

MEANINGS OF WORKLOADS FOR NURSES IN THE EMERGENCY UNIT / EMERGENCY

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ABSTRACT

This study aimed at identifying the Emergency Unit nurses' workloads meanings and to reveal the workloads at this environment. Descriptive study based on a qualitative approach. Twelve nurses were interviewed in November 2010. Four categories were derived from the Content Analysis technique: the living experience on psychical loads, on biological loads, on chemical loads and on physiological loads. It was found that most of the nurses know the psychical and biological loads and just one mentioned the chemical loads in the workplace. However, the nurses did not identify the mechanical load and the physical load was confounded with the physiological. This situation clearly shows the absence or failure of such workforce training process which is needed to acquire knowledge about the harmful effects of those loads to health.

Keywords: Occupational Health. Occupational Risks, Workload. Nursing. Occupational Exposure.

INTRODUCTION

Work is an important activity for people and can provide fulfillment, pleasure, wealth, and accumulation of material goods, among other things. However, it can also mean slavery, exploitation, suffering, stress and consequently result in diseases, health problems and even lead to death. Such repercussions in a person's life are derived from the various burdens arising from the work⁽¹⁾. The concept of workloads originates from the terms: "harmful factors" and "risk factors" that designate the occupational hazards to which workers are exposed and that have the potential to cause health damage related to the work process⁽¹⁾. In this sense, three dimensions are considered when investigating workloads, making it a threefold unit of analysis: the actions of the worker, the context in which they occur and the consequences generated by these actions⁽¹⁾. Therefore, while the concept of risk relates to the identification of potential agents capable of impacting on health from a

probabilistic approach, the concept of workload concentrates on the principles of the work process, namely, on technology and on its organization and division, which consume the work effort and life skills of the worker⁽²⁾. Within this concept workloads are understood as the elements of the work process that interact with each other and with the body of the worker, triggering alterations in the biopsychic processes that manifest as potential or effectively presented physical and mental deterioration⁽¹⁾.

Workloads can be grouped according to their nature or basic characteristics into those that have external materiality and that are modified in the interaction with the body, for example, the physical, chemical, biological and mechanical burdens, and those that acquire materiality in the human body itself and express themselves internally through it, such as the physiological and psychological burdens. Thus, workloads are decomposed into specific types that comprise the particular risks, although, this does not mean that they constitute themselves in the sum of the risks, because they acquire meaning from the

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overall dynamics of the work process⁽¹⁾. This understanding underpins the overcoming of the paradigm of causality for the model of social determination of the disease that represents a resumption of the social approaches of Epidemiology, which are based on the concept that the disease is socially produced^(1,2).

Given the above considerations this study aimed to identify the meaning that nurses from an Emergency Unit have regarding the workloads and to reveal the burdens experienced in this work environment. It should be noted that when the workers, institution and society are aware of the workloads, new strategies can be adopted in the organization of the labor, reducing and preventing diseases and health injuries and consequently improving the quality of life of all involved.

MATERIALS AND METHODS

This was an exploratory, descriptive and qualitative study, conducted in a Emergency Unit (EU) of a teaching hospital in the city of Londrina-PR. Data collection occurred through semi-structured interviews with guiding questions and was conducted from June to September 2010 and recorded with the permission of the participants. The number of respondents was not defined *a priori*. The interviews were continued until sufficient convergence for the visualization of the studied phenomenon occurred, which happened when the sample reached 12 nurses, working on the morning, afternoon or night shifts. The inclusion criteria were to be a nurse and to have been working for at least one year in the previously mentioned unit.

The data were analyzed using the Content Analysis technique⁽³⁾. The analysis was performed in three separate stages: the pre-analysis that consisted of the initial reading of the transcribed data; the exploration of the material that represented the selection of the statements of the participants and organization of the categories; and finally the analysis of the results through their inference and interpretation⁽³⁾. Symbolic Interactionism was used as the theoretical framework of this study. The central ideas of Symbolic Interactionism are based on the interaction process, where

individuals are active and learn to give meaning to things. The individual interacts acting, perceiving, interpreting and acting again. In this way, the individual is a dynamic actor in a constant process of socialization and interaction with the environment and with others, and not a structured and unchanging personality⁽⁴⁾. Symbolic Interactionism focuses on the interaction and the dynamics of the social activities that occupy the space between individuals and constitute the causes of the behavior⁽⁵⁾.

