

## ORIGINAL ARTICLE

## Emotional self-efficacy and well-being in physicians at a high-complexity hospital in Lima, 2025

Miguel Pereira-Alagón<sup>1,a</sup>  <sup>1</sup> Universidad Nacional Mayor de San Marcos, Lima, Peru.<sup>a</sup> Medical student.**Keywords:**

self-efficacy; psychological well-being; occupational health; health services management; hospital staff management (Source: MeSH - NLM).

**ABSTRACT**

**Objective.** To determine the relationship between emotional self-efficacy and well-being in physicians at a high-complexity hospital in Lima, Peru. **Methods.** A quantitative, basic-type study with a non-experimental, correlational, and cross-sectional design. The population consisted of 100 physicians from a high-complexity hospital, with a census-based sample. Two separate instruments were used to measure each variable, both validated and reliable. Spearman's rho and the p-value were used to test the hypotheses. **Results.** Emotional self-efficacy was most frequently rated at a moderate level (49.0%), and well-being was also most commonly reported at a moderate level (66.0%). A significant positive correlation was found between emotional self-efficacy and well-being ( $\rho = 0.899$ ;  $p\text{-value} = 0.000$ ). **Conclusions.** There is a significant relationship between emotional self-efficacy and well-being in physicians at a high-complexity hospital, both overall and across each of their respective dimensions.

## Autoeficacia emocional y bienestar en médicos de un hospital de alta complejidad en Lima, 2025


**Palabras clave:**

autoeficacia; bienestar psicológico; salud ocupacional; gerencia de servicios de salud; manejo del personal de hospital (Fuente: DeCS - BIREME).

**RESUMEN**

**Objetivo.** Determinar la relación entre la autoeficacia emocional y el bienestar en médicos de un hospital de alta complejidad de Lima (Perú). **Métodos.** Enfoque cuantitativo, tipo básico, de diseño no experimental, con alcance correlacional y transversal. La población estuvo conformada por 100 médicos de un hospital de alta complejidad y la muestra fue censal. Los dos instrumentos de medición fueron utilizados, por separado, para evaluar cada variable, siendo ambos válidos y confiables. Para la contrastación de las hipótesis se usó el estadígrafo rho de Spearman y el p-valor. **Resultados.** En la variable autoeficacia emocional, el nivel moderado fue el más frecuente, con un 49,0 %, y en la variable bienestar, el nivel moderado fue el más frecuente con un 66,0 %. Así mismo, se evidenció relación entre la autoeficacia emocional y el bienestar ( $\rho = 0,899$ ;  $p\text{-valor} = 0,000$ ). **Conclusiones.** Existe relación entre la autoeficacia emocional y el bienestar en médicos de un hospital de alta complejidad, a nivel general y en cada una de sus dimensiones.

**Cite as:** Pereira-Alagón M. Emotional self-efficacy and well-being in physicians at a high-complexity hospital in Lima, 2025. Rev Peru Cienc Salud. 2025; 7(2):133-44. doi: <https://doi.org/10.37711/rpcs.2025.7.2.10>

**Correspondence:** Miguel Pereira-Alagón miguel.p140525@gmail.com



## INTRODUCTION

Currently, there is a noticeable gap in scientific information on how emotional self-efficacy and well-being interact in physicians working in high-complexity hospitals <sup>(1)</sup>. Investigating this academic gap is essential to understand how to develop effective and efficient strategies, policies, and health management programs <sup>(2)</sup>.

In high-complexity hospitals, physicians' emotional self-efficacy is a key factor for preserving their well-being and performance <sup>(3)</sup>. However, from a health management perspective, there is limited incorporation of institutional strategies aimed at strengthening this competency, which increases the risk of professional burnout and affects the quality of care provided. This gap highlights the need to manage physicians' well-being not only from a clinical standpoint but also from emotional development as a strategic axis in highly demanding work environments <sup>(4)</sup>.

At the international level, a study conducted in Colombia in 2023 by Cano-García et al. <sup>(7)</sup> reported that low levels of well-being were associated with factors such as organizational stress, depersonalization, and burnout ( $p < 0.05$ ). Similarly, in the United States in 2022, Ju et al. <sup>(6)</sup> found that higher self-efficacy was associated with lower burnout levels, and interventions aimed at increasing self-efficacy and interpersonal factors that promote it could improve physicians' physical and emotional well-being ( $p = 0.001$ ). In Bolivia, in 2021, Viruez-Soto et al. <sup>(5)</sup> found that in adverse work environments, physicians with a greater sense of collaboration and self-efficacy, or those performing multiple tasks, were more exposed to deteriorating well-being ( $p < 0.05$ ). Likewise, García-Torres et al. <sup>(8)</sup> in Mexico in 2021 reported that healthcare professionals working in public contexts and serving as physicians were more likely to experience low levels of well-being ( $p = 0.024$ ), recommending the establishment of effective policies to address this issue.

