78 - ERGONOMIC RISK AND MUSCLE-SKELETAL DISCOMFORT IDENTIFIED IN WORKERS OF A PUBLIC HOSPITAL IN NATAL / RN

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INTRODUCTION

The Worker's Health is a field of Public Health area in full construction, whose object is focused on the health-disease process of workers from various population groups in their job relations (MENDES; DAYS, 1999).

Rigotto (1993) reports that the study on worker's health is a complex and multifaceted issue, that should be taken through different eyes, trying to assist health professionals in their contact with this subject. Encourages these professionals to take attitudes of someone who listens, questions, feels, scans, studies and searches for the construction of a knowledge with workers, while recognizing the difficulties of performing these initiatives.

In Brazil, the relations between labor and worker's health are related to a variety of situations, characterized by different stages of technological incorporation, multiple forms of organization and management, and precariousness of labor relations, which are reflected on living, sickening and dying of workers (BRASIL , 2001).

In the face of inadequate working conditions offered to workers in the hospitals of many countries, the International Labour Organization (ILO), since the decade of 40, has considered the issue as a topic of discussion and has made recommendations regarding health and safety in order the adequacy of working conditions of these professionals.

These unsatisfactory conditions in workplace can be classified into five types, according to the Ordinance No 3214, the Ministry of Labour of Brazil, from 1978. This ordinance contains a series of regulatory standards that consolidate the labor legislation on safety and occupational medicine. There was a risk rating in its Regulatory Standard n. 5 (NR-5), which are: biological, physical, chemical, accidents and ergonomic, which may cause harm to health professionals who work there. Among these factors, we'll be focusing ergonomic on the follow.

According Cavassa (1997), the ergonomic factors are those that focus on labor-employee behavior. These are the design of equipment, of the workplace, the way that the activity is performed, communication, environment (degree of unsoundness, lighting, temperature, and others). The analysis of the working conditions of hospital worker takes him into specific characteristics, besides relating to illness and death, is part of a system that ensures production continuity and determine the break of continuity in the individual work, which defines the shift work. Studies taken with these workers showed that the rotation work shifts cause sleep disorders, nervous and digestive disorders, and disrupted family and social life of workers. To avoid that these risks undertake the activities and the worker's health, adjustment is required among working conditions and the man on the issues of practicality, physical and mental comfort, through: job improvement job, better conditions in workplace, machinery and equipment modernization, improvement in relationships between people, change in work rhythm, proper tools, proper posture, among others (ALVES, 1988).

Accordingly, the hospitals are complex environments that have high numbers of occupational risks to their professionals, both from the area of patients / clients care, and all those in support of these healthcare services (SECCO; GUTIERREZ, 2001a).

Despite the great concern about the life quality in organizations, little has been found regarding the creation and implementation of health programs for workers. And it is under this context that we had idealized this research, starting with the following question: who are the workers who are susceptible to ergonomic hazards and muscle-skeletal discomfort in a hospital in Natal/RN? What are the discomforts felt by these workers? What are the ergonomic hazards they are vulnerable?

To respond our questions, we made the following objectives:

•Characterize the employees of a hospital in Natal / RN, susceptible to muscle-skeletal discomfort and ergonomic hazards, who agreed to participate in the survey, regarding gender, age and function developed;

•Identify the main muscle-skeletal discomfort developed by these workers;

•Identify the ergonomic hazards that these workers are vulnerable within the work environment;

METHODOLOGY

This is a descriptive and exploratory study with a quantitative and investigative approach performed through data collection and systematization.

The study was conducted at the State Reference Hospital in Infectious Diseases and Center for Toxicological Information - Giselda Trigueiro (CTI).

The population studied corresponds to the public servants of the following sectors: transport of patients (stretcher bearer), nutrition, telephony (PABX), laundry and reception, being 04 stretcher bearers, 09 of Nutrition, 04 of Telephony (PABX), 15 of laundry and 04 from reception, a total of 36 public servants. The sectors were selected, since the same, within the hospital environment, demonstrates inherent risks in developing these activities, without stress or specify any of the activities over others. The servants, however, were chosen randomly.

Data collection was performed from January to February 2007 by means of individual interviews with the workers. It was used a questionnaire consisting of closed and open questions being observed the following variables: gender, age, function, discomforts and ergonomic risks conditions identified.