The study was approved by the Research Ethics Committee of the Londrina State University (UEL) under protocol No. 002.0.268.00.09 and all the participants, after being informed of the aims and methodology of the study, signed the Terms of Free Prior Informed Consent.

RESULTS AND DISCUSSION

The majority of the participants in this study were female, over 30 years of age, married, with a predominance of the Catholic religion. The amount of hours worked for all the respondents was 36 hours per week, all had more than four years in the EU, and the length of time since their graduation was six years or more.

The meaning of the encoded statements resulted in four categories with their subcategories, which are presented in Table 1.

Regarding category 1: ***Experiencing Mental Burdens and the absence of human resources***; the statement related to this subcategory is presented below:

The lack of human resources, that is, when there are insufficient employees due to unplanned absences, you cannot manage the complications that appear, we have to provide the care [...]so that this generates a workload, another problem is that the quantity of nursing staff is not adequate, is insufficient, and then the burden is enormous for the nurses (E1).

An insufficient amount of human resources can cause an overload in the activities of the nursing team resulting in deterioration. Health institutions should therefore expand staff calculations, incorporating aspects such as the impact on healthcare costs and outcomes, an evaluation of the degree of dependency of

patients, the workload of the nursing team and the factors that affect the productivity of the

professionals, related to working conditions and worker health, among other things⁽⁶⁾.

Table 1 – Presentation of the analytical categories and thematic subcategories identified from the Statements of the EU nurses, Londrina, PR, 2010.

Categories	Subcategories
1. Experiencing Mental Burdens	Lack of human resources
	High demand from patients
	Management of the nursing team
	Diverse duties of the nurse
	Organization of the work
	Quantity and quality of the materials
	Severity of the patients
2. Experiencing Biological Burdens	Contamination and personal protection
3. Experiencing Chemical Burdens	Handling of medicines and chemical products
4. Experiencing Physiological Burdens	Physical deterioration

Due to the complexity of the problem, it is challenging to solve the problems related to the unplanned absences of workers. However, in an EU, an environment of unpredictability, uncertainty, and immediate life-saving decision making, the professionals are required to be constantly alert. It is therefore crucial that institutions actually consider all these aspects to maintain a workforce that corresponds to the requirements of these units.

Referring to the *high demand of patients*, the following statement was presented:

A burden is working with excessive demands, we work with over 100% of the beds occupied, we have no spaces, but the patients never stop arriving, it is a heavy burden to have patients to be treated who stay in the corridor without beds (E12).

The high demand for emergency services and the repeated hospitalizations in emergency units impact in the care dynamic. Furthermore, this brings impasses in the practice of the nurses responsible for managing these services because they are confronted with critical situations related to the support of life and the quality of the care⁽⁷⁾. The dissatisfaction of the population with the care received in the primary context and the attraction for the emergency services on behalf of the population, who consider them to

be a safe, fast and effective solution for their health problems, are highlighted among the causes of the high demand for these services. This image is directly linked to the power originating from the technological advancement of medicine and the assistentialist role of the health services that prioritize secondary and tertiary care⁽⁸⁾.

The issue of the *management of the nursing team* was evident in the statement:

[...]to manage the team having to work with the characteristics of each, with the dissatisfaction of the people, not of the clients themselves, but of the co-workers, nursing team and even of the medical team (E11).

People are unique and have different views of the world, therefore, there is no way to standardize behavior, actions and thoughts. However, in the team the nursing professionals should have goals to achieve, even though the members have their own visions and perform activities in their own ways. It is essential to respect the individualities without disregarding the common aims of the team⁽⁹⁾. It is also essential to establish dialogue between the staff, however, not a dialog of merely exchanging words, but one that seeks to exchange ideas, which is liberating, which implies the assumption of commitments, committing to

oneself and to others, in an attempt to improve their quality of life and, consequently, to provide the best care for the users and their families, also considering what is best for the institution involved⁽¹⁰⁾.

Regarding the *diverse duties of the nurse*, the following statement demonstrated this problem:

They are all activities that I develop, healthcare, administration, and research, so the burdens are all my functions as a nurse that I bring to my day to day (E3).

The nurse performs a range of activities, with many not specifically related to nursing. Therefore, the work processes must be reviewed, seeking to concentrate efforts to provide more time to perform the specific professional activities, especially patient care⁽¹¹⁾.