In Peru, a study conducted at a specialized medical center in Trujillo in 2024 by Vega <sup>(9)</sup> found that 87.1% of healthcare personnel reported low well-being. Similarly, research conducted in Lima in 2023 by Valencia <sup>(11)</sup> showed that self-efficacy could be directly and significantly correlated with stress ( $p = 0.008$ ) among health science professionals. In the same city,

in 2022, Suyón and Bautista <sup>(10)</sup> concluded that there was an inverse and significant relationship between emotional exhaustion and psychological well-being among healthcare workers ( $p < 0.05$ ). Likewise, Contreras-Camarena et al. <sup>(12)</sup> in 2021 reported that low self-esteem and self-efficacy contributed to burnout, whereas high levels of self-esteem and self-efficacy had a protective role ( $p < 0.05$ ). Similarly, Chalco <sup>(13)</sup> conducted a study in the same city and year, concluding that self-efficacy and emotional state were not significantly related to variables such as treatment adherence or perceived social support ( $p > 0.05$ ).

Therefore, there remains a clear need to strengthen the management of human resources in health through the inclusion of psychosocial factors that directly influence physicians' performance and well-being in high-complexity hospitals <sup>(14)</sup>. In the Peruvian hospital context, this construct has been scarcely explored from a health management perspective, which limits the implementation of institutional strategies aimed at developing physicians' emotional competencies <sup>(15)</sup>.

Based on the evidence reviewed, it is evident that exploring the relationship between emotional self-efficacy and well-being in physicians working in a high-complexity hospital is both relevant and urgent from a health management approach. Accordingly, the objective of this research was to determine the relationship between emotional self-efficacy and well-being in physicians at a high-complexity hospital.



## METHODS

### Study type and area

The research employed a quantitative approach with a non-experimental, correlational, and cross-sectional design. It was conducted at Hospital Nacional Guillermo Almenara Irigoyen in Lima, Peru, between February and May 2025.

### Population and sample

The study population consisted of 100 physicians. A census sampling method was used; therefore, the entire population was included. The inclusion criteria were: having an employment relationship with the institution and completing the informed consent

form. The exclusion criteria were: failure to complete the measurement instrument, participation in another research study, and current use of medication for mental health conditions.

### Variables and data collection instruments

For the first variable, *emotional self-efficacy*, the Emotional Self-Efficacy Scale for Physicians (see Appendix 1), designed and validated by Weurlander et al. <sup>(16)</sup>, was used. This instrument consists of 17 items distributed across five dimensions: "communication with the patient" ( $\alpha = 0.87$ ), "being questioned" ( $\alpha = 0.77$ ), "professional competence" ( $\alpha = 0.80$ ), "educational competence" ( $\alpha = 0.72$ ), and "relationship with other professionals" ( $\alpha = 0.70$ ). The items were rated on a four-point Likert scale, ranging from "strongly disagree" (1 point) to "strongly agree" (4 points). The total score ranged from a minimum of 17 to a maximum of 68 points. Based on the total score, emotional self-efficacy was categorized as *low* (17–33 points), *moderate* (34–51 points), or *high* (52–68 points). A content validation was conducted to ensure cultural adaptation to the Peruvian context through the expert judgment of three specialists in scientific research, psychology, and medicine, yielding an Aiken's V coefficient of 0.92, which was considered highly satisfactory <sup>(17)</sup>.

The second variable, *well-being*, was assessed using the Physician Well-Being Scale (see Appendix 2), designed and validated by Horwitz et al. <sup>(18)</sup>. This instrument comprises 19 items grouped into four dimensions: "self-confidence" ( $\alpha = 0.79$ ), "spirituality and transcendence" ( $\alpha = 0.73$ ), "interpersonal relationships" ( $\alpha = 0.68$ ), and "integral health" ( $\alpha = 0.83$ ). The items were rated on a four-point Likert scale, ranging from "strongly disagree" (1 point) to "strongly agree" (4 points). The total score ranged from 19 to 76 points. Based on the score, well-being was classified as *poor* (19–37 points), *moderate* (38–57 points), or *optimal* (58–76 points). A content validation was also conducted to ensure appropriate adaptation to the national context through the expert judgment of three specialists in scientific research, psychology, and medicine, obtaining an Aiken's V coefficient of 0.86, considered satisfactory <sup>(17)</sup>.

Finally, the participants' sociodemographic characteristics were collected through a questionnaire, including age, sex, socioeconomic level, and years of professional experience.

### Data collection techniques and procedures

The technique employed was an online survey. After each physician provided written informed consent in person, a Google Forms® questionnaire was sent to their institutional email. The form first gathered sociodemographic information about the participants, followed by the administration of the previously mentioned instruments. Participants were allotted approximately 25 minutes to complete the survey.

### Data analysis

Once data collection was completed, the responses were processed using Microsoft Excel software to generate a database that facilitated the preparation of tables for analysis and interpretation of the results. Regarding inferential statistics, given the ordinal nature of both variables, Spearman's rank correlation coefficient ( $\rho$ ) was used <sup>(19)</sup>. Prior to selecting the statistical test, the Kolmogorov–Smirnov normality test was applied, considering that the sample size exceeded 40 participants <sup>(20)</sup>.