The research was conducted within the parameters contained in Resolution 196/96 of the National Health Council and Ministry of Health that works on research involving humans. The resolution aims to ensure the rights and duties that concern the scientific community, to research's subjects and the State.

The data obtained were categorized and processed electronically through Microsoft Excel 2007 software, in addition to being analyzed by descriptive statistics.

RESULTS AND DISCUSSIONS

The results of this study were:

As for the sex of workers on the searched institution, 27 (75%) were female and 09 (25%) were male. Regarding the age of the population, we identified that most had been older than 50 years.

In the characterization of the population as the function developed in this hospital, we've identified that 11% of those working

as stretcher bearers, 14% as serving maids, 3% were kitchen auxiliary, 6% were nutrition aides, 3% of cleaning aids, 11% were telephone operators, 21% worked as a laundry assistant, 11% clothes auxiliary, 6% were tailors, 3% heads of laundry and 11% worked as receptionists.

Of the 36 respondents, most work in the laundry, and of these, 08 are engaged in the task of laundry assistants, 04 are clothes auxiliaries, 02 are tailors, 01 is head of laundry. The duties of tailor, head of laundry and clothes auxiliary are held by women. The functions of stretcher bearer are carried out exclusively by men while reception staff is fully composed by women.

In relation to muscle-skeletal discomfort felt, we identified that about 70% reported pain, followed by other discomforts such as fatigue, crack, weight, especially in the region of the spine, more specifically in the lumbar, suggesting back pain. And the laundry was the sector that most stood out, 11 of the 15 respondents, in this department, quoted pain and discomfort as the largest sense.

Vieira (1999), in his studies, report that the pain is the predominant symptom in most patients with repetitive strain injuries (RSI) and work-related musculoskeletal disorders (WMSDs).

Faced with what was reported during the interviews, through the testimony of workers, we can observe and identify that, in surveyed sectors, there is the presence of some ergonomic hazards, which are closely related to discomfort and possible bone-muscular disorders faced by servers, as shown in Table 01 below:

Table 01 Identification of ergonomic hazards in workers of a public hospital in the Greater Natal / RN, 2007.

FUNCTION	ERGONOMIC RISKS
STRETCHER-BEARER	Lifting and manual weighted-objects transportation, inappropriate posture, night shift.
NUTRITION	Lifting and manual weighted-objects transportation, inappropriate posture, night shift, inadequate or faulty materials, long day of work
PABX – TELEPHONY	Ergonomically deficient and inadequate furniture, inappropriate posture, monotony and repetitiveness, night shift.
LAUNDRY	Exertion, weighted-objects lifting, requirement of inappropriate postures and repetitive movements of the upper limbs and neck, inadequate or faulty materials.
RECEPTION	Repetitive movements of the upper limbs and neck, inappropriate posture, monotony.

For Vieira (1999), the risks are related to bad ergonomic positioning imposed on the worker to perform the tasks due to poor organization of tasks and jobs. The author also mentions that the transport and lifting of heavy loads get the worker to take inadequate body postures and tensions due to implementation of poorly designed tasks.

The Ministry of Labour (1986) calls for the placement of seats to ensure correct posture to the worker, able to avoid forced or disturbed positions, or whenever the implementation of the task requires that we should work seated, as in the case of employees who work in the dubbing of clothing, in sewing, in the sector of telephony (MINISTÉRIO DA SAÚDE, 2004).

According to NR-17, the seats used in workstations must meet the following minimum requirements of comfort:

a) Height adjustable to the stature of the worker and the nature of the work performed;

b) Characteristics of little or no conformation on the basis of the seat;

c) Rounded front edge;

d) Back with slightly adapted body form to protect the lumbar region.

For the activities in which the work should be done seated, from the ergonomic analysis of work, it may be required a feet support adapted to the length of the worker's leg.

All equipment that makes up a workstation must be suited to the psychophysiology characteristics of workers and the nature of the work being performed.

The work's organization is an important piece to build the sense of work as a possibility of expansion or contraction, such as growth or suffering (PROCHET, 2000). However, the chaotic situation that the health system is in the face of the lack of government resources in public hospitals makes workers more exposed to occupational risks (BARTOLOMEO, 1998).

CONCLUSIONS

The workers searched were characterized by being, in majority: 75% are female, aged over 50 years, and 36% of those working in the areas of laundry and clothes from the hospital.

