

IMPACT OF WORKPLACE ON THE HEALTH OF NURSING PROFESSIONALS AT A SPECIALIZED OUTPATIENT CLINIC

IMPACTO DO AMBIENTE LABORAL NO PROCESSO SAÚDE DOENÇA DOS TRABALHADORES DE ENFERMAGEM DE UMA UNIDADE AMBULATORIAL ESPECIALIZADA

IMPACTO DEL AMBIENTE LABORAL EN EL PROCESO DE SALUD-ENFERMEDAD DE LOS TRABAJADORES DE ENFERMERÍA DE UN CENTRO DE ESPECIALIDADES MÉDICAS

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ABSTRACT

This study aims at identifying the perception of nursing professionals about the impact of the work environment on their health. The subjects were 40 workers of a specialized outpatient unit in the city of Rio de Janeiro. Data was collected between March and September 2011. The exposure of nurses to occupational hazards can lead to musculoskeletal disorders, varicose veins and stress. Ergonomic factors can have, as affect negatively their health. This study demonstrates that professional nursing practice is performed in poor conditions and investments are still necessary.

Keywords: Occupational Health Nursing; Occupational Risks; Occupational Health.

RESUMO

Este estudo trata do impacto do ambiente de trabalho no processo de saúde-doença dos trabalhadores de enfermagem de uma unidade ambulatorial especializada da cidade do Rio de Janeiro. Objetiva-se levantar as repercussões do ambiente laboral sobre o processo saúde-doença segundo a percepção dos trabalhadores de enfermagem atuantes. Os sujeitos do estudo foram 40 trabalhadores de enfermagem, com coleta de dados realizada entre março e setembro de 2011. As repercussões da exposição dos trabalhadores de enfermagem aos riscos presentes no ambiente laboral manifestam-se por meio de distúrbios osteomusculares, varizes e estresse. Fatores ergonômicos que podem contribuir para as repercussões negativas na saúde desses trabalhadores também são observados e levantados. Este estudo evidencia que o trabalho de enfermagem ainda se encontra em condições de precariedade e com necessidade de investimentos contínuos.

Palavras-chave: Enfermagem do Trabalho; Riscos Ocupacionais; Saúde do Trabalhador.

RESUMEN

Este estudio trata del impacto del ambiente laboral en el proceso de salud -enfermedad de los trabajadores de enfermería de un centro de especialidades médicas de la ciudad del Rio de Janeiro. Su objetivo fue hacer el relevamiento de las repercusiones del ambiente laboral sobre el proceso salud-enfermedad según la percepción de los trabajadores de enfermería. Participaron cuarenta trabajadores de enfermería; la recogida de datos se realizó entre marzo y septiembre de 2011. Las consecuencias de la exposición de los trabajadores de enfermería a los riesgos del ambiente laboral se manifiestan en problemas musculares y de columna, varices y estrés. También se observaron y consideraron los factores ergonómicos que podrían afectar la salud de los trabajadores. Este estudio demuestra que el trabajo de enfermería aún es precario y que precisa inversiones permanentemente.

Palabras clave: Enfermería del Trabajo; Riesgos Laborales; Salud Laboral.

INTRODUCTION

The present study aims at identifying and characterizing the impact of the work environment on the health and disease processes of nursing professionals at a specialized outpatient unit. The study objective is to expand knowledge about the workers' health, as well as to observe to which extent these professionals are exposed to occupational hazards of which they are often unaware in their work environment. An occupational hazard is "a condition or a set of circumstances that can have an adverse effect, such as death, illness or injury to the workers' health, to property or the environment".^{1,3,4}

The hospital is a complex environment that exposes its workers to a variety of health hazards.²

Agents usually present in the workplace that can pose a risk to workers' health are classified as chemical, physical, biological, ergonomic and accidental. Psychosocial risks are considered an ergonomic hazard.^{3,4}

Occupational hazards are part of the nursing professionals routine given their direct contact with infectious diseases, handling of heavy equipment and patients factors that contribute to physical and mental stress.⁵ The activities considered unhealthy and dangerous, i.e. those whose conditions and control mechanisms handle biological, chemical, physical and mechanical agents, can cause adverse effects on workers' health.⁶

