Conviviente	4	3,5%	10	8,7%	14	12,2%	28	24,3%	
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%	
Tiene hijos	Sí	6	5,2%	39	33,9%	45	39,1%	90	78,3%	
	No	3	2,6%	13	11,3%%	9	7,8%%	25	21,7%	1,853
Total		9	7,8%	52	45,2%	54	47,0%	115	100,00%	p=0,396
Nivel educativo	Técnico(a) de enfermería	6	5,2%	29	25,2%	28	24,3%	63	54,8%	0,721
	Licenciado(a) de enfermería	3	2,6%	23	20,0%	26	22,6%	52	45,2%	p= 0,697
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%	
Área de trabajo	Emergencia	3	2,6%	12	10,4%	15	13,0%	30	26,1%	
	Hospitalización	1	0.90%	9	7,8%	21	18,3%	31	27,0%	
	Centro Obstétrico	2	1,7%	18	15,7%	5	4,3%	25	21,7%	
	Centro Quirúrgico	1	0,9%	4	3,5%	3	2,6%	8	7,0%	
	Consultorios Externos	1	0,9%	6	5,2%	3	2,6%	10	8,7%	20,309
	Central De Esterilización	1	0,9%	2	1,7%	2	1,7%	5	4,3%	p=0,121
	Diagnóstico Por Imágenes	0	0,00%	1	0,9%	2	1,7%	3	2,6%	
	Unidad De Seguros	0	0,00%	0	0,00%	3	2,6%	3	2,6%	
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%	
Condición laboral	Nombrado(a)	3	2,6%	19	16,5%	16	13,9%	38	33,0%	0,572
	Contratado(a)	6	5,2%	33	28,7%	38	33,0%	77	67,0%	p=0,751
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%	
Tiempo de servicio	Menos de 1 año	0	0,0%	0	0,0%	1	0,9%	1	0,9%	
	1-5 años	4	3,5%	23	20,0%	20	17,4%	47	40,9%	5,218
	6-10 años	1	0,9%	8	7,0%	16	13,9%	25	21,7%	p=0,516
	Más De 10 años	4	3,5%	21	18.30%	17	14,8%	42	36,5%	
Total		9	7,8%	52	45,2%	54	47,0%	115	100,0%	

*La relación es significativa en el nivel 0,05 (bilateral)

Figure 5. Distribution of the level of resilience and its relationship with the personal factors of the nursing staff of a hospital in Cajamarca, 2025

Variable	Ítem	Estrés laboral				Total		Chi cuadrado Valor de p
		Bajo estrés		Estrés regular				
		N	%	N	%	N	%	
Edad	20 a 30 años	18	15,70%	3	2,60%	21	18,30%	
	31 a 40 años	35	30,40%	12	10,40%	47	40,90%	
	41 a 50 años	24	20,90%	5	4,30%	29	25,20%	3,854
	51 a más años	17	18,10%	1	0,90%	18	15,70%	p= 0,278
	Total	94	81,70%	21	18,30%	115	100,00%	
Genero	Masculino	14	12,20%	3	2,60%	17	14,80%	
	Femenino	80	69,60%	18	15,70%	98	85,20%	0,005
	Total	94	81,70%	21	18,30%	115	100,00%	p= 0,943
Estado civil	Soltero(a)	38	33,00%	9	7,80%	47	40,90%	
	Casado(a)	23	20,00%	8	7,00%	31	27,00%	
	Divorciado(a)	7	6,10%	0	0,00%	7	6,10%	3,514
	Viudo(a)	2	1,70%	0	0,00%	2	1,70%	p=0,476
	Conviviente	24	20,90%	4	3,50%	28	24,30%	
	Total	94	81,70%	21	18,30%	115	100,00%	
Tiene hijos	Si	75	65,20%	15	13,00%	90	78,30%	0,705
	No	19	16,50%	6	5,20%	25	21,70%	p=0,401
	Total	94	81,70%	21	18,30%	115	100,00%	
Nivel educativo	Técnico (a) de enfermería	56	48,70%	7	6,10%	63	54,80%	
	Licenciado(a) de enfermería	38	33,00%	14	12,20%	52	45,20%	4,772
	Total	94	81,70%	21	18,30%	115	100,00%	**p=0,029***
Área de trabajo	Emergencia	25	21,70%	5	4,30%	30	26,10%	
	Hospitalización	24	20,90%	7	6,10%	31	27,00%	
	Centro obstétrico	21	18,30%	4	3,50%	25	21,70%	
	Centro quirúrgico	7	6,10%	1	0,90%	8	7,00%	
	Consultorios externos	8	7,00%	2	1,70%	10	8,70%	1,859
	Central de esterilización	4	3,50%	1	0,90%	5	4,30%	p=0.967
	Diagnóstico por imágenes	3	2,60%	0	0,00%	3	2,60%	
	Unidad de seguros	2	1,70%	1	0,90%	3	2,60%	
	Total	94	81,70%	21	18,30%	115	100,00%	
Condición laboral	Nombrado(a)	35	30,40%	3	2,60%	38	33,00%	
	Contratado(a)	59	51,30%	18	15,70%	77	67,00%	4,086
	Total	94	81,70%	21	18,30%	115	100,00%	**p=0,043***
Tiempo de servicio	Menos De 1 Año	1	0,90%	0	0,00%	1	0,90%	
	1-5 Años	36	31,30%	11	9,60%	47	40,90%	
	6-10 Años	21	18,30%	4	3,50%	25	21,70%	1,587
	Más De 10 Años	36	31,30%	6	5,20%	42	36,50%	p=0,662
	Total	94	81,70%	21	18,30%	115	100,00%	