In relation to muscle-skeletal discomfort senses, we identified that about 70% reported pain, followed by other discomforts such as fatigue, crack, weight, especially in the region of the spine, more specifically in the lumbar, suggesting back pain, being the laundry sector the one that stood out more.

As for ergonomic risks, in general, we identify that workers are exposed to: improper posture, long journey, overhead labor, inadequate and deficient equipment and furnishings, monotony and repetitiveness.

Given the testimonies of workers, we could see that the dissatisfaction in the workplace is unanimous. It is crucial a change in work organization, to promote the health of the worker so that he feels awareness and satisfaction in providing a good service and not make a martyrdom of their work. It is through work that the individual is constituted as a subject, affirming their identity and their desire to be socially recognized.

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ERGONOMIC RISK AND MUSCLE-SKELETAL DISCOMFORT IDENTIFIED IN WORKERS OF A PUBLIC HOSPITAL IN NATAL / RN

ABSTRACT

This is a descriptive and exploratory study with a quantitative and investigative approach conducted at a public Hospital in Natal/RN. The population consisted of workers from the following sectors: transport of patients (stretcher bearer), nutrition, telephony (PABX), laundry and reception, totaling 36 servers. We had the following objectives: characterize the employees of a hospital in Natal / RN, susceptible to muscle-skeletal discomfort and ergonomic hazards, who agreed to participate in the survey, regarding gender, age and function developed; identify the main muscle-skeletal discomfort developed by these workers and identify the ergonomic hazards that these workers are vulnerable within the work environment. We identified that 75% of staff members were female, aged over 50 years and 36% of those working in the areas of laundry and clothes from the hospital. In relation to muscle-skeletal discomfort senses, we identified that about 70% reported pain, followed by other discomforts such as fatigue, crack, weight, especially in the region of the spine, more specifically in the lumbar, suggesting back pain, being the laundry sector the one that stood out more. As for ergonomic risks, in general, we identify that workers are exposed to: improper posture, long journey, overhead labor, inadequate and deficient equipment and furnishings, monotony and repetitiveness. We conclude that a change is needed in organizing the work of this institution, aimed at prevention and health promotion of workers, emphasizing the importance of the implementation of Ergonomics in the planning and organization of work in hospital environments.

Keywords: Worker's Health Attention; Ergonomics; Muscle-skeletal system.

RISQUES ERGONOMIQUES ET INCONFORT MUSCLE-SQUÉLETTIQUE IDENTIFIÉS CHEZ LES TRAVAILLEURS D'UN HÔPITAL PUBLIC DE NATAL/RN

RÉSUMÉ

Il s'agit d'une étude descriptive-explorative, d'abordage quantitative d'investigation faite dans un hôpital du réseau public de Natal/RN. Le public cible était composé de travailleurs des secteurs suivants : déplacement de patients (brancardiers), nutrition, téléphonie (PABX), buanderie et réception, un total de 36 serviteurs. Nous avons eu comme objectifs : caractériser les travailleurs d'une unité hospitalière à Natal/RN, susceptibles aux inconforts muscle-squélettiques et risques ergonomiques, quant au sexe, âge et fonction développée ; identifier les principaux inconforts muscle-squélettiques développés par ces travailleurs ; et identifier les risques ergonomiques auxquels ils sont soumis dans le lieu de travail. Nous avons identifié que 75% de ces professionnels étaient du sexe féminin, âgés de plus de 50 ans et 36% parmi eux travaillaient dans les secteurs de buanderie et penderie de l'hôpital. Par rapports aux inconforts muscle-squélettiques, nous avons constaté que 70% avaient mal, suivi d'autres inconforts tels : fatique, craquements, sensation de poids surtout dans la région de la colonne vertébrale, plus précisement dans la région lombaire, suggérant des lombardies. Etant la buanderie le secteur le plus touché. Quant aux risques ergonomiques, en général, nous avons pu constater que les travailleurs sont exposés à : posture inadéquate, journée de travail prolongée, surcharge laborale, mobiliaire et équipements inadéquats et déficients, monotonie et répétitivité. Nous avons conclu qu'il faut prévoir des changements dans l'organisation du travail de cette institution dans le but de prévenir et de promouvoir la santé du travailleur, mettant en évidence l'application de l'Ergonomie au cours de la planification et organisation du travail en ambiance hospitalière.

