



Stressors in nursing professionals working in critical hospital areas

Factores estresores en profesionales de enfermería que laboran en áreas críticas hospitalarias

Estressores em profissionais de enfermagem que atuam em áreas críticas do hospital

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ORIGINAL ARTICLE

KEYWORDS

Stressors, critical areas, tasks, nurse, hospital

ABSTRACT. The objective was to identify stressors in nursing professionals working in critical areas of Hospital III de Essalud Puno (Peru). The type of research was descriptive comparative cross-sectional where 45 professionals participated. The instrument applied was the Nursing Stress Scale (NSS), which measures stressful situations in the nursing profession. The results indicate that the factors are present in the physical, psychological, and social environment. The most affected was the physical environment considering the workload in 28.9%. In the psychological environment, lack of support was observed in 28.9%, uncertainty in treatment with 24.4%, insufficient preparation in 17.8%, and death-suffering in 16.7%. In the social environment, problems with the doctor are 28% and with other members (nurse or others) 17.8%. Comparing the critical areas in Hospital III de Essalud, there are frequently stressors in the areas of the Intensive Care Unit - Intermediate Care Unit, neonatology, emergencies, and surgical center. It was also evidenced that marital status affects single women in the physical environment in 31.8%, in the psychological environment to married women in 20.7%. According to the years of service, the most affected are the professionals who had from 21 to 25 years of service in 100.0% and from 2 to 5 years referred stress in the physical environment in 66.7%.

PALABRAS CLAVE

Factores estresores, áreas críticas, labores, enfermera, hospital

RESUMEN. El objetivo fue identificar los factores estresores en las profesionales de enfermería que laboran en áreas críticas del Hospital III de Essalud Puno (Perú). El tipo de investigación fue descriptivo comparativo transversal donde participaron 45 profesionales. El instrumento aplicado fue la escala de Nursing Stress Scale (NSS) que mide situaciones estresantes en el profesional de enfermería. Los resultados indican que los factores se presentan en el ambiente físico, psicológico y social. El más afectado fue el ambiente físico considerando la carga de trabajo en un 28.9%. En el ambiente psicológico se observó la falta de apoyo en 28.9%, incertidumbre en el tratamiento con un 24.4%, preparación insuficiente en 17.8%, y muerte-sufrimiento en 16.7%. En el ambiente social los problemas con el médico son de 28% y con otros miembros (enfermera u otros) el 17.8%.

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Comparando las áreas críticas en el hospital III de Essalud existen factores estresores frecuentemente en las áreas de Unidad de Cuidados Intensivos- Unidad de Cuidados Intermedios, neonatología, emergencias y centro quirúrgico. También se evidenció que el estado civil afecta en el ambiente físico a las solteras en 31.8%, en el ambiente psicológico a las casadas en 20.7%. Según los años de servicio las más afectado son las profesionales que tenían de 21 a 25 años de servicio en un 100.0% y de 2 a 5 años refirieron estrés en el ambiente físico en un 66.7%.

PALAVRAS-CHAVE

Estressores, áreas críticas, tarefas, enfermeira, hospital

RESUMO. O objetivo foi identificar estressores em profissionais de enfermagem que atuam em áreas críticas do Hospital III de Essalud Puno (Peru). O tipo de pesquisa foi descritivo comparativo transversal onde participaram 45 profissionais. O instrumento aplicado foi a Nursing Stress Scale (NSS), que mensura situações estressantes no profissional de enfermagem. Os resultados indicam que os fatores estão presentes no meio físico, psicológico e social. O mais afetado foi o ambiente físico considerando a carga horária em 28,9%. No âmbito psicológico, observou-se falta de apoio em 28,9%, incerteza no tratamento com 24,4%, preparo insuficiente em 17,8% e sofrimento para a morte em 16,7%. No meio social, os problemas com o médico são 28% e com outros membros (enfermeiro ou outros) 17,8%. Comparando-se as áreas críticas do Hospital III de Essalud, são frequentes os estressores nas áreas de Unidade de Terapia Intensiva - Unidade de Terapia Intermediária, Neonatologia, Emergências e Centro Cirúrgico. Evidenciou-se também que o estado civil atinge mulheres solteiras no ambiente físico em 31,8%, e no psicológico em 20,7%. De acordo com os anos de serviço, os mais afetados são os profissionais que possuíam de 21 a 25 anos de serviço em 100,0% e de 2 a 5 anos referiram estresse no ambiente físico em 66,7%.