*La relación es significativa en el nivel 0,05 (bilateral)

Figure 6. Distribution of the level of work stress and its relationship with the personal factors of the nursing staff of a hospital in Cajamarca, 2025

Finally, figure 6 shows the presence of an association between two personal factors and the work stress variable. On the other hand, educational level has been identified as a significant factor (p=0,029), while employment status has a significance of (p=0,043).

DISCUSSION

Nursing professionals facedaily work challenges involving patient care, interaction with coworkers, and communication with family members, which causes them stress that can affect their job performance and mental and physical health. Nurses have been described as essential support in the healthcare system;[25] therefore, it is important for nursing professionals to develop strategies, such as resilience, to cope with stressful situations and improve healthcare.

This study shows that the study variables, stress and resilience, are not significantly related, a finding that coincides with previous studies conducted in similar contexts. For example, the study by Almegewly et al.[26], conducted with critical care nurses in Saudi Arabia during the COVID-19 pandemic, also showed that there was no significant correlation between these variables in a small sample and a specific hospital setting. However, contrary to these findings, other studies have reported significant associations between the two variables. Al-Mashaykhi et al.[27], in their research conducted in a tertiary hospital in Oman, identified a moderate negative correlation, indicating that the higher the level of resilience, the lower the perception of stress. This result

comes from a context with high work demands, which may have favored the protective function of resilience in the face of high levels of stress. Similarly, the study by Terrones[28], conducted in Peru with nurses during the COVID-19 health emergency, established that there was a significant influence between the variables considered. This study found that resilience played a moderating role in the perception of stress, suggesting that, in similar health crisis contexts, resilience can function as a protective factor against stress. In addition, the study by Karabulak et al.[29], conducted in Turkey with 201 nurses, revealed that psychological resilience is an important predictor of perceived stress. It concluded that the higher the level of resilience, the lower the perception of stress, reinforcing the idea that resilience acts as a moderator in high-pressure environments. These divergent results can be explained by differences in the research contexts. While the studies that reported significant correlations were conducted in high-pressure hospital settings, such as tertiary hospitals or in health crisis situations, with staff subjected to a higher workload, the present study was conducted in a possibly more stable work environment, with less pressure and a different sociolaboral context. These differences in work contexts, working conditions, and the demands of each environment may have influenced the absence of a statistical association between stress and resilience in this study.