Nursing professionals are the most exposed to occupational hazards, followed by doctors, dentists and laboratory personnel. Health hazards that are not efficiently controlled may ultimately lead to occupational accidents and diseases.⁷ The majority of health professionals do not link their health condition to the peculiarities of their type of work. This is due to the low and/or lack of concern for their health protection, promotion and maintenance, both by the professionals themselves and by the health institutions.⁸

Generally nursing professionals are not aware of the possible occupational hazards they are exposed to; they ignore the relationship between professional practice and infections and, especially, between health and disease.³

Mauro *et al* conclude that working conditions influence the work process and therefore determine, directly or indirectly, the health-disease processes of nursing teams. Souza⁸ confirms such conclusion and states that work organization may or may not promote and establish actions to prevent or at least minimize the impact of occupational hazards on the professionals' health. This depends on how one understands and perceives the seriousness of such risks to workers' health and productivity.

The identification of risks and factors potentially hazardous to health is essential in order not only to prevent and/or eliminate them but to instruct employers and employees alike. It is necessary therefore to further the knowledge about occu-

pational hazards in order to ensure optimum working conditions that may have an impact on the level of satisfaction and commitment of employees and directly or indirectly influence positively the Brazilian economy.

In addition to the identification of risks, some authors claim that the perceptions of health care professionals influence the implementation or not of standard precautions. This poses serious implications to institutional training (lectures, in-service training, reorientation of professional practices, etc.). The study of perception and cognitive processes are essential for understanding the interrelationships between the individual and the environment, as well as the evaluation of the physical surroundings. Many architecture and urbanism projects are inadequate in satisfying the population's needs because they do not consider their perceptions, values and expectations.⁹

Environment perception and cognitive elements acquired throughout an individual's life "are an element of evaluation of environmental and architectural design suitability", which does not rely on pre-established rules. They regard feelings experienced by the individual towards the built environment, "an interface between reason and emotion".^{10,43}

Considering such perspective, the objective of this study is to survey the impact of the work environment on the health and disease processes as perceived by nursing professionals of a specialized outpatient clinic in the city of Rio de Janeiro. This type of study can help to spread information on the several risks nursing professionals are exposed to on a daily basis, as well as to awaken the interest of professionals to investigate and develop themes related to workers' health, in order to promote the improvement of nursing processes and practices.

METHOD

This is a qualitative and descriptive research. Such approach was selected because the present study deals with nurses' worldview, perceptions and knowledge.¹¹ The research setting was a specialized, moderate complexity, outpatient clinic in the city of Rio de Janeiro. Data was collected in previously selected care units with a significant number of nursing professionals: Ambulatory Surgery Unit (UCAMB); Material Sterilization Centre (CME); rest and welcoming units; clinics; surgical clinics; women's and child's health units. These areas were chosen given the nursing team performance and their work process, characterized by an intense demand and the large number of procedures. In such contexts, occupational hazards result from factors related to the work dynamics and the conditions under which this work is carried out.

During data collection the unit consisted of 80 nursing professionals, including registered nurses, nursing technicians and nursing assistants. The study subjects were 40 professionals:

30 nursing technicians and nursing assistants and 10 registered nurses. The research included those professionals that were not temporarily on leave or on holidays and those that volunteered and were available to provide the information needed.¹² Data was collected between March and September 2011 and all those approached agreed to participate in the study.

The instruments for data collection were previously developed by the authors: a semi-structured interview (aiming at gathering information on the impact of the work environment on health, according to the participants); and a non-participant structured observation (based on a form that aimed at enriching the collection of new data on the occupational hazards of the profession in order to propose interventions to prevent and/or minimise occupational hazards. The researchers performed three pre-tests with the nursing staff and two pre-tests in divisions not included in the survey in order to meet the research objectives.

The participants' anonymity was preserved through the use of a code for each interview so that no connection could be done between the content of the interviews and the subjects. As the interviews were transcribed, the following codes were ascribed: E1, E2, E3, E4, and so forth, according to the chronological order of the transcriptions.

