Abstract

Objectives: To identify nursing staff’s perceptions of working conditions and to propose measures to minimise related adverse impacts on their health and disease processes. Methods: A qualitative, descriptive study of 40 nurses working at an outpatient clinic in Rio de Janeiro City, Brazil, through semi-structured interviews interpreted in the light of content analysis. Results: Participants prepared suggestions focussed on modernising physical infrastructure, replacing workstation furniture and dividing job activities equitably. Conclusion: There is considerable need to set up a Workers Health Centre, through which to implement measures to counter occupational risks and promote workers’ health and safety. Practical implications: This highlights the importance of preventing occupational hazards in nursing work in order to reduce work-related diseases.

Keywords: Occupational health; Nursing; Working conditions.

Resumo

Objetivos: Identificar a percepção dos trabalhadores de enfermagem sobre as condições de trabalho nas quais estão inseridos e propor medidas para minimizar os impactos negativos das mesmas sobre o processo saúde-doença desses trabalhadores. Métodos: Pesquisa qualitativa, descritiva, em uma unidade ambulatorial, na cidade do Rio de Janeiro, Brasil, com quarenta trabalhadores de enfermagem, através de entrevista semiestruturada, interpretados à luz da análise de conteúdo. Resultados: Os participantes elaboraram sugestões centrando-se na modernização da estrutura física, na substituição do mobiliário dos postos de trabalho e na divisão equitativa das atividades laborais. Conclusão: Destacam-se a necessidade e a importância da implantação de um Núcleo da Saúde do Trabalhador, a fim de implementar ações que neutralizem os riscos ocupacionais e promovam saúde e segurança aos trabalhadores. Implicações para a prática: Salienta-se a importância da prevenção dos riscos ocupacionais na prática do trabalhador de enfermagem, a fim de diminuir as doenças no e pelo trabalho.

Palavras-chave: Saúde do trabalhador; Enfermagem; Condições de trabalho.

Resumen

Objetivos: Identificar la percepción de profesionales de enfermería sobre sus condiciones de trabajo y proponer medidas para minimizar los impactos negativos de estas percepciones sobre el proceso salud-enfermedad de estos trabajadores. Métodos: Estudio cualitativo, descriptivo, realizado en una unidad ambulatoria en el municipio de Rio de Janeiro - Brasil, con 40 trabajadores. Los datos fueron obtenidos a través de entrevistas semiestructuradas e interpretados a la luz del análisis de Contenido. Resultados: Los participantes elaboraron sugerencias centrándose en la modernización de la estructura física, sustitución del mobiliario y división equitativa de las tareas. Conclusión: Es necesario e importante implementar un Núcleo de Salud del Trabajador, que efectúe acciones que neutralicen los riesgos ocupacionales, garantizando salud y seguridad. Implicaciones para la práctica: Se resalta la importancia de la prevención de los riesgos ocupacionales en la práctica del profesional de enfermería, con el fin de reducir las incidencias de enfermedad en/para el trabajo.

Palabras clave: Salud del trabajador; Enfermería; Condiciones de trabajo.
INTRODUCTION

The study object was nursing workers' views of their working conditions and of measures to improve their work environment.

Interest in investigating this situation arose initially from working in the nursing profession in a variety of job settings, where it could be seen just how unsuitable working conditions were where health professionals were expected to perform their duties. Such circumstances can have direct or indirect effects on these workers' health and disease processes.

After delineating the study object, a search was conducted through the Virtual Health Library (VHL), in the following data bases: Medical Literature Analysis and Retrieval System Online (MedLine), Latin-American and Caribbean System on Health Sciences Information (LILACS), Scientific Electronic Library On-Line (ScIELO) and the Nursing Database (BDENF), using the following descriptors (in Portuguese): worker's health/nursing and occupational risks/nursing.

Scientific production, particularly as regards workers health and nursing, was found to be mostly in non-Brazilian publications. In addition, few scientific papers offer recommendations and/or contributions to improving the nursing work environment.

Also, on more in-depth study in the field of workers health, a causal nexus was found to exist between labour context and favourable or adverse impacts on working people's health. In that light, it is important to explore this issue in research into nursing, because the profession is suffering systematically and chronically from deficient working conditions.

It is particularly important that workers extend their knowledge of workplace health, so as to develop solutions and measures which, by affording better working conditions, will help prevent and/or minimise occupational risks. Notoriously, in most cases, the nursing work environment offers adverse conditions for the proper performance of nursing duties and can impair nursing workers' health.

