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#### **ORIGINAL**



# Level of work-related stress among nursing staff at the IESS General Hospital in Santo Domingo, 2024

Nivel de estrés laboral en el personal de enfermería del Hospital General IESS Santo Domingo, 2024

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#### **ABSTRACT**

Stress is defined as the set of physiological reactions that prepare the organism for action. This research aims to determine the level of occupational stress in the health personnel of the Instituto Ecuatoriano de Seguridad Social (IESS) of Santo Domingo, 2024. The study sampled 94 nursing personnel, including the administrative and operational areas, adopting a quantitative approach, with a descriptive scope and a non-experimental cross-sectional design. It used the Nurse Stress Scale (NSS) as an instrument, which evaluates the physical, psychological and social state of the nursing staff. The results of the research determined that the nursing staff presents a medium level of work stress, represented by 65 % of the participants; with a significant impact on the psychological dimension. In addition, it was possible to affirm that work overload, rotating schedules, insufficient remuneration and pressure from supervisors and colleagues are the main causes of this phenomenon. Similarly, it was found that working night shifts is related to greater emotional fatigue and high rates of health problems; significantly affecting the physical and emotional well-being of nurses, resulting in physical and psychological wear and tear of workers. In addition, it highlighted the importance of social support and implementing strategies to improve the working conditions and well-being of the nursing staff, in order to improve the quality of care and retain qualified personnel in the hospital.

Keywords: Nursing; Work Stress; IESS.

#### **RESUMEN**

El estrés se define como el conjunto de reacciones fisiológicas que preparan al organismo para la acción. Esta investigación tiene como objetivo determinar el nivel de estrés laboral en el personal de salud del Instituto Ecuatoriano de Seguridad Social (IESS) de Santo Domingo, 2024. El estudio tomó como muestra a 94 personas pertenecientes al personal de enfermería, incluyendo al área administrativa como operacional, adoptando un enfoque cuantitativo, con un alcance descriptivo y un diseño no experimental de corte transversal. El cual, utilizó Nurse Stress Scale (NSS) como instrumento, la cual evalúa el estado físico, psicológico y social del personal de enfermería. Los resultados de la investigación determinaron que el personal de enfermería presenta un nivel medio de estrés laboral, representado por un 65 % de los participantes; con una repercusión significativa en la dimensión psicológica. Además, se pudo afirmar que la sobrecarga laboral, los horarios rotativos, la remuneración insuficiente y la presión de los supervisores y compañeros son las principales causas de este fenómeno. De igual forma, se encontró que trabajar en turnos nocturnos está relacionado con mayor fatiga emocional y altos índices de problemas de salud; afectando de manera significativa el bienestar físico y emocional de los enfermeros, obteniendo desgaste físico y psicológicos de los trabajadores. Además, resaltó la importancia del apoyo social e implementar estrategias para mejorar las condiciones laborales y el bienestar del personal de enfermería, para mejorar la calidad de atención y retener al personal calificado en el hospital.

Palabras clave: Enfermería; Estrés Laboral; IESS.

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#### INTRODUCTION

#### **Problem Statement**

Work-related stress is becoming a chronic disease in the lives of workers worldwide. "In Europe, 44,1 % of doctors and nurses are affected by work overload, fatigue, and physical and mental exhaustion". Mexico has been recognized as one of the Latin American countries with the highest rates of work-related stress. Mexico led the top three in this ranking with 63 %, followed by India and the United States, both with 59 %. Colombia became one of the countries with the highest levels of work-related stress in Latin America. (1,2,3,4) According to the same source, approximately three out of five workers in the country have experienced work-related stress.

Studies reveal that 10 % of Ecuadorians suffer from work-related stress. (2,5,6,7,8) Likewise, high work demands in the public hospital sector, such as a lack of camaraderie, had created an unsustainable environment, where stress levels increased. In this sense, "excessive workloads have been deteriorating and causing people to lose the commitment to their work that they initially had with the institution". (3,9,10,11,12,13) In the nursing field, factors such as high workloads, experiences related to death, and a lack of collaboration among colleagues, especially in critical areas such as intensive care units, contributed to work-related stress. (4,14,15,16,17)

No information from reliable sources has been found for Santo Domingo, however, at the IESS General Hospital in Santo Domingo, nursing staff were exposed to various stress triggers, which had negative consequences at the work, social, family, and economic levels. These factors were related to work overload, rotating schedules that negatively affected family relationships, sleep disorders, and weight problems. (18,19,20,21,22) Likewise, insufficient pay, mistreatment by patients, the assignment of responsibilities that did not fit the nursing role, and lack of time were crucial elements. (23,24,25,26,27) Pressure from supervisors and colleagues also contributed to a tense work environment. (28,29,30,31)

Work-related stress is a public health problem that affects workers' well-being, causing physical and emotional harm, as well as an imbalance in their work and emotional state. (5) In the health sector, it was essential to investigate work-related stress in order to develop effective interventions, improve the quality of care, retain qualified staff, and provide support for the well-being of necessary personnel. (32,33,34,35)

What is the level of work-related stress among nursing staff at the IESS General Hospital in Santo Domingo in 2024?