### Ethical aspects

All ethical principles established in the Declaration of Helsinki were fully respected. Informed consent was obtained from all participants, and ethical and responsible conduct was maintained throughout the research process. The study was approved by the Institutional Research Ethics Committee of Hospital Nacional Guillermo Almenara Irigoyen, under study code No. 39-2025.

## RESULTS

Regarding sex, male physicians predominated, accounting for 62.0% of the total. With respect to age, the 41–50-year group stood out, representing 33.0% of the participants. In terms of socioeconomic level, the middle level was predominant, comprising 75% of the total. Concerning work experience, the category of 11 to 20 years was the most frequent, with 43% (see Table 1).

In the variable "emotional self-efficacy", the analysis of its dimensions shows that the highest mean corresponded to "relationship with other professionals" (3.48), which was also accompanied by the lowest standard deviation (0.79). This indicates a highly positive and homogeneous perception regarding collaborative work between physicians and

**Table 1.** Sociodemographic characteristics of the study subjects

Characteristic	n = 100	
	fi	%
<b>Sex</b>		
Male	62	62.0
Female	38	38.0
<b>Age</b>		
30 - 40 years	24	24.0
41 - 50 years	33	33.0
51 - 60 years	31	31.0
Over 60 years	12	12.0
<b>Socioeconomic level</b>		
High	15	15.0
Middle	75	75.0
Low	10	10.0
<b>Work experience</b>		
0 to 10 years	34	34.0
11 to 20 years	43	43.0
21 to 30 years	23	23.0

other health professionals. In contrast, the lowest mean was observed in the dimension "being questioned" (3.28), which, although not reflecting a negative evaluation, suggests a lower openness to criticism or review of medical decisions. Nevertheless, its standard deviation is also relatively low (0.83), indicating a stable perception among participants (see Table 2).

Regarding the variable "well-being", the highest mean was found in the dimension "interpersonal relationships" (3.35), indicating that physicians

positively value their ability to interact with others and maintain fluid and effective relationships in the workplace. This dimension also shows a low standard deviation (0.85), suggesting consistency in responses among participants. In contrast, the lowest mean corresponds to the dimension "spirituality and transcendence" (3.25), with a similar standard deviation (0.86). This may indicate that, although this dimension is considered relevant, its evaluation is slightly lower compared to other areas of personal and professional well-being (see Table 3).

**Table 2.** Descriptive statistics of emotional self-efficacy by dimensions

Dimensions	Mean	Median	Standard deviation
Communication with the patient	3.28	3	0.86
Being questioned	3.28	3	0.83
Professional competence	3.28	3	0.87
Educational competence	3.37	3	0.86
Relationship with other professionals	3.48	3	0.79

**Table 3.** Descriptive statistics of well-being by dimensions

Dimensions	Mean	Median	Standard deviation
Self-confidence	3.28	3	0.86
Spirituality and transcendence	3.25	3	0.86
Interpersonal relationships	3.35	3	0.85
Integral health	3.26	3	0.86

For the variable “emotional self-efficacy”, the moderate level was the most prevalent, representing 49.0% of the total number of physicians from a high-complexity hospital (see Table 4).

For the variable “well-being”, the moderate level was the most frequent, representing 66.0% of the total number of physicians in a high-complexity hospital (see Table 5).

The established criterion ( $p < 0.05$ ) was met for for both the specific and the general hypotheses; therefore, each null hypothesis was rejected. It is thus affirmed that there is a significant relationship between emotional self-efficacy and well-being among physicians in a high-complexity hospital, both at the general level and across all its dimensions (see Table 6).

## DISCUSSION

Researching emotional self-efficacy and well-being in physicians is crucial due to the high emotional and physical demands they face in their work environment, which can directly impact their performance, mental health, and quality of life <sup>(21)</sup>.

**Table 5.** Level of well-being among physicians in a high-complexity hospital

Level of well-being	n = 100	
	fi	%
Optimal	17	17.0
Moderate	66	66.0
Deficient	17	17.0

**Table 4.** Level of emotional self-efficacy among physicians in a high-complexity hospital

Level of emotional self-efficacy	n = 100	
	fi	%
High	39	39.0
Moderate	49	49.0
Low	12	12.0

Emotional self-efficacy, as a protective factor against stress, has the potential to enhance physicians’ ability to manage difficult situations, maintain emotional control under high-pressure contexts, and preserve their overall well-being. Likewise, physicians’ well-being is fundamental not only for their individual health but also for the quality of care they provide to patients and for effective teamwork dynamics. Therefore, this type of research helps identify critical areas that can be addressed at an institutional level to promote emotional support policies and professional development programs that benefit both physicians and the overall quality of the healthcare system <sup>(22)</sup>.

