Adaptación y estrés laboral en el personal de las unidades médico- quirúrgicas

Adaptation and work-related stress in medical-surgical staff units

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Resumen

La práctica de la enfermería quirúrgica inmersa en procesos complejos, los conocimientos y habilidades son indispensables para el cuidado. El estudio analiza el estrés y la adaptación laboral de enfermeras quirúrgicas como elementos que influyen en la calidad de la atención. El objetivo es describir la relación que existe entre los factores estresantes y la adaptación laboral en el personal de enfermería en áreas quirúrgicas. En un Hospital General con personal de las áreas de quirófano y toco cirugía, se utilizó el estudio descriptivo, correlacional, transversal con la Escala de Estrés en Enfermería de Cuidados Intensivos (CCNSS) 1996 de Sawatsky, JoAnn R.N; B.N (adaptada para área quirúrgica), la escala de signos y síntomas para identificar el nivel de adaptación y la escala para identificar modos adaptativos. Los resultados fueron que 60% del personal presenta nivel de estrés medio en estímulos focales, contextuales y residuales. El modo adaptativo de desempeño del rol se encontró que 64% presenta "nivel de adaptación", mientras que 36%, presenta "nivel de desadaptación".

Palabras clave: adaptación**,** factores estresantes, nivel de adaptación, calidad de enfermería.

Abstract

The complex processes undergoing surgical nursing practice, the knowledge and skills are essential for care. The study analyzes the stress and labour adaptation of surgical nurses as elements that influence the quality of care. The objective is to describe the relationship between stressors and work adaptation in nurse in surgical areas. In a General Hospital with staff of the operating room, labor and delivery (L&D) area, we used the descriptive, correlational, cross-sectional study with the stress scale in nursing of ICU (CCNSS) 1996 of Sawatsky, JoAnn R.N; B.N (adapted for surgical area), the

scale of signs and symptoms to identify the level of adaptation and the scale to identify adaptive modes. The results were that 60% of the staff presents half-focal, contextual and residual stimuli stress level. Adaptive mode of playing the role found that 64% presents "adjustment level", while 36%, presents "level mismatch".

Key Words: adaptation, stress factors, level of adaptation, quality of nursing.

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Introduction

The world of work has gone through transformations over the last century and the beginning of this. One of these changes has been the progressive and massive incorporation of women into the workforce. As mentioned by Garbi,1 the participation of women in economic activities, political and cultural is increasingly notorious around the world. On the other hand, work activities related to assisting others have deserved great attention from researchers in the social sciences in particular in recent years;2 the present document has focused attention in a professional group in particular. nurses, surgical stress and labour adaptation of these medical areas. The workplace determines the exposure of the nurse to certain stressors which, according as they are lived, resolved and faced, determine individual response to this, either adaptive (learning and satisfaction) or unadaptative (wear and dissatisfaction). They have been described several characteristics that influence health nurse, such as the size of the institution, the hierarchical level which is a responsibility that is, employment stability, dysfunctions of role (overload, ambiguity in the roles and interpersonal conflict) the lack of participation in decision making and organizational control. Work-related stress is maintained imbalance between demands that the profession demands and the capabilities of coping of nurses Scientific hindsight, you can ensure that the most important occupational demands (stressors) are the resources devoted to effective coping with stress, both individual and institutional level; coping efficiently facilitates the learning demand (higher compression and development of new adaptive resources), and the ability to accurately control and job satisfaction, ensuring greater personal efficacy. A maladaptive coping usually oriented avoidance or escape from demands, and causes pathological anxiety, personal wear and an increased risk of disturbances psicosomáticas.6

In practice in surgical units, the nurse often is immersed in complex processes that require the application of a series of specific knowledge and skills, or situations that must answer for the requirements of the position they play, involving physical exertion and mental, derived from the nature of the responsibility of the effectiveness of care provided in the three periods of the surgical process: preoperative, intraoperative and postoperative orders they receive from doctors and timely and effective responses must offer to them, the quality and quantity of specialized equipment and specific materials that have to manage and forecast to take to ello.3