Accordingly, the objectives selected were: to identify nursing workers' perceptions of their working conditions and to propose measures to minimise the adverse effects of working conditions on these workers' health and disease processes.

This study contributed to addressing the lack of information on workers' health, with a view to providing input to the planning and execution of measures to prevent risks and health disorders and to assist in the introduction of measures to attenuate and/or counter adverse impacts on nursing workers' health.

LITERATURE REVIEW

This study is plural and polysemous, as it considers work to be a source of psychosocial experience, mainly due to its central role in people's lives. Work is a means not solely to material subsistence, but also to the development of psycho-cognitive and affective potential, to identity-building and to social participation. From that perspective, in addition to being a source of income, work affords satisfaction and pleasure at doing something useful, as well as feelings of group belonging. It thus has wide-ranging repercussions on especially the economic, psychological and social dimensions of life.

Meanwhile, the advent of globalisation and the flexible accumulation of capital have brought drastic changes to productive models and work organisation, leading to extremely adverse working conditions hostile to workers. This new phase has led to the depletion of workers' physical, psychological and cognitive energies, resulting from the many changes in the world of work: the requirement that workers be polyvalent and multifunctional, increasing informal work and the large-scale introduction of hard technology into work processes. These circumstances have all altered how work operates and, among other things, have degraded wages and hard-won, longstanding labour rights. As a result, work-related diseases are emerging with increasing prevalence. These include Repetitive Strain Injuries (RSIs), Work-Related Musculoskeletal Disorders (WMSDs) and other conditions, such as mental wear leading to increased psychological suffering and psychosomatic complications or associations.

In this respect, labour conditions are directly related to the potential for workers' falling ill. Working conditions can be defined by a set of factors including hours worked, pay, work organisation, workers' knowledge of work organisation, workplace hygiene and safety, ergonomics, the availability of social services for workers, labour relations, factors individual to each worker, the social, economic and political situation in the country and so on. It is thus necessary to consider the conditioning factors and determinants involved in this complex relation between work and health in order to care for workers comprehensively and in depth.

Given its complexity, the healthcare work process requires not only the intensive use of human resources, but also refined technology, a feature less likely to be found in other services. The work process is demanding, intensive and involves extremely long working hours, sometimes involving back-to-back 12-hour shifts, making it exhausting.

As a profession of the healthcare sector, nursing suffers from all these intervening factors, as well as others proper to the culture and ideology of the profession. In that regard, the work of nursing is burdened by standards, routines and fragmentation of tasks, with no joint participation by nursing teams at decision-making moments, and with little regard for workers' subjectivities. In addition, nursing is granted little social and professional recognition, and nurses' wages and working conditions are often inadequate.

METHODS

The setting for this qualitative, descriptive study was a specialised, medium-complexity outpatient clinic in Rio de Janeiro City. The sector selected for data collection were the care units where most nursing workers are concentrated: the outpatient surgical unit, central sterile services department, rest and reception and the internal medicine, surgical, women's and children's clinics.

The criteria for selecting these sectors were given by the activities of the nursing team and the work dynamic, which was characterised by intense demand for care and the large number...
of healthcare procedures, in turn involving occupational risks stemming from various different factors and connected both with the work process and the conditions in which the work is done.

The study participants were 40 nursing workers, 30 nurse technicians and nursing auxiliaries and 10 nurses. The inclusion criteria were that they should be working in the period chosen for data collection and have time to be interviewed. The exclusion criterion, meanwhile, was being off work on leave of absence or holidays. Data were collected between March and September 2011 and no workers refused to participate in the study.

Data were collected using two instruments: I) a semi-structured interview designed to gather information on working conditions and their impact on health; and II) structured, non-participant observation based on a form and used to complement the data from the interview and capture information on occupational risks in nursing work. These two instruments complemented each other in gathering data to recommend proposals for preventing and/or minimising the risks present in the workplace. The information collected was examined and interpreted in the light of the thematic content analysis technique.

The study was approved by the research ethics committee of the Hospital Universitário Pedro Ernesto (CEP/HUPE), under N° 2528 CEP/HUPE, and was conducted in keeping with Resolution N° 466, of 12 December 2012, governing research with human subjects.

RESULTS

As regards improving working conditions, first the participants formulated suggestions centred on the outpatient clinic’s physical structure and furniture. Prominent among these was a proposal to refurbish the flooring, air conditioning, lighting, furniture and equipment systems.