Regarding the purpose of this study, a significant relationship was found between emotional self-efficacy and well-being among physicians. This may be due to the fact that professionals who trust their ability to manage emotions tend to cope more effectively with work-related stress, thereby reducing its negative impact on mental health. This suggests that the perception of internal control over

**Table 6.** Correlation between emotional self-efficacy and well-being

Variables	Emotional self-efficacy	
	Spearman’s rho coefficient	p-value
Well-being	0.899	0.00
Dimensions		
Self-confidence	0.897	0.01
Spirituality and transcendence	0.827	0.00
Interpersonal relationships	0.885	0.03
Integral health	0.851	0.02

one's emotions not only protects against emotional exhaustion but also serves as a preventive resource against chronic stress. In this regard, Ju et al. <sup>(6)</sup> indicated that self-efficacy functions as a regulatory mechanism in stressful situations, enabling more adaptive responses. Similarly, Pérez-Valdecantos et al. <sup>(23)</sup> demonstrated that physicians with high levels of self-efficacy report greater job satisfaction and lower prevalence of anxiety and emotional exhaustion symptoms. From this perspective, self-efficacy not only modulates emotional responses but also strengthens one's relationship with work, fostering a healthier connection with the demands of the professional role. Possessing this ability allows physicians to maintain a more resilient attitude toward the pressures of the hospital environment <sup>(24)</sup>.

Nevertheless, not all components of well-being can be explained solely by emotional self-efficacy. Although this ability contributes to better internal regulation, other factors such as working conditions, organizational support, and job stability also play decisive roles. Cavallari <sup>(25)</sup> points out that the integral well-being of medical personnel requires both individual and structural interventions to be sustainable over time. In other words, emotional self-efficacy can be a powerful tool, but its impact is limited in hostile work environments or in the absence of institutional support. Therefore, this finding should not be interpreted in an individualistic sense but rather as an invitation to rethink medical well-being from a systemic and comprehensive perspective.

In line with this, a significant relationship was found between emotional self-efficacy and self-confidence, which can be explained by the fact that physicians with greater control over their emotions tend to feel more secure when making decisions and managing stress <sup>(26)</sup>. This association highlights that emotional regulation is not only a psychological skill but also a practical foundation for safe and efficient clinical practice. Lin <sup>(27)</sup> suggests that self-efficacy enhances the perception of competence, thereby strengthening self-confidence. In other words, feeling capable of managing difficult situations reinforces the professional self-image physicians build of themselves, which can have positive effects on both performance and the physician-patient relationship. Along these lines, Capone <sup>(28)</sup> demonstrated that professionals with high emotional self-efficacy show greater confidence in their performance. This can be interpreted as a positive feedback loop: the higher the self-efficacy, the stronger the confidence—and vice versa—creating a

virtuous cycle that sustains professional functioning under pressure.

A significant relationship was also found between emotional self-efficacy and the dimensions of spirituality and transcendence, suggesting that physicians with greater capacity to manage their emotions also experience a stronger connection with their purpose and personal values in the workplace. This connection can be fundamental for coping with stress and challenges inherent to the medical profession, as spirituality can act as an internal resource that strengthens resilience <sup>(30)</sup>. According to Jin <sup>(31)</sup>, healthcare professionals who develop emotional skills tend to find greater meaning and purpose in their work, which enhances their overall well-being.

From a health management perspective, this underscores the importance of creating spaces that foster emotional and spiritual development among medical personnel, as these aspects not only improve mental health but can also enhance commitment and the quality of patient care. Nonetheless, organizational factors such as work overload and lack of institutional support must also be considered, as these can negatively affect the relationship between emotional self-efficacy and spiritual well-being, as highlighted by Herrero-Hahn et al. <sup>(32)</sup>.

Similarly, a significant relationship was observed between emotional self-efficacy and interpersonal relationships among physicians. This suggests that professionals with greater emotional regulation skills are more effective in communication and conflict resolution within the workplace <sup>(33)</sup>. Emotional self-efficacy fosters greater empathy, which facilitates understanding others' emotions and improves teamwork collaboration. According to Chudner et al. <sup>(34)</sup>, individuals with high emotional self-efficacy possess superior social interaction management skills, which translates into a more harmonious and efficient work environment.

From a health management standpoint, this highlights the importance of promoting emotional development among physicians, as healthy interpersonal relationships improve not only the work climate but also the quality of patient care <sup>(35)</sup>. However, organizational factors such as leadership style, workload, and limited resources also influence the dynamics of interpersonal relationships, as indicated by Pérez-Valdecantos et al. <sup>(36)</sup>, which

calls for a comprehensive approach to institutional well-being policies.

The significant relationship between emotional self-efficacy and integral health among physicians suggests that professionals with greater capacity to manage their emotions enjoy better physical, psychological, and social well-being. This finding is particularly relevant in high-pressure clinical settings, where the ability to maintain emotional stability can make the difference between resilience and psychosomatic collapse. Emotional self-efficacy, as a protective factor against stress and anxiety, helps physicians maintain a balance between professional and personal demands, thereby promoting integral health. Souto et al.<sup>(37)</sup> report that physicians with high emotional self-efficacy are better equipped to face daily challenges in their work environment, improving their general well-being. Functionally, this not only reduces absenteeism and professional burnout but also enhances clinical performance and the quality of patient interactions.