Karasek and Theorell, claim that the nurse should provide care to all patients and ensure a safe environment to help achieve the desired surgical intervention for this, besides the theoretical and practical knowledge required results should be high self-esteem, have a mental and physical balance that allows to carry on business in an efficient and effective manner in the daily practice of patient care. The same authors mention that one of the risks of nursing practice is the presence of job stress; them, characterized his work as high demand and low control; This combination makes this profession in a high stress job; resulting in higher levels of stress and job dissatisfaction.[4]

Moreover, when nurses have family responsibilities such as parenting and household management, they can represent high demands which in turn can affect their health status and the level of welfare in general.5

With support from the Adaptation Model Callista Roy, which is based on scientific and philosophical principles from systems theory mentions that humans as adaptive beings have the ability to adapt and create changes in the environment. The ability to respond to these changes is determined by the demands of the situation and internal resources. Callista Roy specifies that adaptation is the process and result by the people who have the ability to think and feel, as individuals or as members of a group, are aware and seek integration into their environment.

To correlate the stressors that may influence the adaptation work the following instruments were used:

1. The level of stress in intensive care nursing (CCNSS) developed by Sawatsky, Jo-Ann RN; B. N. School of Nursing, University of Manitoba, Winnipeg, Canada, published in 1996. (To identify focal, contextual and residual stimuli) which to surgical areas for this study was contextualized.

2. The scale of signs and symptoms to identify adaptation level (integrated level, and committed compensatory Level Level) in nurses, it was built on the theory of Callista Roy. Describe the various signs and symptoms that staff presented their working environment, which are potentially causing adjustment or maladjustment in the work performed by the nursing staff.

3. The scale to identify ways to adapt, role performance and Interdependence in nursing staff; It was structured based on two of the four modes of adaptation of the Theory of Adaptation of Roy. It describes a set of behaviors and situations that might arise nurses in the workplace, which cause adaptation or maladjustment in the nursing staff.

Methodology

The design used for this research was descriptive, correlational, cross to the collection of information on General Hospital Durango Mexico (HGD), second-level institution in the City of Durango, belonging to the Ministry of Health (SSD) was selected.

The study population was constituted by 374 nurses attached to Durango General Hospital. 84 nurses were distributed in surgical areas that were surveyed 80 different categories (nursing assistants, general nursing, registered nurses, nurses with master's and others), who formed the study sample of the total enrolled population to medical surgical areas. The distribution of the study population was considered five working shifts (morning, evening, night, and day mixed Cumulative Time).

The criteria for inclusion was to be working in surgical medical areas of any of the five work shifts, nurse participant should have one of the following categories (auxiliary nurse, general nursing, registered nurses, nurses with master's and others) Gender : Female and Male, base personnel, contract fees (paid with own resources of the institution) and state contract (paid with funds from the state government). With any old work activity in services surgery operating room and I play. To collect the information the doctor visited areas. Personalized way the invitation was made to the nurses to participate in the study who were informed of the general objective and specific objectives, as well as the ethics of it.

Subsequently, the staff agreed to participate, he was asked to read and sign an informed consent letter, which met the same criteria of ethics for health research studies. Each participant was provided with an envelope containing the instruments for data collection. Which were: nursing stress scale intensive care (CCNSS), the scale of signs and symptoms to identify adaptation level and scale to identify ways to adapt and a pen.

At the same time delivering the package explained the content and form of the instruments response to its full understanding for filling these, it provided a considerable time for filling out the forms, same as the nurses own convenient judged (filling instruments in time was about 30 minutes). In medical surgical areas it was available for a specific physical space; any doubt that said the staff explained without influence for your reply.