Data were analysed and interpreted using thematic content analysis, which organizes data through phases or stages, leading to a structured and organized content result.

The research was approved by the Research Ethics Committee of the Pedro Ernesto University Hospital (CEP/HUPE) under Protocol No. 2528 CEP/HUPE. Following ethical guidelines, each participant was explained the research objectives and signed the free and informed statement. The latter, according to Resolution No. 196/96 ensures the anonymity, freedom and confidentiality of information to be disclosed in this research.

RESULTS AND DISCUSSION

The emergence and subsequent consolidation of neoliberal capitalism caused significant changes in work processes. This can be exemplified by the massive application of technological innovations, the precarious conditions and labour relations, the increase in work rhythms and competitiveness among workers.¹³ Such contexts resulted in profound changes in the working dynamics, increasing, in turn, the negative effects of work on the worker's constitution.

The research subjects mentioned the following effects of work processes upon their health: musculoskeletal disorders, varicose veins and stress. The most frequent ones were those related to the musculoskeletal system, as reported by the literature.¹⁴⁻¹⁹

Among the musculoskeletal diseases, the main complaints were low back pain and pain in the peripheral region (lower limbs). Low back pain is the result of cumulative trauma disorder - especially patient mobilization and position changes, two frequent interventions in direct patient care.^{14,20,21}

Many studies describe the main risk factors related to musculoskeletal disorders^{14,15,17,18}: as: a) work organization: increase in working hours, overtime, fast-paced work, lack of personnel, repetitive tasks, informatization, time requirements, lack of autonomy, fragmentation of tasks and relationship with managers; b) environmental factors: inadequate furniture and insufficient lighting; c) excessive physical strain due to the handling of heavy loads, bad posture, repetitive movements.

The above factors were recorded on the subjects' discourse and witnessed during field observations. Direct observation confirmed aspects of physical structure, such as long interdepartmental and intradepartmental passageways; difficult access to units, lack of lifts; reception with inoperative escalator; insufficient and inadequate changing rooms and bathrooms; lack of furniture in the wards; poorly designed wards (ergonomic inadequacy) that favour the spread of disease amongst workers.

Confirming these findings, the subjects mentioned that the nursing work process is repetitive, monotonous and they feel overworked. Adding to that they believe they somatise the negative effects of the physical structure of the working environment which leads to musculoskeletal disorders.

Employees have to move from here to take other things; the toilet flush doesn't work and they have to get a bucket of water; this does all the damaging (E02).

It's a very long passageway with a single bathroom down the hall (E24).

These words emphasize characteristics of the nursing work process, which can lead to musculoskeletal disorders: repetitive movements, adoption of incorrect body posture for long periods of time, physical overload, recurrent tasks, organizational aspects and indoor distances, among others.^{14,16,18,22}

We give a bath, we get a spine strain, it's a pulled muscle. It happened to me on the operating table: the doctor said "come on, let's do the turn", I was doing it alone, it was a bad movement. What happened? I had a spine strain and had to be 35 days off work (E26).

In this sense, the work environment, its physical, mechanical and psychological conditions associated with the demands of the work process (working hours, work overload, etc.), can

lead the nursing professional to adopt bad postures, one of the main causes of changes in the musculoskeletal system.^{8,14,15,23,24}

Nursing is usually a female profession and women are more prone to musculoskeletal disorders, since beyond the working hours and the level of mechanization, the double shift must be considered, for it increases the risk of such diseases.^{14,16,25}

Consistent with previous studies, the participants cited varicose veins as one of the main negative health hazards affecting nursing professionals.^{26,27} Although there is no clear evidence to the link between varicose veins and type of work, among the main risk factors identified those related to the work process are: old age, being female, standing postures (static and dynamic), shift work, work schedule, high room temperature and humidity, wrong handling of weights and stress.^{26,28,29} Most of these factors are present in the nursing work environment.