From a health management perspective, this underlines the importance of implementing emotional development programs as part of workplace well-being strategies, as improving physicians' emotional health positively impacts service quality and the work environment. This represents a strategic investment in fostering a healthier organizational culture, where emotionality is recognized as a legitimate dimension of medical practice. However, integral health also depends on organizational factors that significantly influence physicians' well-being. As Tomas<sup>(38)</sup> notes, efforts aimed at strengthening physicians' emotional resources must be aligned with structural reforms so that the responsibility for well-being does not fall exclusively on the individual.

One of the main limitations of this study was its cross-sectional design, which prevents establishing causal relationships between emotional self-efficacy and well-being among physicians. Additionally, the research was conducted in a single high-complexity hospital, which restricts the generalizability of the results to other institutions with different organizational or cultural contexts. Moreover, as the study relied on online instruments, there is a potential risk of response bias due to social desirability or participants' subjective self-perception. These limitations should be taken into account when interpreting the findings and designing future research.

From a health management perspective, the practical implications of this study highlight the need to incorporate emotional self-efficacy as a strategic axis in the management of human talent in high-complexity hospitals. Strengthening this competency among physicians not only contributes to their psychological well-being but also enhances their performance, clinical decision-making, and quality of care.

In this sense, the study's findings support the implementation of institutional policies aimed at the emotional development of medical staff, the creation of healthy work environments, and the promotion of an organizational culture that values mental health as an integral component of healthcare management.

It is recommended that future research include physicians from different specialties and critical care services, in order to compare levels of emotional self-efficacy and well-being across diverse healthcare contexts. Similarly, longitudinal and multicenter studies are suggested to obtain more generalizable findings. It would also be particularly valuable to assess the effectiveness of programs aimed at strengthening emotional skills—such as emotional intelligence, mindfulness, or emotional regulation—while incorporating qualitative methodologies that provide deeper insight into physicians' lived experiences.

From an institutional standpoint, it is proposed that hospitals, especially high-complexity ones, develop and integrate continuous monitoring protocols for the emotional well-being of medical staff, as well as structured emotional support routines, such as peer-support circles, supervised active breaks, or professional listening spaces. It would also be appropriate to establish institutional alert indicators to detect early signs of professional burnout or emotional distress, facilitating timely interventions.

## Conclusion

This study concludes that there is a significant relationship between emotional self-efficacy and well-being among physicians in a high-complexity hospital, both at a general level and across all dimensions. This finding suggests that professionals who perceive a greater ability to identify, understand, regulate, and appropriately express their emotions tend to experience higher levels of well-being.