1. INTRODUCTION

At present, the population is being affected by a phenomenon called stress and it occurs when it faces the demands of the environment, be it family life and / or professional life; Therefore, it requires a certain degree of adaptation and at the same time adjusting the activities to the time available (Soles, 2019). The working conditions in the nursing professional imply exposure to pain and death, interpersonal conflicts, lack of autonomy and authority in decision-making and lack of definition of the professional role that generate a state of chronic stress. The World Health Organization (WHO) defines stress as a set of physiological reactions that prepare the body for action in the face of any stressor or stressful situation; But when this situation is constant and exceeds the capabilities of the individual, it becomes a health problem (Olea, 2019).

Although it is true today with the problem of the COVID-19 pandemic, nursing professionals are at the first level of care within hospitals and even more so in critical areas, which often makes a stressful situation from the beginning. from providing direct care and care to hospitalized ICU patients until actively participating in other large-scale interventions. They are always at the forefront, working 24 hours a day to protect and maintain the health and well-being of patients and society in general (WHO, 2020).

Research on associated labor factors in the Nursing professionals of the Emergency Service of a Public Hospital Level III. Chiclayo 2019 the results were observed that 77.8% of nurses presented a medium level of work stress, 17.8% high level and 4.4% low level (Barboza, 2019).

Garza in his study on Stress Level in Nurses who work in hospitalization areas refers that the highest percentage of the sample corresponded to the female gender with a mean age of 42 years; the highest proportion were married and the highest percentage had a working seniority of more than 11 years, reporting moderate stress. The factors that generate the most stress are those related to death and suffering, workload, insufficient

preparation, uncertainty in relation to the treatments given to patients and the lack of support from nursing superiors (Garza et al., 2011).

Work-related stress or occupational stress is defined by the National Institute of Occupational Safety and Health as a consequence of the imbalance between the demands of work and the capabilities / resources or needs of the worker is a pattern of an emotional, cognitive, behavioral reaction and physiological to lethal and adverse components of the work content (Rodriguez, et al., 2011).

Stressful situations that are not solved effectively produce the threat of loss of personal control (anguish-alarm signal) and the appearance of behavioral disturbances such as repetitive ones as coping strategies. The modern nurse is well prepared to meet the demands of the job; It is the stage in its history in which its training is broader and more profound, with a body of its own knowledge ... the devaluation of the role of nursing whose role as caregiver is not recognized by its main beneficiaries and by other professionals but the nursing professionals and doctors are constantly confronting illness and death; her work includes performing unpleasant tasks at some point, within her tasks identification with patients produces intense feelings of protection in this painful emotional situation that can manifest itself in stressful moments in nursing professionals (Mingote & Pérez 2003).

Understanding that mental health is a state of well-being through which individuals recognize their abilities and are able to cope with the normal stresses of life, stress could be anything that requires a non-specific response from the body to any demand. (Muñoz et al., 2015).

In Hospital III de Essalud Puno, many times wrong behaviors of the nurses have been observed such as aggressiveness, intolerance, apathy, irritability, among others those that are manifested by the users and relatives of the patients, which is evidenced by the change of attitude they often assume when faced with a stressful situation. They also make comments such as: "I feel tired, they demand a lot of me, I'm stressed, I would like to rest, I would like to leave this for a few days ...", among others; By thus making their professional work unsuitable with the risk of suffering stress in response, the patient may present a risk of inhumane responses without being intentional. Given the above, it can be affirmed that the nurse, who works in critical areas is prone to stress and the best way to deal with it is to know which stressors cause the greatest problem for proper development, recognize it in a timely manner, identify it to eliminate it or find its effects before the health of the professional worsens.