Although still very controversial, it is possible that bad posture worsens venous diseases, particularly in the case of upright (orthostatic) position. In order to maintain a standing posture, low but constant levels of muscle tension are required. This prolonged state of contraction causes the compression of blood vessels that impairs blood circulation causing disorders, such as varicose veins. However, the higher incidence of varicose veins among women might be due to hormonal factors.²⁹

The typical symptoms of varicose veins are pain, discomfort, fatigue, swelling, heaviness and muscle cramps that worsen throughout the day.³⁰ Such features are prevalent in nursing processes and can be exemplified by the following narratives:

I have been working here over 26 years, I acquired many varicose veins, leg pain (E15).

The appearance of varicose veins is a fact, because we spend too much time standing and walking, all the time (E35).

Besides musculoskeletal diseases and varicose veins, many participants mentioned stress as having significant consequences on the health of nursing professionals. According to them stress is related to the level of responsibility of their duties (the fact that they are dealing with human lives) and managerial pressure for productivity, effectiveness and efficiency. This generates psychological distress, which, in turn, results in occupational stress, due to the complexity of the relationship between working conditions, extra working conditions and the professionals' personal characteristics when the work demands exceed their coping abilities. The abnormal distress and/or the body's reduced ability to work is due to the professionals' lack of tolerance, overcoming ability or adaptation skills to psychological requirements perceived as unfair, overwhelming and inexhaustible.²⁹

Nursing professionals are, compared to other specialists, the most exposed to occupational stress because, in addition to direct contact with disease and death, they have long working hours and accelerated work processes; they are exposed to a repressive and authoritarian attitude of a rigid and vertical hierarchy; the fragmentation of their tasks and the lack of social recognition is an added aggravation. On the other hand, they need to constantly improve their skills given the continuous development of medical technology, increasing the occupational stress.^{30,31}

Stress can directly influence an employee performance; it can cause nervousness, fatigue, irritability, pain in the neck and shoulders muscles, tension headache, lack of concentration, depression, pessimism, incommunicability, low productivity and lack of creativity.²⁹

Finally, the study participants listed other health problems: decreased visual acuity, kidney problems, depression and worsening of previous health problems, such as diabetes and hypertension.

Occupational hazards and disease processes are multidimensional and complex; they damage and cause health deterioration. In this sense, the work context can have negative impacts upon workers, their family and productivity.

The nursing collective is not yet sufficiently mobilized to defend measures in favour of their own health, their productivity, their performance and job satisfaction. To this end, the professional as a group should have sufficient knowledge of the labour conditions and organization, the effects of occupational health hazards, the causes of occupational diseases and their control.^{6,32,33} Nurses should think on their health as a productive force, and that health professionals are exposed to work-related strains that affect their health condition.³⁴ Since workers live, get ill and die as a result of such physical and psychological strain, interdisciplinary interventions, with new approaches and methodologies are needed. Work should be considered as a process of an active individual whose goal is to deliver a service which, in this case, is the well-being of another participant in the process, the patient.³

FINAL CONSIDERATIONS

The research theme is an important subject in the field of occupational safety and health for the improvement of living and working conditions. The findings of this study indicated that there are still poor working conditions for nurses and that further investments are required.

A re-reading of the results allowed the authors to conclude that the constant exposure of the nursing staff to the hazards in the work environment causes stress, musculoskeletal disorders and especially varicose veins. The researchers observed that ergonomic factors may negatively affect workers'

health: long passageways; absence or limited availability of toilets; manual handling of loads; insufficient and inadequate furniture that can cause posture related problems, among others.

Research reveals that it is necessary to plan and implement actions to improve the workers' health. Regular breaks during working hours; physical exercises at work; continuing education programmes; more use of available technology; and a better relationship between the teams are indicated actions too.

From this perspective, the Workers Health Centre is extremely necessary in helping workers to improve their performance and in the implementation of a health policy aiming at counteracting occupational hazards, promoting health and safety and providing treatment to those already unwell.

It is extremely important to be aware of and to study the working conditions of nurses in order to carry out other projects that can help implement actions for continuously improving work processes promoting, therefore, the health of these professionals.

It is hoped that this research will encourage further studies on the issue that may contribute to ensure that the employees are working in a safe and healthy environment and that they themselves are working safely.

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