#### Objective

To determine the level of work-related stress among nursing staff at the IESS General Hospital, Santo Domingo, 2024.

#### **METHOD**

#### Type and Design of the Research

This study took a quantitative approach, as it was based on the collection of numerical data to assess the presence of work-related stress among nursing staff. This made it possible to obtain accurate statistical results for healthcare personnel, facilitating the implementation of measures for future studies. (6) The fundamental objective was to expand, from a theoretical perspective, knowledge about the causes and preventive measures. The research was carried out at a descriptive level, analyzing and detailing exclusively the responses obtained in the statistics on the level of stress among healthcare personnel; (7) without influencing the factors that determine the variable.

The term "design" refers to the plan or strategy devised to answer the research questions. (8) The design used in this research was non-experimental, as it did not seek to modify any problematic situation in the locality. Prospective data were collected using a cross-sectional design, which "is classified as an individual-based observational study that usually has a dual purpose: descriptive and analytical". (9) In addition, interventions with the sample were limited and the time frame for applying the practice was brief.

## Population and Sample

#### **Population**

The population is the source of the desired information related to the study topic, which will be analyzed, measured, and quantified. The population to be considered was the operational and administrative nursing staff of the IESS Hospital in Santo Domingo, which has around 200 workers distributed across different areas such as critical care (emergency, ICU, APH), diagnostic and treatment assistants (imaging, nutrition, pathology, physiatry, pharmacy, laboratory), hospitalization and outpatient care (hospitalization, outpatient consultations, social work, admissions), and administration.

#### Sample

The sample was selected using the procedure of selecting representative and valid parts of the population. In this research, a sample of 94 nursing staff from different areas (critical care, diagnostic and treatment

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assistants, hospitalization and outpatient care, and administration) was taken. The inclusion criteria were professional nurses (licensed) and assistants with a minimum of six months of work at the institution, nursing interns, both sexes, and acceptance to participate in the study. The exclusion criteria were practitioners from various institutions, personnel indirectly hired by the institution, and personnel with less than six months of contract.

#### **Data Collection Instruments**

The Nurse Stress Scale (NSS) was the best research instrument for measuring the variable. It was created in 1981 by Gray-Toft and Anderson with the aim of quantifying the frequency of sources of stress. The objective of the instrument is to measure the frequency with which certain situations are perceived as stressful by nursing professionals in the hospital environment. The scale is valid, having been used and modified in Peru by Licda. Niño L et al. (11), and reliable "through the test-retest, obtaining a value of 0,81". The instrument consists of 34 items divided into three dimensions: physical with four questions, psychological with 21 questions, and social with nine questions (12); its response scale consists of four options 0=always, 1=almost always, 2=almost never, and 3=never. It was observed that the time needed to complete the scale ranged from 10 to 15 minutes.

Figure 1 shows the factors involved in work-related stress in the nursing field, including physical, psychological, and social dimensions. It consists of stressors such as workload, death and suffering, insufficient preparation, lack of support, uncertainty about treatment, problems with doctors, and problems among nursing professionals stressors such as workload, death and suffering, insufficient preparation, lack of support, uncertainty about treatment, problems with doctors, and problems among nursing professionals.

| Dimensión<br>Física      | Factor I: Carga de trabajo.                              | Preguntas | 1, 6, 7, 9, 10, 11,<br>13, 14 |
|--------------------------|--|-----------|-------------------------------|
| Dimensión<br>Psicológica | Factor II: Muerte y sufrimiento.                         | Preguntas | 16, 17, 18, 20, 23,<br>32     |
|                          | Factor III: Preparación insuficiente.                    | Preguntas | 4, 10, 21, 22, 24,<br>26      |
|                          | Factor IV: Falta de apoyo.                               | Preguntas | 28, 30, 31                    |
|                          | Factor V: Incertidumbre respecto al tratamiento.         | Preguntas | 2, 3, 5, 8, 12                |
| Dimensión Social         | Factor VI: Problemas con los médicos.                    | Preguntas | 15, 25, 27, 29                |
|                          | Factor VII: Problemas entre profesionales de enfermería. | Preguntas | 33, 34                        |

Figure 1. Stressors

Figure 2 shows the scores in the overall score and by dimension. Overall, the scores range from 0-34 for low, 35-68 for medium, and 69-102 for high. In the physical dimension, the scores range from 0-4 for low, 5-8 for medium, and 9-12 for high. For the psychological dimension, the ranges are 0-21 for low, 22-42 for medium, and 43-63 for high. And in the social dimension, the scores are 0-9 for low, 10-18 for medium, and 19-27 for high.