2. METHOD AND MATERIALS

Place of study

This study was carried out at Hospital III de Essalud Puno, located in Parque Industrial Salcedo S / N in critical services such as: Intensive Care Unit - Intermediate Care Unit, Neonatology, Surgical and Emergency Center; services where there is specialized direct care for the critical patient.

Population and sample

The population and sample consisted of all the assisting nurses who work in the Critical Areas: ICU-NICU, Neonatology, Surgical Center and Emergencies in a total of 45 nurses.

Type of study

The research was descriptive-comparative, of a non-experimental type of cross section, because it sought to specify the stressors to which nursing professionals were exposed in critical areas (Hernandez & Lòpez, 2016).

The technique used was the survey in order to obtain valid and reliable information regarding the stressors of the nursing professionals. The instrument that was applied was the Nurses Stress scale (NSS) developed by Pamela Gray-Toft and James G. Anderson, which measures the frequency with which certain situations are perceived as stressful by hospital nursing staff.

The Nurses Stress Scale consists of 34 items grouped into seven factors: Related to the physical environment 1 (workload), the psychological environment 4 (Death and suffering, insufficient preparation, lack of support and uncertainty in treatment) and Social environment 2 (problems with doctors and problems with other members of the nursing team).

The self-administered scale was personalized and was carried out in approximately 15 to 20 minutes which presents four Likert-type responses: never = 0, sometime = 1, frequently = 2 and very frequently = 3. As a level indicative of the presence or absence of stressors at a general level responses from 0 - 1 do not mean alteration, while answers from 2 - 3 translate into an alteration (Más & Escribà, 1998).

3. RESULTS AND DISCUSSION

Table 1.

Stressors of nursing professionals in critical areas.

The nursing stress scale	Stressors					
	Physical environment		Psychological environment		Social environment	
	N	%	N	%	N	%
(0) Never	-	-	1	2.2	1	2.2
(1) Ever	32	71.1	36	80.0	37	82.2
(2) Frequently	13	28.9	8	17.8	7	15.6
(3) Very frequently	-	-	-	-	-	-
Total	45	100.	45	100.	45	100.

Source: The Nursing Stress Scale (NSS)

In table 1 it can be seen that the stressors that are present in nursing professionals who work in critical areas are the physical environment with 28.9%, who are frequently stressed, unlike the Psychological environment 17.8% and the social environment 15.6%.

Stress can have repercussions on an individual, social and organizational level; The results point to organizational factors capable of triggering stress in the intensivist nurse. The results were significant for the professional variables, inadequate physical structure; It should be detailed that at work it aims to have physical spaces that are adequate to the needs of the workers (Costa, et al 2011). According to another study, it was concluded that 62.5% of surgical center nurses present moderate stress due to inadequate infrastructure (Calsina, 2012).

In another study where they applied the NSS scale. On the one hand, uncertainty in treatment was the subscale that caused the highest level of stress in nurses and the stress perceived by nursing professionals related to problems with doctors was lower (Portero, & Vaquero, 2016).

A recent study presents results with greater frequency in situations with the psychological environment since observing the suffering or pain in the patient produces a high percentage of stress in the Nurses and this type of relationships are constituted in events of intense emotional burden for the professional, which must be carefully controlled so that the situation can be resolved efficiently. In many cases, these situations have a negative or fatal outcome that is accompanied by feelings of frustration, fear, anger or despair on the part of the professional. These types of situations are defined as experiences that cause maladaptive stress; In addition, the social environment and finally the physical environment turn out to be less conflictive but stressful factors in their daily work (Muñoz et al., 2015).

The results of this work are similar to those reported by the aforementioned researchers, stress is present in the professionals who work in critical areas, even more so if three stressors are identified in the environment in which they carry out their activities, these refer to the infrastructure of the area. Most of the services mentioned have been adapted in infrastructure because the demand of patients is greater and the infrastructure has been insufficient, which progressively increases the problems in the professional nurse.