## REFERENCES

- Kim H-K, Seo J-H, Park C-H. The Mediating Effect of Self-Efficacy and Coping Strategy in Relation to Job Stress and Psychological Well-Being of Home-Visiting Care Workers for Elderly during the COVID-19 Pandemic. *International Journal of Environmental Research and Public Health* [Internet]. 2022 [cited 2025 Apr 24];19(19):12164. doi:10.3390/ijerph191912164
- Budrevičiūtė A, Raila G, Paukštaitienė R, Valius L, Argyrides M. Consultation Management during the COVID-19 Pandemic: The Experience of Lithuanian Physicians. *Healthcare* [Internet]. 2022 [cited 2025 Apr 26]; 10(12):2472. doi:10.3390/healthcare10122472
- Teixeira RA, Grimes A, Embry L, Aguilar C, Shay LA. Pediatric Oncology Providers' HPV Vaccine Knowledge, Attitude, Self-Efficacy, and Practice after Communication Training: A Comparison with a National Survey. *Vaccines* [Internet]. 2024 [cited 2025 Apr 27];12(9):1060. doi:10.3390/vaccines12091060
- Hanganu B, Iorga M, Pop LM, Ioan BG. Socio-Demographic, Professional and Institutional Characteristics That Make Romanian Doctors More Prone to Malpractice Complaints. *Medicina* [Internet]. 2022 [cited 2025 Apr 28];58(2):287. doi:10.3390/medicina58020287
- Viruez-Soto J, Delgado Bolton RC, San-Martín M, Vivanco L. Inter-Professional Collaboration and Occupational Well-Being of Physicians Who Work in Adverse Working Conditions. *Healthcare* [Internet]. 2021 [cited 2025 Apr 30];9(9):1210. doi:10.3390/healthcare9091210
- Ju TR, Mikrut EE, Spinelli A, Romain A-M, Brondolo E, Sundaram V, et al. Factors Associated with Burnout among Resident Physicians Responding to the COVID-19 Pandemic: A 2-Month Longitudinal Observation Study. *International Journal of Environmental Research and Public Health* [Internet]. 2022 [cited 2025 May 2];19(15):9714. doi:10.3390/ijerph19159714
- Cano-García M, Ruiz-Blandón D, Vergara-Velez I, Chaverra-Gil L. Impacto del estrés laboral en el bienestar psicológico del personal de un hospital público de Medellín, Colombia. *Cienc. Enferm.* [Internet]. 2023 [cited 2025 Jul 5];29:31. doi:10.29393/ce29-31iemv50031
- García-Torres M, Aguilar-Castro J, García-Méndez M. Bienestar psicológico y burnout en personal de salud durante la pandemia de COVID-19. *Escritos de Psicología* [Internet]. 2021 [cited 2025 Jul 5];14(2):96-106. doi:10.24310/espiescpsi.v14i2.13618
- Vega M. Bienestar social laboral y calidad de atención en el Centro Médico Especializado I-3 Liga Peruana de Lucha Contra el Cáncer – Trujillo [Internet]. Trujillo: Universidad Nacional de Trujillo; 2024 [cited 2025 May 2] Available from: <https://dspace.unitru.edu.pe/items/d7a6d1d9-b0cc-4ee2-8c60-09d813191188>
- Suyón A, Bautista L. Agotamiento emocional y bienestar psicológico en personal de salud de Lima Metropolitana durante la pandemia por Covid-19 [Internet]. Lima: Universidad San Ignacio de Loyola; 2022 [cited 2025 May 5] Available from: <https://repositorio.usil.edu.pe/items/99adae8d-f712-4d82-99ea-8961febff282>
- Valencia D. Estrés laboral y autoeficacia para el afrontamiento del estrés en personal de salud de un hospital estatal de Lima Metropolitana, en tiempos de pandemia por la COVID-19, año 2023 [Internet]. Lima: Universidad Norbert Wiener; 2023 [cited 2025 May 6] Available from: <https://repositorio.uwiener.edu.pe/entities/publication/ca6ecb2e-676c-4f26-a1b5-fb2f2b0f019b>
- Contreras-Camarena C, Lira-Veliz H, Benito-Condor B. Autoestima y síndrome de burnout en médicos de unidades críticas. Estudio correlacional. Hospital Nacional Dos de Mayo. Lima-Perú. *Horiz. Med.* [Internet]. 2021 [cited 2025 May 6];21(2):e1507. doi:10.24265/horizmed.2021.v21n2.06
- Chalco M. Modelo integrador explicativo de adherencia al tratamiento basado en la relación médico - paciente, autoeficacia, estado emocional y apoyo social percibido en pacientes con insuficiencia renal crónica de hospitales nacionales – Lima [Internet]. Lima: Universidad Peruana Cayetano Heredia; 2021 [cited 2025 May 7] Available from: <https://repositorio.upch.edu.pe/handle/20.500.12866/11245>
- Ying Y-H, Cheng H-C, Chen M-J, Lee W-L, Chang K. Health Policies, Physician Incentives, and Service Utilization for Non-Acute Diseases in Taiwan: The Case of Cataracts. *Healthcare* [Internet]. 2025 [cited 2025 May 8];13(6):587. doi:10.3390/healthcare13060587
- Hanco-Monrroy DE, Caballero-Apaza LM, Abarca-Fernández D, Castagnetto JM, Condori-Cardoza FA, De-Lama Moran R, et al. Medical Professionalism and Its Association with Dropout Intention in Peruvian Medical Students during the COVID-19 Pandemic. *Behavioral Sciences* [Internet]. 2024 [cited 2025 May 9];14(8):641. doi:10.3390/bs14080641
- Weurlander M, Wanstrom L, Seeberger A, Lonn A, Barman L, Hult H, et al. Development and validation of the physician self-efficacy to manage emotional challenges Scale (PSMEC). *BMC Medical Education* [Internet]. 2024 [cited 2025 May 10];24:228. doi:10.1186/s12909-024-05220-9
- Merino-Soto C. Aiken's V Coefficient: Differences in Content Validity Judgments. *MHSalud* [Internet]. 2023 [cited 2025 May 10];20(1):23-32. doi: 10.15359/mhs.20-1.3
- Horwitz N, Bascuñán L, Schiattino I, Acuña J, Jiménez J. Validación de una escala para medir el bienestar subjetivo de los médicos (BISUMED). *Revista médica de Chile* [Internet]. 2010 [cited 2025 May 10];138(9):1084-1090. doi:10.4067/S0034-98872010000900002
- Mesfioui M, Trufin J, Zuyderhoff P. Bounds on Spearman's rho when at least one random variable is discrete. *Eur. Actuar. J.* [Internet]. 2022 [cited 2025 May 11];12:321-348. doi:10.1007/s13385-021-00289-8
- Lanzante J. Testing for differences between two distributions in the presence of serial correlation using the Kolmogorov-Smirnov and Kuiper's tests. *International Journal of Climatology* [Internet]. 2021 [cited 2025 May 11];41(14):6314-6323. doi:10.1002/joc.7196
- Lee H. Building Wealth, Building Health: Asset Holding and Health Care Utilization Among U.S. Immigrants. *Healthcare* [Internet]. 2025 [cited 2025 May 14];13(2):101. doi:10.3390/healthcare13020101
- Ishikawa M, Seto R, Oguro M, Sato Y. Relationship Between Critically Longer Working Hours, Depressive Symptoms, and Suicidal Ideation Among Obstetricians and Gynecologists in Japan. *Healthcare* [Internet]. 2024 [cited 2025 May 14];12(23):2364. doi:10.3390/healthcare12232364
- Pérez-Valdecantos D, Caballero-García A, del Castillo-Sanz T, Bello HJ, Roche E, Roche A, et al. Variations in Salivary Stress Biomarkers and Their Relationship with Anxiety, Self-Efficacy and Sleeping Quality in Emergency Health Care Professionals. *International Journal of Environmental Research and Public Health* [Internet]. 2021 [cited 2025 May 14];18(17):9277. doi:10.3390/ijerph18179277
- Zamakos E, Metallinou D, Tigka M, Lykeridou A, Sarantaki A, Nanou C. The Associations of Perceived Self-Efficacy with Emotional Intelligence, Personality, Resilience, and Attitudes Towards Death among Midwives. *Healthcare* [Internet]. 2024 [cited 2025 May 14];12(11):1129. doi:10.3390/healthcare12111129