In relation to stress, the results of the study show the presence of low stress (81,7 %) in nursing workers. This contrasts with studies such as those by Ccorahua et al.[17], Karabulak et al.[29], and Almegewly et al.[26], which highlighted the presence of intermediate levels of stress. Similarly, Aqtam et al.[16] conducted a study throughout the COVID-19 pandemic, where they found that nursing staff working in intensive care units in Palestine had high levels of stress due to constant exposure to patients with serious clinical conditions, which can generate heavy emotional burdens.

On the other hand, this study identified that 47 % of the sample had high resilience, followed by medium resilience (45,2 %). Other studies report different results in terms of resilience levels. For example, a study conducted in a hospital in Peru found that medium resilience levels predominated.[17] Similarly, another study conducted in Saudi Arabia found moderate levels of resilience.[30] In contrast, Hamaideh et al.[31] found low levels of resilience in nurses working in psychiatric wards. However, studies comparing the level of resilience between job categories have been found, showing that in the intensive care unit, nurses had lower resilience than doctors, since they are the first line of contact with the patient.[32] Similarly, another study compared resilience scores among nurses, doctors, nursing practitioners, and medical assistants, finding that nurses had lower levels of resilience, probably influenced by the COVID-19 pandemic.[25]

Likewise, nursing professionals showed varying levels of resilience depending on personal and work characteristics. Thus, a relationship was found between gender and the resilience variable, as in the study by Martínez Arriaga et al.[33], which mentions that men had greater resilience. On the other hand, when analyzing the variable of work stress, it was identified that contracted staff had higher levels of regular stress than appointed staff, which is particularly striking and could be due to job instability, pressure to meet goals, or lack of institutional benefits. Similarly, it is evident that registered nurses had higher levels of regular stress than technicians, possibly due to the greater administrative, clinical, and leadership responsibilities they tend to assume in the hospital environment. It is worth mentioning that no similar studies were found with results that specifically address these relationships, which highlights the importance of these findings as possible contributions to future research aimed at exploring in greater depth how contract status and level of professional training influence the perception of work-related stress.

However, it is important to note that resilience and work stress are multifactorial phenomena, influenced by a variety of individual, organizational, and contextual factors that exceed those addressed in this study. For example, Croghan et al.[25] found that age is significantly correlated with resilience, showing that older age is associated with greater emotional coping capacity. Similarly, research by Hamaideh et al.[31] found that resilience is positively correlated with educational level and job satisfaction, suggesting that professional training and the organizational environment also play a decisive role in the development of this protective capacity. These findings highlight the importance of conducting future research that incorporates a more holistic approach, allowing for an understanding of the interaction between personal and environmental variables in shaping stress and resilience among nursing staff.
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CONCLUSIONS

Consequently, this research demonstrated that there is no significant relationship between work stress and resilience in nursing professionals at a hospital in Cajamarca during 2025. The data collected indicate that the dominant level of stress was low, with 81,7 % of respondents reporting low stress levels. In terms of resilience, most staff reported medium and high levels, with high resilience standing out at 47 %. Although no correlation was found between the two variables, the results show that nursing staff are capable of coping with the demands of their work.

On the other hand, it is important to note that in this research, conducted using a probabilistic approach, gender was identified as a significant factor in the presence of resilience. Likewise, factors such as level of education and employment status have a significant impact on stress levels.

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AUTHORSHIP CONTRIBUTION
Conceptualization: Ariana Isabel Llaja Ocas, Victoria Aricela Malca Valderrama, Luz Zarahi Monteza Coronado, Miriam Adelis Leyva Chávez

Data curation: Ariana Isabel Llaja Ocas, Victoria Aricela Malca Valderrama, Luz Zarahi Monteza Coronado, Miriam Adelis Leyva Chávez

Formal analysis: Ariana Isabel Llaja Ocas, Victoria Aricela Malca Valderrama, Luz Zarahi Monteza Coronado, Miriam Adelis Leyva Chávez

Drafting - original draft: Ariana Isabel Llaja Ocas, Victoria Aricela Malca Valderrama, Luz Zarahi Monteza Coronado, Miriam Adelis Leyva Chávez

Writing - proofreading and editing: Ariana Isabel Llaja Ocas, Victoria Aricela Malca Valderrama, Luz Zarahi Monteza Coronado, Miriam Adelis Leyva Chávez