The issue of the *organization of the work* was identified in the following statement:

A burden is the work process in which we deteriorate, psychologically, spiritually and physically, it is not like I thought before, that is, just physical, today the psychological aspect has a lot of influence, it is part of the body, the burdens are not only those that we see, but also psychological, the work process is largely responsible for these burdens (E6).

The organization of work is a challenge that can only be addressed through models that allow people to assimilate what happens inside and around them and develop adequate solutions for every problem that arises. In this sense, an in-depth view of the dynamics of the work within the productive working environments is essential. There is a need to analyze the quotidian of the workers, i.e., the subject of the action and in action, to allow the reinvention of the logic of the collective work. When this occurs, the individual has a high degree of freedom to be creative, to relate and interact, which means being a protagonist in their work process⁽¹²⁾.

The mental burdens, for example, can support high rates of work smoothly while the task allows decisions making, however, they become stressful when devoid of significant contents⁽¹⁾.

The statement below refers to the *quantity and quality of materials*:

[...]you find a solution, if you have a ventilator, if you don't have a ventilator, you find a solution,

this is what happens to us, there is a great lack of material, this generates a burden because we have to provide care (E9).

It is a fact that, in the majority of cases, the lack of material and equipment shortages, linked to high user demands leads to situations of stress and conflict in the team, due to disputes between the professionals regarding the use or acquisition of the necessary materials, with the aim of performing their activities and caring for the patient in the best way⁽⁹⁾.

The *severity of the patients* was revealed in the statement below:

[...]the critically ill, intubated patient, the severely ill child, high risk pregnancies, this care burden consumes us, it is an immense burden for the nurses (E5).

The daily work in contact with pain, suffering, death, mutilation and shocking alterations to the image of the patients is characterized as a subjective burden that is a determinant for the emergence of mental and behavioral problems due to deterioration, which is constant for these professionals⁽¹³⁾. It is emphasized that care for critically ill patients, whose clinical conditions are constantly susceptible to instability, is a triggering factor for deterioration, stress and, consequently, suffering for health professionals⁽¹⁴⁾.

Category 2: *Experiencing Biological Burdens and the subcategory contamination and personal protection were exposed by the following statement:*

We need to be alert using gloves, masks and aprons, we need to avoid contamination, another thing is always washing your hands, but sometimes there's so much to do quickly that even we forget to use the protective equipment, there is a biological burden, virus, bacteria, fungi (E1).

The burdens of workers who perform activities in hospital environments are generally associated with biological agents that can trigger various health problems. This exposure makes them vulnerable to acquiring infectious diseases such as Hepatitis types B and C⁽¹⁵⁾. The problems and injuries to the health of workers who work in healthcare services are worrying, since they are typically insalubrious. The characteristics and the forms of organization and

division of the work expose the workers, especially as they remain in the environment throughout their workday and for a large part of their productive lives⁽¹⁶⁾.

Professional safety through the use of worker accident prevention standards is of paramount importance, as it protects the patient and the professional who runs a permanent occupational risk. Therefore, it is critical that intervention measures are adopted, and one of the strategies envisaged is the implementation of the measures of standard precautions (SP)⁽¹⁷⁾. The use of SP is recommended in the care of all patients, however, despite this recommendation, the permanent coexistence with this exposure and the repetition of quotidian procedures lead to the reduction of risk perception that healthcare professionals experience, making it difficult to take the decision for the adoption of SP⁽¹⁸⁾.

Category 3: *Experiencing Chemical Burdens and its subcategory handling of medicines and chemical products* was evidenced in the statement below:

We have the chemical burden, that is when we handle chemical products and medicines (E5).

Chemical substances can damage the health of the workers who perform activities in the hospital environment. This may range from allergic processes to cancer⁽¹⁶⁾. Most of the time the nursing staff do not recognize the potential effects of the chemical substances present in the hospital environment. The chemical burdens to which they are exposed in hospitals are mainly from the procedures of sterilization, disinfection, handling and the pharmacological treatment of the patients⁽¹⁶⁾. A study performed with the nursing staff identified that they need to acquire further information regarding exposure to chemical products, as they often do not recognize them as hazardous to their health⁽¹⁹⁾.

Category 4: *Experiencing Physiological Burdens and the subcategory physical deterioration*, was demonstrated in the following statement:

We have the physical burdens that are mainly related to physical problems, such as back and knee pains, due to moving heavy patients and carrying furniture, this demands a lot of effort and we ask for help, but it is still difficult (E5).