DATA COLLECTION INSTRUMENTS

Three standard survey instrument for gathering information were used:

The instrument used to identify stressors (focal, contextual and residual stimuli) that cause job stress was the CCNSS. Developed specifically for nurses assigned to the intensive care unit and coronary care units. The reliability of the scale of perceived stress is supported by a coefficient alpha of 0.87. The instrument consists of 7 indicators in 47 items, presented closed Likert response: with 3 possible answers.

For each indicator a brief description of the issues explored, distributed as follows becomes:

Estímulos	Indicadores y dimensiones Factores estresantes	No. Ítems	Ponderación Nivel de estrés
Focales	**III. Atención al paciente.** Situaciones específicas de la atención al paciente en los periodos quirúrgicos.	9	Alto = 23 – 27 Medio = 16 - 22 Bajo = 9 - 15
	IV. Conocimientos y habilidades. Manejo de tecnología y capacitación.	5	Alto = 13 – 15 Medio = 9 - 12 Bajo = 5 - 8
	VI. Condiciones del paciente. Diagnóstico.	5	Alto = 13 -15 Medio = 9 -12 Bajo = 5 - 8
Contextuales	**II. Relaciones interpersonales.** Estilos de comunicación.	7	Alto = 17 – 21 Medio = 12 - 16 Bajo = 7 - 11
	V. Medio ambiente de trabajo físico. Ruido, distribución física, iluminación.	5	Alto = 13 – 15 Medio = 9 - 12 Bajo = 5 – 8
	VII. Procedimientos específicos. Manejo de medicamentos, vías y tecnologías.	5	Alto = 13 - 15 Medio = 9 -12 Bajo =5 - 8

Residuales	**I. Administración de la unidad.** Competencia del personal, puesto, funciones, normas de servicio, dotación de recursos humanos y materiales, incidencias.	11	Alto = 27 - 33 Medio = 19 - 26 Bajo = 11 - 18

Ponderación Final Escala (CCNSS)	
Nivel de Estrés	**Total de Puntos**
Alto	111-141
Medio	79-110
Bajo	47-78

Scale signs and symptoms to identify the level of labor adjustment, was built based on the three levels of adaptation of the theory of Callista Roy (integrated level, compensatory level, and committed level). It consists of 24 items that describe the various signs and symptoms that nurses could present in their work environment, which may be responsible for adaptation or maladjustment. To identify the levels of adaptation, Callista Roy demonstrates the interaction of the person with the environment to adapt to new situations. The person in the process of adaptation can show a level of adaptation integrated in other compensatory or compromised, the balance between these and the magnitude of the stimulus determine the response of adaptation or maladjustment.

To use the instrument a scale was developed to identify the level of adaptation:

Nivel de adaptación	**Definición**	**Dimensiones**		**Medición**	**Ponderación**
Integrado	Describe las estructuras y funciones de los procesos vitales	**-**Oxigenación **-**Digestivo **-**Neurológico **-**Cardiovascular **-**Urinario **-**Actividad y reposo **-**Eliminación **-**Protección	**Adaptación**	24 Ítems	Adaptación 24-36
Compensatorio	Mecanismos reguladores y cognitivos activos. Respuestas de adaptación				
Comprometido	Respuestas inadecuadas de adaptación	**Desadaptación**			Desadaptación 37-48

In each item the possible answers are: Yes (2) and NO (1). It is a self-administered scale which complete filling is done in about 5 minutes.

Scale to identify the modes of adaptation in nurses

It was built based on two of the four adaptation modes of the Theory of Callista Roy. (Mode Interdependence and Role Performance Mode). It consists of 26 items that describe a set of behaviors to fit the focal, contextual and residual stimuli present in the work environment of nurses, which may be responsible for adaptation or maladjustment. Adaptation modes show the interaction of the person with the environment to adapt to new situations. The person in the process of adaptation can show a positive or negative level. In each item the possible answers are: Never (1) Sometimes (2), and always (3).