Table 2.

Stressor of the physical environment of nursing professionals in critical areas.

The nursing stress scale	Physical environment factor	
	Workload	
	N	%
(0) Never	-	-
(1) Ever	32	71.1
(2) Frequently	13	28.9
(3) Very frequently	-	-
Total	45	100.0

Source: The Nursing Stress Scale (NSS)

Table 2 shows the stressors of the physical environment where it can be seen that the item workload shows results in 28.9% frequently and sometimes 71.1%.

In Mexico, the most affected aspect was physical, workload, a factor that generates more stress (48.8%), followed by death and suffering (29.3%); as well as the uncertainty in the treatment (29.3%). The study also shows that

men are perceived as more stressed (83.3%) than women (25.7%). Concluding at work that nurses perceive themselves as stressed people with work overload and sensitive to the suffering of users (Cortaza, 2014). In another study, it was the physical environment that alters the normal course of the nursing professional's work due to distorting the concentration and tranquility they require to perform their work in an optimal way, equipment noises, work environment, lighting, order, and asepsis of the inadequate and insufficient place, space to carry out specific nursing tasks. In another investigation, the presence of the physical environment was reported as the greatest indicator of work overload (Garza et al., 2011). In the city of Huánuco, the physical environment is a high work stressor in nursing professionals (López, 2016).

With respect to the results found and the references obtained, it is indicated that they are similar, physical environments are the problem referred to by professionals who, at some point, due to the activities carried out, are reduced to reduced spaces, the infrastructure of the Hospital itself being a problem, some have been adapted by the demand of patients who do not meet conditions required for an adequate environment putting the integrity of the patient at risk when there is pain and suffering increased by anguish, restlessness of the professional work, in addition to that in critical situations the care of the patient can contribute to generate greater stress.

Table 3.

Psychological stressor of the nursing professional in critical areas.

The nursing stress scale	Psychological Factor							
	Death and suffering		Insufficient preparation		Lack of support		Treatment uncertainty	
	N	%	N	%	N	%	N	%
(0) Never	2	4.4	6	13.3	2	4.4	1	2.2
(1) Ever	40	88.9	30	66.7	30	66.7	33	73.3
(2) Frequently	3	6.7	8	17.8	13	28.9	11	24.4
(3) Very frequently	-	-	1	2.2	-	-	-	-
Total	45	100	45	100	45	100	45	100

Source: The Nursing Stress Scale (NSS)

Table 3 presents stressors of the psychological environment where we can indicate that it considers 4 aspects: lack of support is 28.9%, uncertainty in treatment 24.4%, insufficient preparation 17.8% and death - suffering 6.7%, all of which are frequently stressful and very frequently insufficient preparation by 2.2%.

Psychological factors refer to the characteristics of the different types of personality that, when a stressful situation is triggered, will occasionally cause psychological damage, this is given by the difficulty to achieve objectives, feelings of inferiority, fear of error, feelings of insecurity, among others. In Cortaza's research, he places these professionals as people who really live daily emotional conflicts generated by the contact they have with the death and suffering of the people they provide care for, they are sensitive professionals and on many occasions they are perceived by users or family members as people who are not very sensitive to these processes.

A study reports that the psychological environment, insufficient preparation is 17% and the lack of support 17.9%, showing how situations generate stress at a medium and high level (Garza et al., 2011). Stress can directly induce psychological and physiological effects that alter health ... Living under stressful situations is usually associated with a reduction in health behaviors and an increase in harmful behaviors (Guerrero, 1997). Psychological stress in the workplace is one of the most frequent problems and can affect people's physical and mental health, in this sense, the nurse whose work environment is a hospital center can alter their biological balance. psycho-emotional because this is a highly stressful and / or overwhelming place (Calsina, 2012). In Chilean hospitals, nurses from critical units perceive inadequate psychosocial factors and mental work overload in several of its dimensions (Ceballos-Vásquez et al., 2015).