25. Cavallari E, Setti I, Curcuruto M, Sommovigo V. Coping in the Face of Verbal Aggression: The Role of Self-Efficacy in Protecting Healthcare Professionals' Well-Being and Job Satisfaction. *Behavioral Sciences* [Internet]. 2025 [cited 2025 May 14];15(4):478. doi:10.3390/bs15040478
26. Abrams MP, Salzman J, Espina Rey A, Daly K. Impact of Providing Peer Support on Medical Students' Empathy, Self-Efficacy, and Mental Health Stigma. *International Journal of Environmental Research and Public Health* [Internet]. 2022 [cited 2025 May 14];19(9):5135. doi:10.3390/ijerph19095135
27. Lin Y-J, Yen C-F, Chang Y-P, Wang P-W. Comparisons of Motivation to Receive COVID-19 Vaccination and Related Factors between Frontline Physicians and Nurses and the Public in Taiwan: Applying the Extended Protection Motivation Theory. *Vaccines* [Internet]. 2021 [cited 2025 May 14];9(5):528. doi:10.3390/vaccines9050528
28. Capone V. Medical Communication Perceived Self-Efficacy (ME-CO) Scale: Construction and Validation of a New Measuring Instrument from a Socio-Cognitive Perspective. *European Journal of Investigation in Health, Psychology and Education* [Internet]. 2022 [cited 2025 May 14];12(7):765-780. doi:10.3390/ejihpe12070056
29. Hoegen P, Vos M, van Oostveen C, de Bot C, Echteld MA, Maaskant J, et al. Nurse Leadership and Work Environment Association with Outcome Expectancy and Self-Efficacy in Evidence-Based Practice among Hospital Nurses in The Netherlands: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health* [Internet]. 2022 [cited 2025 May 14];19(21):14422. doi:10.3390/ijerph192114422
30. Jung S-h. Does Workplace Spirituality Increase Self-Esteem in Female Professional Dancers? The Mediating Effect of Positive Psychological Capital and Team Trust. *Religions* [Internet]. 2023 [cited 2025 May 14];14(4):445. doi:10.3390/rel14040445
31. Jin J. Factors Influencing Spiritual Health among Nursing Students in the Prolonged COVID-19 Situation. *International Journal of Environmental Research and Public Health* [Internet]. 2023 [cited 2025 May 15];20(4):3716. doi:10.3390/ijerph20043716
32. Herrero-Hahn R, Montoya-Juárez R, Hueso-Montoro C, Martí-García C, Salazar-Blandón DA, García-Caro MP. Cultural Adaptation, Validation, and Analysis of the Self-Efficacy in Palliative Care Scale for Use with Spanish Nurses. *International Journal of Environmental Research and Public Health* [Internet]. 2019 [cited 2025 May 15];16(23):4840. doi:10.3390/ijerph16234840
33. Dębska-Janus M, Rozpara M, Muchacka-Cymerman A, Dębski P, Tomik R. Health Behaviors in the Context of Optimism and Self-Efficacy—The Role of Gender Differences: A Cross-Sectional Study in Polish Health Sciences Students. *Behavioral Sciences* [Internet]. 2025 [cited 2025 May 20];15(5):626. doi:10.3390/bs15050626
34. Chudner I, Shnider A, Gluzman O, Keidar H, Haimi M. Gender Perspectives on Self-Employment Among Israeli Family Physicians: A Qualitative Study. *Social Sciences* [Internet]. 2025 [cited 2025 May 21]; 14(2):96. doi:10.3390/socsci14020096
35. Zaman N, Goldberg DM, Kelly S, Russell RS, Drye SL. The Relationship between Nurses' Training and Perceptions of Electronic Documentation Systems. *Nursing Reports* [Internet]. 2021 [cited 2025 May 21];11(1):12-27. doi:10.3390/nursrep11010002
36. Pérez-Valdecantos D, Caballero-García A, Bello HJ, Noriega-González D, Palomar-Ciria N, Roche A, et al. Professional Quality of Life of Healthcare Workers in Hospital Emergency Departments. *Behavioral Sciences* [Internet]. 2022 [cited 2025 May 22];12(6):188. doi:10.3390/bs12060188
37. Souto I, Brito E, Pereira A. Self-Efficacy, Resilience and Distress: Challenges in Education for Sustainable Entrepreneurship in a Health Context. *Education Sciences* [Internet]. 2022 [cited 2025 May 22];12(10):720. doi:10.3390/educsci12100720
38. Tomas J. Occupational Self-Efficacy as a Mediator in the Reciprocal Relationship between Job Demands and Mental Health Complaints: A Three-Wave Investigation. *International Journal of Environmental Research and Public Health* [Internet]. 2021 [cited 2025 May 27];18(21):11532. doi:10.3390/ijerph182111532