Indicadores	Definición	Dimensiones	Medición	Ponderación
Modo adaptativo de interdependencia.	Relación de las personas con sus allegados y los sistemas de apoyo.	**-Conductas dependientes** (búsqueda de atención, ayuda y afecto). **-Conductas independientes** (Tener iniciativa y satisfacción laboral)	13 Ítems	**Adaptación.** Puntos = 13 - 26 **Desadaptación.** Puntos = 27 – 39
Modo adaptativo del rol.	Indica conductas de razón, de posición de la persona en la sociedad	Interacción de las personas en situaciones concretas.	13 Ítems	**Adaptación.** Puntos = 13 – 26 **Desadaptación.** Puntos = 27 – 39

Ponderación Escala de Modos de Adaptación		
Modos de adaptación	**Nivel**	**Ponderación**
Interdependencia	Adaptativo	26 - 51
desempeño del rol	Desadaptativa	52 - 78

The application of the instrument was conducted in the five work shifts. After the specified period and the total reactive answered the instrument for statistical analysis and graphing were collected. For the analysis of the information obtained we were used descriptive statistics, obtaining measures of central tendency and dispersion measures, as well as the representation of the data provided by the statistical analysis of the variables and the correlational reasoning used the r Persson allowed to determine the relationship between the variables studied.

RESULTS

With this chart was found that the total nursing staff assigned to the medical surgical areas a percentage of 60%, shows an average level of stress in the focal stimuli as well as the same level of stress with 51.3% in the contextual stimuli and 50% in the residual stimuli. Significantly, it was found above the 40% level under stress contextual and

residual stimuli, thus we can say that the evocative stressors analyzed under this theory of adaptation generates a lower and middle staff stress nurses working in these surgical areas (Figure 1). Adaptation mode performance Role in Figure 2 shows that the adaptive mode analyzed has a percentage of 64% has "adaptation level" where situations like "I consider myself an effective worker, clearly distinguish between my work environment manifest and my social environment, in my work I tolerate my colleagues who have different ideas to me. " "Nervousness does not prevent me to continue working properly, teamwork does not create problems for me to integrate my work, I do not prevent external pressures continue: while the percentage of 36%, presents" level of mismatch "where situations are observed working properly, the emergence of disgruntled my work does not prevent me fight."

Graph 1. Focal stimuli and stress level in the nursing staff assigned to the areas of medical surgical Durango General Hospital. Dgo. SSD.