|             | _ Psicologica         | 0-21        |              | 11            |
|-------------|-----------------------|-------------|--------------|---------------|
| Nimaneianae | Física<br>Psicológica | 0-4<br>0-21 | 5-8<br>22-42 | 9-12<br>43-63 |
| General     |                       | 0 -34       | 35-68        | 69-102        |
| Niveles     |                       | Bajo        | Medio        | Alto          |

Figure 2. Scores by Dimension

#### Data Processing and Analysis Plan

The results obtained from the data collection instrument were analyzed question by question and tabulated directly using Google Forms, as it was a digital survey. This allowed the results to be processed and digitized using Microsoft Excel. All data was aligned quantitatively and, once collected, grouped according to similar

characteristics. The information was organized in a data figure to facilitate the retrieval of questions and answers, allowing for effective tabulation.

#### **Ethical Considerations**

Ethics were taken into account in this research, the objective of which is to "guarantee the accuracy of events, respect for the truth, and trust in science". (13) By obtaining the informed consent of the participants, all participants will have equal opportunity to be subjects of research, without distinction. In addition, the data was kept anonymous to protect the information collected and ensure that it is used only for research purposes.

#### **RESULTS**

#### **Level of Work Stress**

Figure 3 shows the levels of work stress among nursing staff at the IESS General Hospital in Santo Domingo, Ecuador, during 2024. According to the research, 65 % of respondents were found to have a medium level of work stress. However, 33 % had a high level of stress, which has a negative impact on staff well-being and performance.

|             | N  | %    |
|-------------|----|------|
| Nivel Bajo  | 2  | 2%   |
| Nivel Medio | 61 | 65%  |
| Nivel Alto  | 31 | 33%  |
| Total       | 94 | 100% |

Figure 3. Overall Level of Work-Related Stress

#### Social and Demographic Characteristics

Figure 4 describes the social and demographic characteristics of nursing staff at the IESS General Hospital in Santo Domingo in 2024. Women were the most represented gender, accounting for 80,9 %, while men accounted for 18,1 %. Participants in the 31-40 age range constituted 57,4 %, single 44,7 %, married 31,9 %, cohabiting 13,8 %, and divorced 9,6 %. In addition, 29,8 % of participants did not have children. In terms of professional qualifications, 60,6 % are registered nurses, 23,4 % are nursing assistants, and 8,5 % are interns, 4,3 % are orderlies, and the rest are other professionals. Most participants work in critical care, at 55,3 %, with the operating room area standing out at 94,7 %. In terms of length of service, 53,7 % have between 7 and 10 years of experience; and 89,4 % work rotating shifts, while 10,6 % work day shifts.

|              | Variable                   | N  | %    |
|--------------|----------------------------|----|------|
|              | Masculino                  | 17 | 18,1 |
| Género       | Femenino                   | 76 | 80,9 |
|              | Otro                       | 1  | 1,1  |
|              | 18 - 20 años               | 0  | 0    |
| Edad         | 21 - 30 años               | 20 | 21,3 |
|              | 31 - 40 años               | 54 | 57,4 |
|              |                            |    |      |
|              | 41 - 50 años               | 16 | 17   |
|              | 51 años o más              | 4  | 4,3  |
|              | Soltero/a                  | 42 | 44,7 |
|              | Casado/a                   | 30 | 31,9 |
| Estado civil | Unión libre                | 13 | 13,8 |
|              | Divorciado/a               | 9  | 9,6  |
|              | Viudo/a                    | 0  | 0    |
|              | Ninguno                    | 28 | 29,8 |
|              | Uno                        | 25 | 26,6 |
| Hijos        | Dos                        | 27 | 28,7 |
|              | Más de tres                | 14 | 14,9 |
|              | Licenciado/a en enfermería | 57 | 60,6 |
|              | Auxiliar de enfermería     | 22 | 23,4 |
|              | Interno de enfermería      | 8  | 8.5  |