#### Funding sources

The research was conducted with the author's own resources.

#### Conflict of interest statement

The author declares no conflicts of interest.

#### Authorship contribution

Conceptualization, methodology, formal analysis, research, resources, writing—original draft, writing—revision and editing, and visualization.

## APPENDICES

### Appendix 1. Physician Emotional Self-Efficacy Scale

	Strongly Disagree	Disagree	Agree	Strongly Agree
<b>Dimension: Communication with the Patient</b>				
1. I can communicate with difficult patients				
2. I can handle difficult questions from patients				
3. I am confident in my ability to attend to a patient/family member who expresses strong emotions				
4. I am good at calming patients				
5. I am good at giving bad news to patients				
6. I am good at establishing good relationships with patients				
<b>Dimension: Being Questioned</b>				
7. I can handle being questioned by patients				
8. I can tolerate being questioned by other healthcare professionals				
<b>Dimension: Professional Competence</b>				
9. I feel confident that I have sufficient knowledge				
10. I am good at the practical skills required in my role as a physician				
11. I feel confident in managing my knowledge gaps				
12. I believe in my ability to make sound medical decisions				
<b>Dimension: Educational Competence</b>				
13. I can get patients to follow advice and recommendations				
14. I am good at judging whether the patient has understood my information				
15. I can explain things in a way that patients understand				
<b>Dimension: Relationship with Other Professionals</b>				
16. I can contribute to a positive collaboration within the healthcare team				
17. I am good at establishing good relationships with other healthcare professionals				

**Appendix 2.** Physician Well-Being Scale

	Strongly Disagree	Disagree	Agree	Strongly Agree
<b>Dimension: Self-Confidence</b>				
1. I am confident in my ability to face life crises				
2. I am confident in my ability to face the future				
3. I am capable of facing unexpected situations				
4. I am capable of achieving my personal goals				
<b>Dimension: Spirituality and Transcendence</b>				
5. I am part of a harmonious whole				
6. I have spiritual values				
7. I would choose my profession again				
8. I feel part of a collective project				
9. My life has meaning				
<b>Dimension: Interpersonal Relationships</b>				
10. I have a good relationship with my partner				
11. I have a good relationship with my children/ family members				
12. I have a good circle of friends				
13. I am satisfied with my friends				
<b>Dimension: Integral Health</b>				
14. I do not lose patience over trivial matters				
15. I do not have trouble sleeping				
16. I can easily maintain concentration				
17. Criticism does not bother me				
18. I do not experience extreme fatigue				
19. I do not have pain in any part of my body				

**Appendix 3.** Descriptive Statistics of Emotional Self-Efficacy by Items

Dimension	Item	Mean	Median	Standard deviation
Communication with the Patient	I1	3.20	3	0.89
	I2	3.35	3	0.85
	I3	3.05	3	0.92
	I4	3.50	4	0.78
	I5	3.13	3	0.90
	I6	3.42	3	0.84
Being Questioned	I7	2.95	3	0.91
	I8	3.61	4	0.75
Professional Competence	I9	3.26	3	0.88
	I10	3.45	3	0.83
	I11	3.15	3	0.89
	I12	3.25	3	0.87
Educational Competence	I13	3.55	4	0.79
	I14	3.23	3	0.94
	I15	3.34	3	0.85
Relationship with Other Professionals	I16	3.50	4	0.76
	I17	3.45	3	0.82

**Appendix 4.** Descriptive Statistics of Well-Being by Items

Dimension	Item	Mean	Median	Standard deviation
Self-Confidence	I1	3.20	3	0.89
	I2	3.35	3	0.85
	I3	3.05	3	0.92
	I4	3.50	4	0.78
Spirituality and Transcendence	I5	3.10	3	0.90
	I6	3.40	3	0.84
	I7	2.95	3	0.91
	I8	3.60	4	0.75
	I9	3.20	3	0.88
Interpersonal Relationships	I10	3.45	3	0.83
	I11	3.15	3	0.89
	I12	3.25	3	0.87
	I13	3.55	4	0.79
Integral Health	I14	3.00	3	0.94
	I15	3.30	3	0.85
	I16	3.50	4	0.76
	I17	3.40	3	0.82
	I18	3.25	3	0.88
	I19	3.10	3	0.91