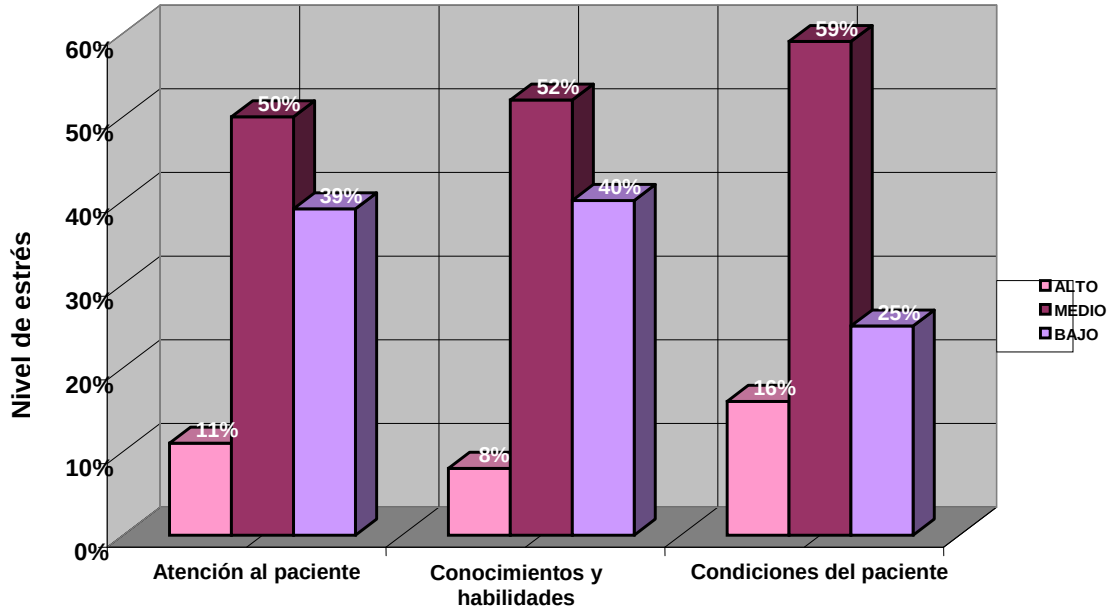


Figure 2. contextual stimuli and stress level in the nursing staff assigned to surgical medical areas.

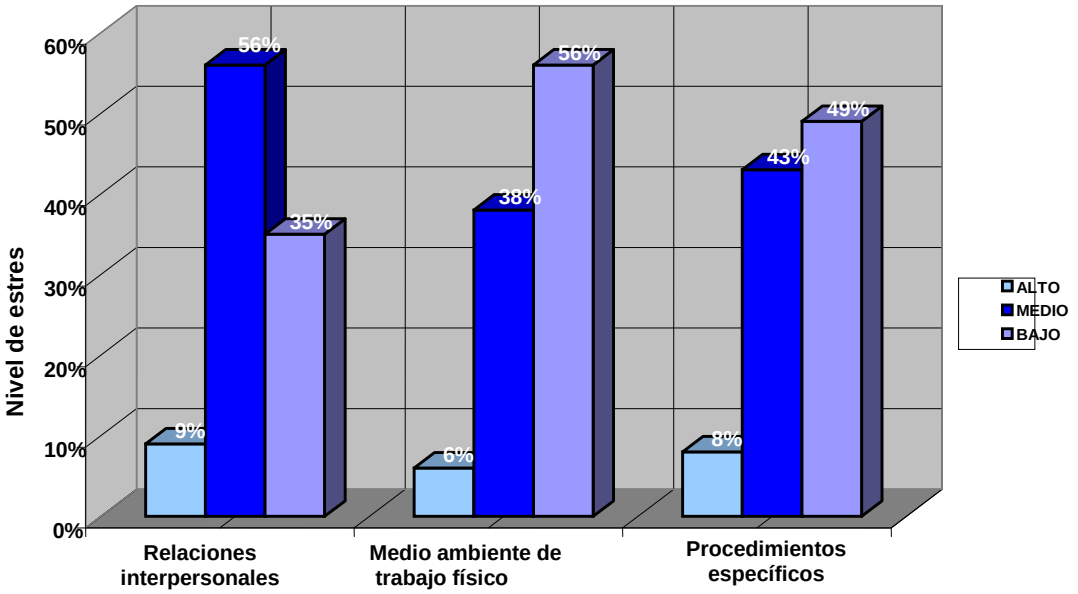


Figure 3. Residual stress level stimuli and staff assigned to medical surgical nursing areas.