|                               | Licenciado/a en enfermería  | 57 | 60.6 |
|-------------------------------|---|----|------|
|                               | Auxiliar de enfermería  | 22 | 23,4 |
|                               | Interno de enfermería   | 8  | 8.5  |
| Profesión o                   | Camillero   | 4  | 4,3  |
| cargo                         | Lcdo. Terapia Física  | 1  | 1,1  |
|                               | Terapista respiratoria  | 1  | 1,1  |
|                               | IRE   | 1  | 1,1  |
|                               | Medicina Crítica (emergencia.<br>UCI, <u>APH)</u><br>Auxiliar de diagnóstico y                    | 52 | 55,3 |
| Área o servicio<br>de trabajo | tratamiento (imagen, nutrición,<br>patología, fisiatría, farmacia,<br>laboratorio)                | 0  | 0    |
|                               | Hospitalización y ambulatorio<br>(hospitalización, consulta externa,<br>trabajo social, admisión) | 39 | 41,5 |
|                               | Administrativo  | 3  | 3,2  |
| Rol principal del             | Operativo   | 89 | 94,7 |
| hospital                      | Administrativo  | 5  | 5,3  |
|                               | Menos de 1 año de servicio  | 18 | 19,1 |
|                               | De 1 a 3 años de servicio   | 4  | 4,3  |
| Años de servicio              | De 4 a 6 años de servicio   | 10 | 10,6 |
|                               | De 7 a 10 años de servicio  | 50 | 53,2 |
|                               | Más de 10 años de servicio  | 12 | 12,8 |
|                               | Diurno  | 10 | 10,6 |
| Tuno de trabajo               | Nocturno  | 0  | 0    |
|                               | Rotativo  | 84 | 89,4 |

Figure 4. Descriptive Data of Participants

### **Physical Dimension**

Figure 5 provides an overview of the level of work-related stress according to the physical dimension among nursing staff at the IESS General Hospital. According to the research, it was shown that 60 % of respondents have a medium level of work stress, 28 % have a low level, and 13 % have a high level.

|             | N  | %    |
|-------------|----|------|
| Nivel Bajo  | 26 | 28%  |
| Nivel Medio | 56 | 60%  |
| Nivel Alto  | 12 | 13%  |
| Total       | 94 | 100% |

Figure 5. Physical Dimension

|     |   | Sie | mpre        | _  | Casi<br>siempre |    | asi<br>nca   | Nunca |           | To | tal |
|-----|---|-----|-------------|----|-----------------|----|--------------|-------|-----------|----|-----|
| N°. | Pregunta  | N   | %           | N  | %               | N  | %            | N     | %         | N  | %   |
| 1   | Interrupciones frecuentes en la realización de sus tareas.          | 16  | <u>17</u>   | 30 | 31, <u>9</u>    | 35 | 37, <u>2</u> | 13    | 14        | 94 | 100 |
| 2   | Recibir críticas de médicos.  Realización de cuidados de enfermería | 13  | <u>13,8</u> | 19 | 20, <u>2</u>    | 44 | 46, <u>8</u> | 18    | 19        | 94 | 100 |
| 3   | que resultan dolorosos para los pacientes.                          | 10  | 10,6        | 31 | 33              | 37 | 39, <u>4</u> | 16    | <u>17</u> | 94 | 100 |
| 4   | Sentirse impotente en el caso de un paciente que no mejora.         | 25  | 26,6        | 42 | 44, <u>7</u>    | 16 | <u>17</u>    | 11    | 12        | 94 | 100 |

Figure 6. Physical Dimension by Items

Figure 6 shows the significant percentages of participants who almost always experienced frequent interruptions in the performance of their tasks (31,9 %), with 17 % stating that they were always frequently interrupted in the performing their tasks. 13,8 % of respondents always received criticism from doctors, while 20,2 % experienced this situation almost always, showing that more than a third of nursing staff are exposed to criticism from medical staff. Thirty-three percent stated that they almost always perform nursing care that is painful for patients. In addition, 26,6 % always felt helpless when faced with patients who did not improve, while 44,7 % felt this way almost always. Taken together, these data showed that 71,3 % of nursing staff regularly faced feelings of helplessness in their work.

#### **Psychological Dimension**

Figure 7 shows the level of work stress according to the psychological dimension among nursing staff at the IESS General Hospital. It was shown that 56 % of those surveyed have a medium level of work stress. Forty-one percent have a high level of stress, indicating problems in the mental health and well-being of nursing staff, which could affect their performance and the quality of patient care.

|             | N  | %    |
|-------------|----|------|
| Nivel Bajo  | 2  | 2%   |
| Nivel Medio | 53 | 56%  |
| Nivel Alto  | 39 | 41%  |
| Total       | 94 | 100% |