The main stressors identified in the nursing staff working in a hospital are: being in continuous contact with the suffering and death of the patient, work overload, problems of interrelation with the rest of the nursing team, conflict with doctors and lack of social support at work. The factors that generate the most stress are those related to death and suffering, workload, insufficient preparation, uncertainty in relation to the treatments given to patients and the lack of support from nursing superiors (Garza et al., 2011). López (2016), points out in their research work that 57.3% indicate in their work the psychological environment is a moderate work stressor, about Death and suffering: they are natural phenomena inherent to the human condition that share biological, social aspects, cultural, as well as psychological emotional, events that have the greatest emotional impact both on the person himself and on direct contacts (Tomas-Sabado, et al., 2004).

The results obtained are mostly psychological stress, the nursing professional is the person within the health team who deteriorates their mental health due to circumstances that arise at any time in their daily work caring for critical patients who are under their responsibility, which suggests that despite the time this factor continues to be a permanent stressor in nursing professional development not only in critical areas but also in non-critical areas. These psychological factors show a predominance closely related to the activities carried out, often tirelessly physically and mentally.

Table 4.

Stressor of the social environment of nursing professionals in critical areas.

The nursing stress scale	Social environment factor			
	Problems with the doctor		Problems with other members	
	N	%	N	%
(0) Never	2	4.4	4	8.9
(1) Ever	29	64.4	33	73.3
(2) Frequently	13	28.9	8	17.8
(3) Very frequently	1	2.2	-	-
Total	45	100.0	45	100.0

Source: The Nursing Stress Scale (NSS)

In the present table 4, the social environment stressor frequently occurs in problems with the doctor in 28.8% and 17.8% with other members. 2.2% are very frequently with the doctor, especially in the ICU-NICU and emergency areas.

The problems depend and are inherent in an Institution where professional activities are carried out in critical areas with doctors, superiors, the patient's family and the patient himself. Likewise, the lack of communication with co-workers about service problems when sharing experiences and positive or negative feelings towards patients, absence of the medical professional in emergency situations to make decisions affect the patient (Ferreira, et al., 2017). In the social environment factor, it is considered to make decisions when the doctor is not present in an emergency situation, which generates moderate stress (Garma and Sánchez, 2019). It is known that the social environment is where a great majority of situations occur that can generate stress among individuals since the results show that the conflict with the doctors is perceived at a low level by the majority of the participants and the conflict with the nurses is high (Cortaza, 2014). Communication with other people is complicated and often difficult to achieve effectively; and interpersonal relationships deteriorate as a result of excessive work (Mingote et al., 2016).

The results found consider a very important factor that is present within the nursing professional's decision-making, which they have to face many times in the absence of the doctor and other members; Within this, it can be asserted that the medical professional is sometimes not in their jobs, which generates greater responsibility of the nursing professional for making decisions that are not under their responsibility, being sometimes difficult, putting health recovery at risk of the patient. In addition, other nursing professionals are the ones that cause more problems when the responsibility is greater, perhaps due to ignorance and the commitment that one has when facing difficult situations at a certain moment, in addition to having interpersonal relationships altered by critical situations that the environment handles; However, the work friction that they may have is prioritized precisely due to the care management with priority patients.

Table 5.

Stressors of professionals working in critical hospital areas

Factors	Critical areas																							
	UCI-UCIN						Urgency						Surgical center						Neonatología					
	Never (0)		Ever (1)		Frequently (2)		Never (0)		Ever (1)		Frequently (2)		Never(0)		Ever(1)		Frequently (2)		Never (0)		Ever (1)		Frequently (2)	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Physical environment	0	0	7	63.6	4	36.4	0	0	8	72.7	3	27.3	0	0	10	76.9	3	23.1	0	0	7	70	3	30
Psychological environment	0	0	9	81.8	2	18.2	0	0	9	81.8	2	18.2	1	7.7	11	84.6	1	7.7	0	0	7	70	3	30
Social environment	1	9.1	8	72.7	2	18.2	0	0	9	81.8	2	18.2	0	0	13	100	0	0	0	0	7	70	3	30

Source: The Nursing Stress Scale (NSS)

Table 5 shows the stressors of nursing professionals in critical areas where it is generally observed that stressors frequently occur in: ICU-NICU in the physical environment in 36.4%, psychological and social environments in 18.2%; in Emergencies the physical environment is 27.3%, the psychological and social environments is 18.2% respectively; in Surgical Center the physical environment is 23.1% and the psychological environment is 7.7%; and in Neonatology, the three physical, psychological and social environments are presented in 30% respectively as stressors of the nursing profession.