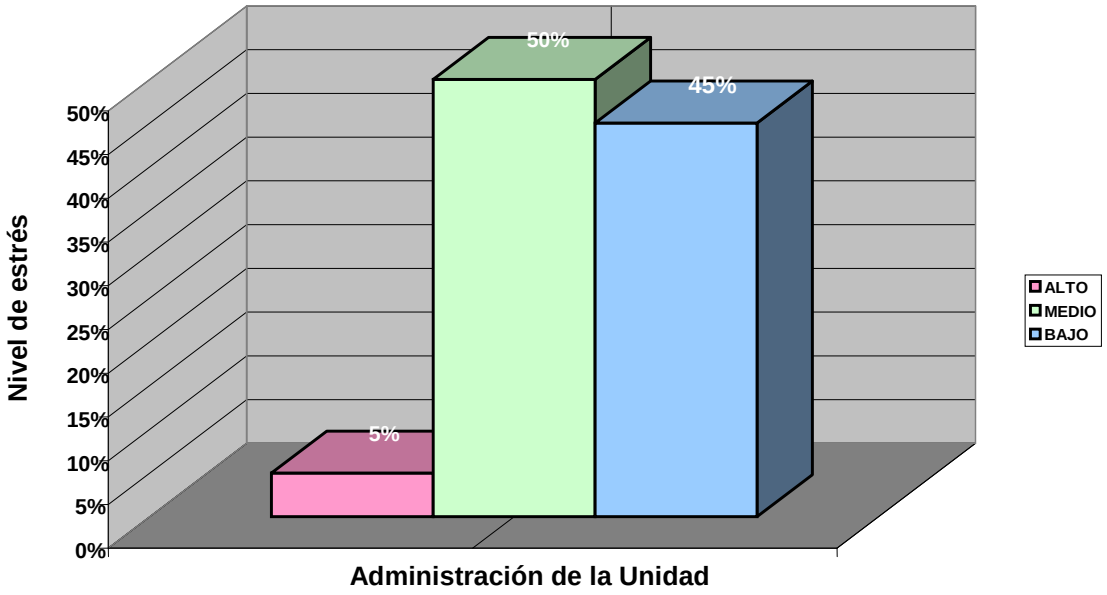
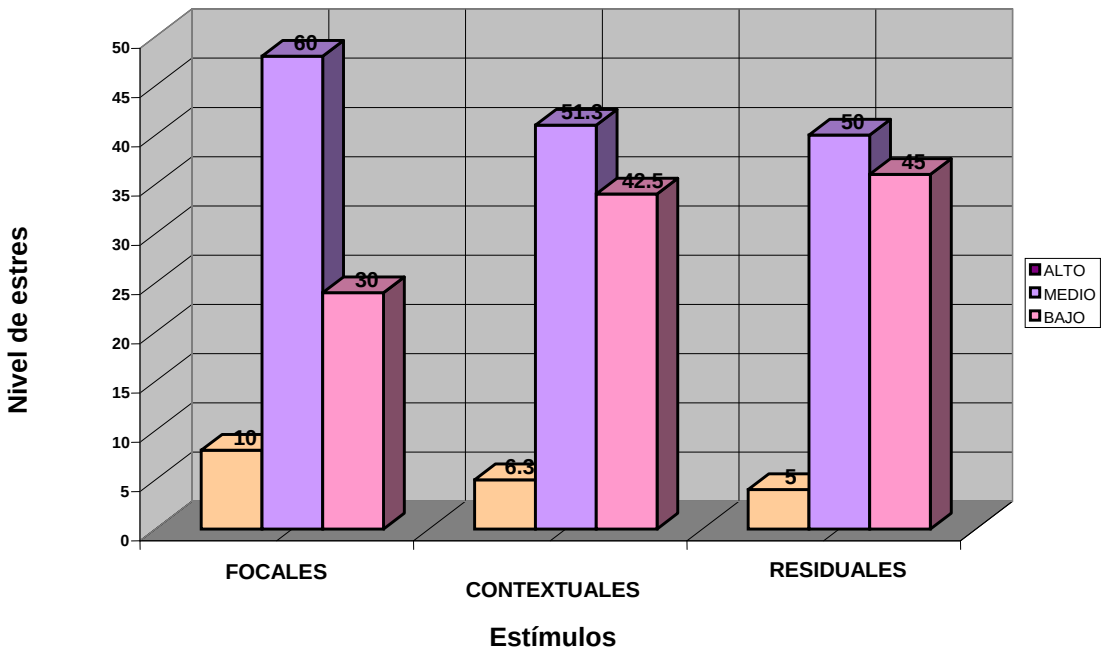


Figure 4. focal contextual and residual stimuli and stress level in the nursing staff assigned to surgical medical areas.