MOTS-CLÉS: Attention à la santé du travailleur. Ergonomie. Système muscle-squélettique.

RIESGOS ERGONÓMICOS Y LAS MOLESTIAS MÚSCULO-ESQUELÉTICOS IDENTIFICADOS EN TRABAJADORES DE UN HOSPITAL PÚBLICO DE NATAL / RN

RESUMEN

Este estudio es descriptivo y exploratorio, con una investigación cuantitativa realizada en un hospital público en Natal / RN. La población fue trabajadores de los siguientes sectores: transporte de pacientes, nutrición, teléfono (PABX), lavandería y recepción, con un total de 36 servidores. Hemos tenido los siguientes objetivos: caracterizar a los empleados de un hospital en Natal / RN, probablemente a los trastornos musculoesqueléticos y riesgos ergonómicos, de acuerdo con el sexo, la edad y la función desarrollada; identificar los principales trastornos músculo-esqueléticos elaborados por estos trabajadores, y identificar riesgos ergonómicos que estos trabajadores están sujetos en el entorno de trabajo. Se identificó que el 75% de los miembros del personal eran mujeres, de más de 50 años y el 36% de las personas que trabajan en las áreas de lavandería y ropa de alta del hospital. En relación con el músculo-esquelético molestias sentidos, hemos identificado que aproximadamente el 70% reportó dolor, seguida por otras molestias como fatiga, crack, el peso, especialmente en la región de la columna vertebral, más específicamente en la región lumbar, lo que sugiere el dolor de espalda, como industria de la ropa con la más alta incidencia. En relación a los riesgos ergonómicos, en general, hemos podido identificar que los trabajadores están expuestos a: postura inadecuada, largo día de trabajo, los gastos generales de trabajo, equipo y mobiliario insuficiente y deficiente, la monotonía y repetitividad. Llegamos a la conclusión de la necesidad de un cambio en la organización de la labor de esta institución, encaminadas a la prevención y promoción de la salud de los trabajadores, haciendo hincapié en la importancia de la aplicación de la ergonomía en la planificación y organización de los trabajos en entornos de hospital.
PALABRAS CLAVE: Atención a la salud del trabajador; Ergonomía; sistema musculoesquelético.

RISCOS ERGONÔMICOS E DESCONFORTO MÚSCULOESQUELÉTICO IDENTIFICADOS EM TRABALHADORES DE UM HOSPITAL PÚBLICO DE NATAL/RN

RESUMO

Trata-se de um estudo descritivo-exploratório, com abordagem quantitativa investigativa, realizada em um hospital público de Natal/RN. A população constou de trabalhadores dos seguintes setores: transporte de pacientes (maqueiro), nutrição, telefonia (PABX), lavanderia e recepção, totalizando 36 servidores. Tivemos como objetivos: caracterizar os trabalhadores de uma unidade hospitalar, em Natal/RN, susceptíveis a desconforto músculo-esquelético e riscos ergonômicos, quanto ao sexo, idade e função desenvolvida; identificar os principais desconfortos músculos-esqueléticos desenvolvidos por esses trabalhadores; e identificar os riscos ergonômicos a que esses trabalhadores estão sujeitos, dentro do ambiente de trabalho. Identificamos que 75% desses profissionais eram do sexo feminino; com idade acima de 50 anos, e 36% desses atuavam nos setores de lavanderia e rouparia do hospital. Em relação aos desconfortos músculos-esqueléticos sentidos, identificamos que cerca de 70% referiram dor, seguido de outros desconfortos como: cansaço; estalos; peso, principalmente na região da coluna, mais precisamente na região lombar, sugerindo lombalgias. Sendo a lavanderia o setor com maior ocorrência. Quanto aos riscos ergonômicos, no geral, pudemos identificar que os trabalhadores estão expostos à: postura inadequada, jornada prolongada, sobrecarga laboral, ao mobiliário e aos equipamentos inadequados e deficientes, à monotonia e repetitividade. Concluímos que é imprescindível uma mudança na organização do trabalho dessa instituição, visando à prevenção e promoção da saúde do trabalhador, ressaltando a importância da aplicação da Ergonomia no planejamento e na organização do trabalho em ambientes hospitalares.

PALAVRAS-CHAVE: Atenção à saúde do trabalhador. Ergonomia. Sistema músculo-esquelético.