Figure 7. Psychological Dimension

Figure 8 presents the items related to the psychological dimension. 10,6 % of participants stated that they almost always had problems with a supervisor, while 3,2 % stated that they always experienced this. In addition, 7,4 % stated that they are always affected when listening to or talking to a patient about their impending death. On the other hand, 10,6 % of participants indicated that they did not have the opportunity to talk openly with colleagues about service issues. Patient death is a relatively common experience, affecting approximately onethird of the sample, or 34 %. It is striking that 90,5 % of participants almost never (42,6 %) or never (47,9 %) had any kind of conflict with doctors. 10,6 % of nursing staff always experienced constant fear of making mistakes in patient care. In addition, 23,4 % stated that they almost always lived with this fear, representing 34 % of the total sample. On the other hand, 26,6 % of participants indicated that they almost always lacked opportunities to share experiences and feelings with other colleagues, indicating a deficiency in communication and mutual support among staff. The death of patients with whom they had had a close emotional relationship represents a challenge. 5,3 % stated that they had always experienced emotional difficulties, while 18,1 % experienced them almost always. It is alarming that 20,2 % always and 23,4 % almost always face the absence of a doctor when a patient is dying. This implies that more than half of the nursing staff, 43,6 %, was significantly affected by this emotional burden. In addition, 14,4 % almost always disagreed with the treatment of patients, and 6,4 % stated that they always disagree. 6,4 % of respondents stated that they have always felt insufficiently prepared to emotionally support the patient's family. These results highlight the need for training in communication skills and emotional support for nursing staff.

|            |   |     |         |    | Casi         | (  | Casi         |    |              | _  |       |  |
|------------|---|-----|---------|----|--------------|----|--------------|----|--------------|----|-------|--|
|            |   | Sie | Siempre |    | siempre      |    | nunca        |    | Nunca<br>I   |    | Total |  |
| <b>N</b> ° | Pregunta  | N   | %       | N  | %            | N  | %            | N  | %            | N  | %     |  |
| 5          | Problemas con un supervisor.  | 3   | 3,2     | 10 | 10, <u>6</u> | 35 | 37, <u>2</u> | 46 | 48, <u>9</u> | 94 | 100   |  |
| 6          | Escuchar o hablar con un paciente sobre su muerte cercana.                                    | 7   | 7,4     | 19 | 20, <u>2</u> | 34 | 36, <u>2</u> | 34 | 36, <u>2</u> | 94 | 100   |  |
| 7          | No tener ocasión para hablar abiertamente con los compañeros (enfermeras/os y/o auxiliares de | 10  | 10,6    | 27 | 28,7         | 31 | 33           | 26 | 27,7         | 94 | 100   |  |
|            | enfermería) del servicio sobre problemas en el servicio.                                      |     |         |    |              |    |              |    |              |    |       |  |