The study in the surgical center of two hospitals investigated the results obtained showed that 64% of the HBT nurses and 51% of the HRDT presented a medium level of work stress (Valle, 2014). The most affected aspect is the physical environment, workload was the factor that generated the most stress 48.8%, followed by death and suffering 29.3%; as well as the uncertainty in the treatment 29.3% (Cortaza, 2014.). In another investigation of critical areas, their results showed that workload is the stressor that most affects nursing staff by 50%, followed by death and suffering 30% as well as uncertainty in treatment 30% (Menor-Segura et al., 2017).



The physical environment is constituted as a high work stressor; and the psychological and social environments are constituted as moderate work stressors in nursing professionals. Critical areas are areas where staff work continuously and during the scheduled shift, events that alter emotional states may develop, which generally in unexpected, unscheduled situations could be the cause of the presence of stressors in the different scenarios (López, 2016). In the Intensive Care Unit, stress has been a risk factor in the quality of life of professionals and workers; It is a service where there are patients who need direct and intensive care of continuous surveillance since their condition can be determined to evolve favorably or death; They are naturally mobilizing spaces of emotions, feelings that are frequently expressed in a very intense way ... there are also living with other professionals, problems related to human and material resources, the high technology found in this sector beyond the environment itself can favor psychological stress in these professionals (Rodríguez, 2020).

Nursing is the profession that requires a deployment of activities in the different areas that need to maintain a greater emotional control of greater rigor, since it is a career exposed to different situations, where life must be preserved, such as the management of the patient with Reserved prognosis and the need to provide care, not only intensive, but also prolonged, which also requires high concentration and responsibility that result in physical and mental wear and tear, in addition to the need to permanently maintain the spirit of sharing, with the patient and his family, the hours of anguish, depression and pain, so it is essential that intervention strategies be established to prevent work stress in the nurses of the different services such as meetings to exchange ideas, opinions, rotation of the nurses from critical units, regular training on strategies and techniques to prevent and I stress which will promote well-being and labor productivity (Novaes, et al., 2020).

Analyzing and comparing the results in the present investigation, it can be conjectured that in the critical areas studied they reveal that the common stressor is the psychological environment that is always present, being high in Surgical Center, ICU-NICU, Emergency and Neonatology respectively; followed by the social environment present in Neonatology, Emergency and ICU-NICU; and the physical environment is mainly presented in the ICU-NICU, Neonatology, Emergency and Surgical Center. Thus, the hospital constitutes one of the most stressful work environments for the nursing profession and is considered an exhausting and overwhelming occupation because it faces difficult and risky situations on a daily basis, especially when they are working in inadequate environments such as infrastructure including to environmental factors, psychological being the most common; and socially, interpersonal relationships that frequently damage a professional relationship with doctors due to absenteeism when making decisions that affect the patient's life; and with other members of the work team of a service especially for interpersonal problems of various kinds.

4. CONCLUSIONS

The stressors in nursing professionals who work in critical areas are: the physical, psychological and social environment.

The physical environment: workload is the stressor that is often always present.

The psychological environment: lack of support, uncertainty in treatment, insufficient preparation and death - suffering are frequently present as a stressor.

The social environment: problems with doctors is a stressor that occurs frequently.



Comparing the critical areas investigated, the stressors are frequently in: ICU-NICU, Neonatology, Emergencias and Surgical Center mostly affected in the physical, psychological and social environment respectively.

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