DISCUSSION

The nature and analysis of the results in this research study have been conducted show relevance to nurses involved in surgical medical areas within a health institution, therefore, it is intended that the results can be considered by nurses administering medical surgical areas in health institutions; as one of the needs that are reflected in the institutions has been the pursuit of labor adaptation of nurses to areas in which they operate to allow them to provide quality care and warmth, as well as consider the problem situations that may exist in the health team, the Theory of Callista Roy adaptation enabled the development and analysis of this study therefore can be considered to be one of the studies shows that the influence of the focal, contextual stimuli and waste as stressful on the level of labor adaptation of the nurses involved in surgical areas of the hospital medical factors. The World Health Organization (WHO) and health units in Mexico believe that workplace stress is one of the most important occupational hazards that affect the health personnel is a problem that occupies one of the first places in diseases labor. Some of the relevant results discussed in the study population, it has a population of reproductive age mostly with an age of 35 years with an academic degree in nursing training, something that is seen as positive for staff performance within a business area in which it operates, since we have a young

population, 35 (+ -9.9), predominantly females with 91.1%; a high percentage, 48.7 are registered nurses and have an unstable employment situation, 43.7% do not have a permanent contract at the institution. And with a seniority in the institution and in the relatively short surgical area, zero to ten years; the highest percentage corresponds to the morning shift 30%; some studies as Col. Esquivel, 30 in his study of factors causing stress in nurses show that the category of general nurses in hospital areas with similar training showed a higher average stress of 39.1%. Another study by Garcia et al31 at Cristal Painter Hospital Complex of Ourense, in which stressors were identified by nurses specialized care found with a profile 40 years old, married, with children and with 15 years of Social Security old and eight years old in unity and with a rotating shift nurses have identified as major stressors agents work overload, see the death of a special patient care for seriously ill patients, not receiving a salary commensurate with the work done. The work area in which it operates nurses may be determined by stressors that depending on how you have lived, resolved and faced the adaptive or maladaptive response to the work environment will be determined.

For the level of adaptation are considered signs and symptoms that the nurses presented in its workplace. The result for the level of adaptation was a low percentage of the committed level (23%), signs and symptoms that were identified are tremors or cramps, changes in breathing, feeling sick, anxiety, fear and trembling, bradycardia and tachycardia and fast talking and gasped. This mention may be analyzed stressors that influence job performance of nurses responsible for quality care within a service involves surgical areas, be on the lookout for those agents that may affect the alignment of staff within the service that this step forward is an interest of the management to change the work environment to ensure labor welfare of health personnel, and therefore the care they provide.

For the adaptive mode of role performance, it was found that 64% have "adaptation level" where situations like "I consider myself an effective worker, distinguish clearly between my workplace and my social environment, in my work come I tolerate my colleagues who have different ideas to me. " Mode interdependence 95% have an adapted level, where situations like being satisfied with the relationships they have with their families manifest, "you may integrate to work with my colleagues, my family is important to support the performance of my work activities and respect the decisions of my colleagues work. " This mention may be analyzed stressors that influence job performance of nurses responsible for quality care within a service involves surgical

areas, be on the lookout for those agents that may affect the alignment of staff within the service that this the next step is to modify the work environment to ensure labor welfare of health personnel, and therefore the care they provide.

CONCLUSIONS

The analysis of the concepts mentioned in the theoretical model of Callista Roy, lets focus on the personal care of the nurse in the reduction of ineffective responses, for which they must identify the cause of these and achieve the expected results of adaptation. To review and analyze the concepts of model the relationships that occur between the nurse (as a person) and the atmosphere are unified, and engage within these stimuli, resulting in adaptive or maladaptive responses, which determines the level of adaptation. It is concluded according to the model of Roy Adaptation that nurses in surgical areas can offset work stress if the necessary conditions exist so that they could respond positively to appropriate control measures for effective occupational adaptation, avoiding Possible complications resulting from the disease to the body.

It is vital that health institutions, management staff identify the focal, contextual and residual stimuli workers responsible and try to modify the work environment to ensure labor welfare, and thus care.

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