What is referred to in the literature as physiological burdens⁽¹⁾, were cited by the subjects as physical burdens. They were expressed in different words, however they were shown in the same context as internal materiality - occurring in the human body itself. The physical risks refer to noise, vibration, ionizing and non-ionizing radiation, extreme temperatures, abnormal pressure and humidity, inadequate lighting and exposure to fire or electric shocks. The difficulty in identifying the physical agents was also evident in a study performed with nursing staff in Uberaba (MG), in which the majority of the nursing staff investigated the physical risk factors/agents associated with the body position, twisting the spine and carrying weights⁽²⁰⁾.

FINAL CONSIDERATIONS

The nurses identified some workloads that are exposed, meaning that they can be aware that these burdens cause disease and/or damage to their health. However, only one respondent spoke about the chemical burden and none clearly identified the physical burden, with a shift in understanding of the physiological and physical burden, however, both are of the external materiality. Furthermore, none of them identified the mechanical burden that relates to the inadequate place of work, lifting and transporting weights, improper posture, routine and service design error, and furniture, among other factors. This makes the absence or failure of the training process of the workers in question evident, making it necessary to appropriate knowledge about the harmful effects of the burdens to their health. It is essential to discuss with these professionals and the managers of the institution regarding the adoption of strategies to prevent injuries caused by these burdens. It is noteworthy that the respondents recognized the SP, however, due to the intensity and speed of the activities, they often forgot to use them properly. Therefore, it is of fundamental importance to awaken these professionals to the importance of adopting the standards recommended for hospital environments, avoiding accidents and, consequently, increasing the protection of themselves, and of the patients and the family members they attend

SIGNIFICADOS DE CARGAS DE TRABALHO PARA ENFERMEIROS DE PRONTO SOCORRO/EMERGÊNCIA

RESUMO

Neste artigo objetivou-se identificar o significado que os enfermeiros de uma Unidade de Pronto Socorro/Emergência atribuem às cargas de trabalho e revelar as cargas vivenciadas no ambiente de trabalho. O estudo é do tipo descritivo, com abordagem qualitativa. Foram entrevistados 12 enfermeiros, em novembro de 2010. Utilizou-se a técnica de análise de conteúdo que resultou em quatro categorias: vivenciando as cargas psíquicas, vivenciando as cargas biológicas, vivenciando as cargas químicas, e vivenciando as cargas fisiológicas. Constatou-se que a maioria dos sujeitos conhece as cargas psicológicas e biológicas e apenas um mencionou as cargas químicas a que estão expostos no ambiente de trabalho. Entretanto, os enfermeiros não identificaram a carga mecânica e confundiram a carga física com a fisiológica, evidenciando a ausência ou falha no processo de capacitação dos trabalhadores em questão, tão necessário para que adquiram conhecimento sobre os efeitos maléficos dessas cargas à saúde.

Palavras-chave: Saúde do Trabalhador. Riscos Ocupacionais. Carga de Trabalho. Enfermagem. Exposição Profissional.

SIGNIFICADO DE LAS CARGAS DE TRABAJO PARA LAS ENFERMERAS EN LA SALA DE EMERGENCIA / URGENCIA

RESUMEN

El objetivo fue identificar el significado que las enfermeras de una Unidad de Emergencia tienen en carga de trabajo y conocer cargas vivió profundamente en este ambiente del trabajo.

Estudio descriptivo con enfoque cualitativo. Doce enfermeras fueron entrevistadas en noviembre de 2012. Se utilizó la técnica de Análisis de Contenido que resultó en cuatro categorías: experimentando las cargas psíquicas, las cargas biológicas, las cargas químicas y las cargas fisiológicas. Se encontró que la mayoría de sujetos del ensayo saben las cargas psicológicas y biológicas y sólo uno menciona las cargas a productos químicos en el lugar de trabajo. Sin embargo, las enfermeras no identificó la carga mecánica y confundir las cargas fisiológicas y físicas. Esta situación muestra claramente la ausencia o el fracaso del proceso de formación del personal necesario para adquirir conocimientos sobre los efectos nocivos de las cargas para la salud.

Palabras clave: Salud Laboral. Riesgos Ocupacionales. Carga de Trabajo. Enfermería. Exposición Profesional.

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