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| 8  | La muerte del paciente.  | 10 | 10,6       | 22  | 23,4         | 37 | 39,4         | 25   | 26,6 9         | )4             | 100 |
|----|--|----|------------|-----|--------------|----|--------------|------|----------------|----------------|-----|
| 9  | Problemas con uno o varios médicos.                                  | 0  | 0          | 9   | 9,6          | 40 | 42,6         | 45   | 47,9           | 94             | 100 |
|    | <u>Miedo a cometer un error en</u> los                               |    |            |     |              |    |              |      |                |                |     |
| 10 | cuidados de enfermería de un   | 10 | 10,6       | 22  | 23,4         | 36 | 38,3         | 26   | 27,7 9         | )4             | 100 |
|    | paciente.  |    |            |     |              |    |              |      |                |                |     |
|    | No tener ocasión para compartir                                      |    |            |     |              |    |              |      |                |                |     |
|    | experiencias y sentimientos con otros                                |    |            |     |              |    |              |      |                |                |     |
| 11 | compañeros (enfermeras/os y/o  | 8  | 8,5        | 25  | 26,6         | 36 | 38,3         | 25   | 26,6 9         | 94             | 100 |
|    | auxiliares de enfermería) del servicio.                              |    |            |     |              |    |              |      |                |                |     |
| 12 | Muerte de un paciente con quien has                                  | _  | <i>5</i> 2 | 47  | 40.4         | 40 | 40.0         | 20   | 24.0           |                | 100 |
| 12 | llegado a tener una relación estrecha.                               | 5  | 5,3        | 17  | 18 <u>,1</u> | 40 | 42, <u>6</u> | 32   | 34 9           | 14             | 100 |
| 13 | El médico no está presente cuando un                                 | 10 | 20.2       | 22  | 23.4         | 28 | 20.8         | 25   | 26,6 9         | 14             | 100 |
|    | paciente se está muriendo.   | 13 | 20,2       | 22  | 23, <u>4</u> | 20 | 23, <u>0</u> | 20   | 20, <u>0</u>   | <del>/ 1</del> | 100 |
| 14 | Fetar on desaction can al  | 6  | 6.4        | 1.1 | 140          | 20 | 40.4         | 26   | 20.2           |                | 100 |
| 14 | tratamiento de un paciente.  | 6  | 0,4        | 14  | 14,9         | 30 | 40,4         | 30   | 38,3 9         | 14             | 100 |
|    | Sentirse insuficientemente preparado                                 |    |            |     |              |    |              |      |                |                |     |
| 15 | <u>para ayudar</u> <u>emocionalmente a</u> la                        | 6  | 6,4        | 20  | 21,3         | 32 | 34           | 36   | 38,3           | 94             | 100 |
|    | familia del paciente.  |    |            |     |              |    |              |      |                |                |     |
|    | No tener ocasión para expresar a otros compañeros (enfermeras/os y/o |    |            |     |              |    |              |      |                |                |     |
|    | compañeros (enfermeras/os y/o auxiliares de enfermería) del servicio |    |            |     |              |    |              |      |                |                |     |
| 16 | auxiliares de efficilierta) del servicio                             | 3  | 3 2        | 20  | 21.2         | 27 | 30 1         | 2/   | 36.2 0         | 14             | 100 |
| 10 | mis sentimientos negativos hacia los                                 | 3  | 3,2        | 20  | 21,3         | 31 | 39,4         | 34   | 36,2 9         | 74             | 100 |
|    | pacientes (Ej.: pacientes conflictivos.                              |    |            |     |              |    |              |      |                |                |     |
|    | hostilidad, etc.)  |    |            |     |              |    |              |      |                |                |     |
|    | Recibir información insuficiente del                                 |    |            |     |              |    |              |      |                |                |     |
| 17 | médico acerca <u>del estado</u> de un                                | 10 | 10,6       | 28  | 29,8         | 28 | 29,8         | 28   | 29,8 9         | 4              | 100 |
|    | paciente.  |    |            |     |              |    |              |      |                |                |     |
|    | No disponer de una contestación                                      |    |            |     |              |    |              |      |                |                |     |
| 18 | satisfactoria a una pregunta hecha por                               | 1  | 1,1        | 20  | 21,3         | 43 | 45,7         | 7 30 | 31,9           | 94             | 100 |
|    | un paciente.   |    | ,          |     |              |    |              |      |                |                |     |
|    | Tomar una decisión sobre un paciente                                 |    |            |     |              |    |              |      |                |                |     |
| 19 | cuando el médico no está disponible.                                 | 6  | 6,4        | 20  | 21,3         | 37 | 39,4         | 1 31 | 33             | 94             | 100 |
| 20 | Pasar temporalmente a otros servicios                                | 13 | 13.8       | 21  | 22.3         | 33 | 35.1         | 27   | 28,7           | 94             | 100 |
|    | con falta de personal.   |    |            |     | ,=           |    | ′=           |      | ,              |                |     |
| 21 | <u>Ver</u> a un paciente sufrir.                                     | 14 | 14,9       | 38  | 40,4         | 25 | 26,6         | 3 17 | ' 18 <u>,1</u> | 94             | 100 |
|    | Dificultad para trabaiar con uno o                                   |    |            |     | -            |    | ,            |      | ,              |                | -   |
| 22 | varios compañeros de otros servicios.                                | 0  | 0          | 17  | 18, <u>1</u> | 33 | 35,1         | 44   | 46, <u>8</u>   | 94             | 100 |
|    | •  |    |            |     |              |    |              |      |                |                |     |
|    | Sentirse insuficientemente preparado                                 |    |            |     |              |    |              |      |                |                |     |
| 23 | para ayudar emocionalmente al  | 7  | 7,4        | 18  | 19,1         | 36 | 38,3         | 3 33 | 35,1           | 94             | 100 |
|    | paciente.  |    |            |     |              |    |              |      |                |                |     |
| 24 | Recibir críticas de un supervisor.                                   | 8  | 8,5        | 18  | 19,1         | 19 | 41,5         | 5 19 | 30,9           | 64             | 100 |
| 25 | Personal y turno imprevisible.                                       | 11 | 11,7       | 20  | 21,3         | 38 | 40,4         | 25   | 26,6           | 94             | 100 |
|    |  |    |            |     |              |    |              |      |                |                |     |

Figure 8. Psychological Dimension by Items

Twenty-one point three percent of respondents stated that they almost always lacked the time to express negative feelings toward patients to their colleagues in the same department.

In addition, 10,6 % said they always received insufficient information from doctors, and 29,8 % said this happened almost always. This indicates interprofessional communication problems that can affect the quality of patient care. On the other hand, 45,7 % of staff almost never received satisfactory responses from patients, reflecting a lack of communication with the medical and nursing team. In addition, 6,4 % mentioned that they always had to make decisions about patients due to the absence of doctors, which implied a significant and potentially stressful burden of responsibility. Temporary changes to other services, with a lack of staff, always affected them (13,8 %), which generated an excessive workload. 14,9 % always witnessed patient suffering, while 40,4 % did so almost always, exposing more than half of the sample to constantly demanding emotional situations. In terms of collaboration with colleagues from other services, 18,1 % had difficulties almost always, 38,3 % almost never, and 35,1 % never felt sufficiently prepared to provide emotional support to patients, highlighting the need for skills in this area. 19,1 % received criticism from supervisors, and 26,6 % never had unpredictable staffing and shifts, while 11,7 % always did.

#### Social Dimension

Figure 9 shows the level of work stress according to the social dimension among nursing staff at the IESS General Hospital. It indicates that 65 % of respondents have a medium level of work stress. Thirty-three percent have a high level of stress, meaning that more than half of respondents experienced a medium level of stress, while a third of staff had a high level.

|             | N  | %    |
|-------------|----|------|
| Nivel Bajo  | 2  | 2%   |
| Nivel Medio | 61 | 65%  |
| Nivel Alto  | 31 | 33%  |
| Total       | 94 | 100% |

Figure 9. Social Dimension

Figure 10 shows the items related to the social dimension. 7,4 % of respondents indicated that doctors almost always prescribed inappropriate treatments for patients. In addition, 13,8 % reported that they always performed tasks that did not correspond to their nursing area, while 19,1 % almost always did so, which generated an overload of responsibilities, diverting them from their main duties. Forty-two point six percent of respondents mentioned that they almost always lacked sufficient time to provide emotional support to patients. In addition, the difficulty of working with one or more colleagues in the service is always a difficulty for 3,2 % of respondents. Likewise, 42,6 % almost always feel that they do not have enough time to perform their nursing tasks, which represents a significant work overload. 44,7 % indicated that the doctor was almost never present in an emergency, although 12,8 % stated that he or she was always absent. On the other hand, 13,8 % showed that he or she was almost never present. The lack of information with the work team affected nurse-patient communication, as 23,3 % almost always did not know what to say to the patient or their family about their clinical condition and treatment. Staff shortages are undoubtedly an alarming factor, as 44,7 % indicated that there was always a shortage of staff, which means that there is a deficiency in patient care.

|            |   |           | Siempre      |    | Casi    | (  | Casi         |    |       |    |      |
|------------|---|-----------|--------------|----|---------|----|--------------|----|-------|----|------|
|            |   | Sie       |              |    | siempre |    | nunca        |    | Nunca |    | otal |
| <u>N.º</u> | Pregunta  | N         | %            | N  | %       | N  | %            | N  | %     | N  | %    |
| 26         | El médico prescribe un tratamiento que parece inapropiado para el paciente. | 1         | 1,1          | 7  | 7,4     | 44 | <u>46</u> ,8 | 42 | 44,7  | 94 | 100  |
|            | Realizar demasiadas tareas que no   |           |              |    |         |    |              |    |       |    |      |
| 27         | <u>son</u> de enfermería <u>(</u> Ej.: tareas administrativas).             | <u>13</u> | <u>13</u> ,8 | 18 | 19,1    | 32 | 34           | 31 | 33    | 94 | 100  |

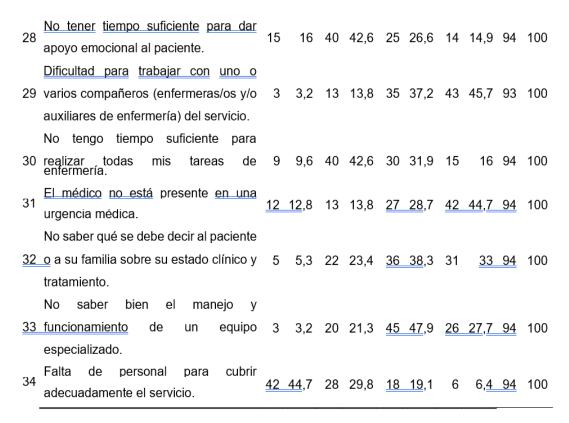


Figure 10. Social Dimension by Items

#### **DISCUSSION**

This study conducted at the IESS General Hospital in Santo Domingo revealed that, in 2024, there is an average level of work stress of 65 % among nursing staff, which could be attributed to emotional and psychological management; this is specifically related to the person and their environment, which jeopardizes the well-being of the patient. (14,35,36) In other words, stress appears when we perceive that our ability to cope with a situation is in danger.

When comparing these findings with similar research, significant similarities can be observed. Similarly, Huaman et al.<sup>(15)</sup> found that nurses at the Rene Toche Groppo Hospital in Chincha had an average work stress level of 50,65 %. These results demonstrate that work-related stress in nursing is a persistent and widespread problem. Cazal et al.<sup>(16)</sup>, in their study entitled "Level of work-related stress among nursing professionals in the Emergency Department of the Dos de Mayo National Hospital in Lima," concluded that 60 % of nursing professionals reached an average level of stress.<sup>(37,38)</sup>

However, the study by Chipana et al.<sup>(17)</sup> on stress levels and coping strategies in nursing at a MINSA hospital in Chanchamayo in 2016, determined a low level of stress in 72,5 % of respondents. This discrepancy could be attributed to variations in work contexts, institutional policies, or assessment methodologies, which underscores the need to consider contextual factors in interpreting these results. It should be noted that a sustained medium level of stress could lead to a deterioration in the quality of patient care, an increase in medical errors, and mental health problems among nursing staff.<sup>(39,40)</sup>

Nursing staff have an average level of work-related stress of 60 % in the physical dimension, which could be the result of an unhealthy work environment, specifically related to workload and work shifts. These interpretations are in line with Cano, who points out that work-related stress "occurs when there is a discrepancy between the demands of the environment and the person's resources to cope with them." This highlights the importance of considering both environmental factors and personal resources when assessing work-related stress. (41,42)

When this research is compared with other studies, the results show a certain degree of coincidence. Alvarado et al.<sup>(18)</sup>, in their research at the ESSALUD Hospital, found an average stress level of 69,5 %. This similarity suggests that physical factors in the work environment are a significant and constant source of stress for nursing staff.

However, other studies disagree with these results. Peralta et al.  $^{(19)}$  showed that 55 % of nursing professionals exhibit high levels of work-related stress according to the physical dimension. Similarly, Cristie et al.  $^{(20)}$  in their research at Sergio Bernales Hospital, found that 50 % of participants had a low level of stress. These variations could be attributed to different factors, such as the intensity of the workload or the physical conditions of the different hospitals studied, as well as personal coping strategies in different environments.  $^{(43)}$ 

In the psychological dimension, the results revealed that 56 % of nursing staff have a medium level of stress. According to the results, this demonstrates that staff are insufficiently prepared to face the psychosocial challenges inherent in the job, which significantly influence psychological well-being. Although the stress level is not critical, it demonstrates considerable pressure that could negatively impact the well-being and work efficiency of these professionals.

When comparing these results with other studies, a similarity can be observed with Alvarado et al.  $^{(18)}$  in their study conducted at the ESSALUD Peru Hospital on the psychological environment, where they found an average stress level of 53,4 % among nursing staff.

Other studies showed the opposite. Del Rosario et al. (21), in their research at hospitals in northern Lima, reported that 57 % of nursing professionals experienced low levels of stress in the psychological dimension. Peralta et al. (19) indicated that 75 % of nursing professionals showed high levels of work-related stress. This can be influenced by workload, organizational support, and stress management. What is relevant is that eustress is considered "a positive psychological response to a stressor, produced as a result of the presence of positive psychological states"; and distress as "a negative response to a stressor, produced as a result of the presence of negative psychological states". (22)

The study revealed an average level of work stress of 65 % in the social dimension among nursing staff. This finding suggests that interpersonal conflicts in the work environment are one of the main social stressors. Additionally, staff shortages and changes in services or shifts, in contexts where an unfavorable work environment prevails, contribute significantly to elevated stress levels. These factors highlight the crucial role that both interpersonal relationships and organizational structure play in the stress experience of nursing staff. (44)

When comparing these results with previous research, notable discrepancies can be observed. Del Rosario et al. (21) reported that 92,1 % of the participants in their study experienced high levels of stress in the social environment dimension. In contrast, research by Cristie et al. (20) revealed that 64 % of participants had low levels of stress in this same dimension. These significant variations could be attributed to differences in specific work contexts, human resource management policies, or the strategies implemented for conflict management in the different hospitals studied.

From a theoretical perspective, it is pertinent to consider the observations; contemporary working conditions can place high demands on workers, including high levels of attention and concentration, significant responsibilities, work overload, and long or irregular working hours. These circumstances contribute to the growing prevalence of psychosocial risks in the workplace, with increasingly evident repercussions in the health, social, and economic spheres.<sup>(23)</sup>

#### **CONCLUSIONS**

The study showed that nursing staff at the IESS General Hospital in Santo Domingo experienced an average level of work-related stress (65 %) with an impact on both the physical and psychosocial and social dimensions. Various factors such as work overload, rotating schedules that negatively affect family relationships, and sleep disorders wear workers down physically and psychologically.

In terms of the physical dimension, 60% of nursing staff experienced a medium level, which increased the likelihood of making mistakes. Thus, physical burdens and rotating shifts contributed to a lower quality of life and emotional exhaustion.

In terms of the psychological dimension, the study revealed that 56 % of nursing staff experienced a medium level, while 41 % experienced a high level, indicating that a significant proportion of workers suffer from high levels of work-related stress.

Regarding the social dimension, 65% of nursing staff experienced a medium level of work-related stress. It was determined that the greater the social support, the lower the stress, as supportive relationships between colleagues were fostered, allowing them to better cope with the demands and pressures of work.

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#### **CONFLICT OF INTEREST**

Authors declare that there is no conflict of interest.

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