The work environment must change: for instance, the sector’s floor has to be levelled. In the rest sector, the floor is higher at the counter than in the rest of the sector; in an emergency, someone may have an accident, like stumbling on that uneven floor. The lighting must be improved too. (E34)

The participants’ proposals for refitting the work environment highlighted particularly replacing workplace furniture, which was old, and consequently broken, torn and rusty.

Change the furniture, because it is unsuitable for folding clothing and puts strain on your backbone. (E01)

They offered several proposals on organisational matters, such as more humane leadership, procurement of equipment and materials better suited to the work process, and more efficient and efficacious forms of communication among the teams. One point in particular stood out, however: more human resources, so as to reduce overwork.

More staff to attend to patients, because they come long distances and have very difficult lives and then sometimes the arrive here and are not attended to. So, more doctors are needed, more nurses, more staff of all kinds to attend to the patients. (E05)

Participants also called for equitable division of work activities, so as to avert staff overwork and favour breaks for rest and relaxation. They also stressed the need for clear communication between management and workers, in the belief that communication is one of the determinants of proper job performance and employee satisfaction.

I propose a little more organisation. It may be our fault too, even carelessness on our part, because sometimes you could stop, take a break, but in the excitement of doing it now, everything has to be rushed and you end up making it worse for yourself. (E28)

I would propose better dialogue between nurse management, the nursing coordinator, and the nursing workers, because things are not talked over here, things here are imposed and that causes a lot of bad feeling among us all. (E18)

What also emerged from the interviews was a concern with the high incidence of accidents with sharps. In response, it was suggested that personal protective equipment of appropriate quality be supplied in sufficient quantity.

There should be better protection equipment. We should have goggles, a suitable gown for a certain type of patient. (E23)

Participants also referred to the need for work tools to facilitate the work process, particularly to relieve repetitive movements and heavy loads.

We could have transfer boards, because with the obese patients we have to transport it is impossible. We have to pull them with the sheet and certainly, with time, that is going to harm our health. (E10)

Participants also spoke of the need to introduce a workers’ health policy in the institution, including humanised treatment of staff. That treatment would involve improving forms of communication among the different levels in the nursing profession hierarchy and listening to workers’ proposals and taking them into consideration.

In particular, a proposal should be drawn up for a workers’ health policy here, which has never existed. So, if a proposal existed, that could be an avenue. (E06)
Although mentioned by only one participant, there was an emphasis on the importance of humanising the work process:

_I think it’s humanisation. Humanisation on the job is the best thing there is. Because if you don’t consider the social part of a worker, you will have a worker whose work very often lacks humanity too._ (E26)

It was also suggested that alternative therapies be offered to workers, so as to enhance still further the care provided to workers:

_In parallel with work, they should offer alternative therapies. There should be alternative treatment, gymnastics or occupational therapy to alleviate stress, such as yoga. So, these alternative things to improve health._ (E15)

**DISCUSSION**

In the statements recorded, the health problem most often mentioned by the subjects related to the musculoskeletal system, the main complaints being lower back and leg pains.

Many studies have identified the chief risk factors related to musculoskeletal disorders as being work organisation, environmental factors and excessive physical exertion resulting from handling loads and inappropriate posture. All these factors could be perceived in the participants’ speech and during the field observation. Concerns included the physical structure, such as long corridors within and between departments, departments with no lifts that were difficult to reach, reception with a damaged escalator, insufficient and/or unsuitable changing rooms and bathrooms, insufficient furniture on the wards and departments with unsuitable architectural environments, in disregard of ergonomic principles and favouring disease processes among workers.

In addition to the physical factors, there were ergonomic considerations, represented by repetitive movements, incorrect posture for long periods, physical overload and long distances between internal environments. These data are consistent with the literature and can lead to musculoskeletal problems.

Moreover, stress - correlating with the responsibility of dealing with people’s lives and management pressure for productivity, effectiveness and efficiency - was considered to be one important effect that work had on the workers’ health and disease processes.

Stress can have direct influences on individuals’ mode of production, causing imbalances in the organism, such as nervousness, fatigue, irritability, neck and shoulder muscle pains, tension headache, poor concentration, depression, low productivity and poor creativity. Given that workers’ lives, deaths and diseases are related to the wear and tear resulting from their role in the work process, what is needed is transdisciplinary intervention, with new approaches and methodologies that conceive of work as a process by active subjects, whose goal is to produce something beneficial - which, in the case of nursing personnel, is patient wellbeing.

In that respect, it is of the utmost importance that installations should be physically appropriate to the provision of health care in order to contribute to the quality of patient care and proper performance of team work. In the event that installations do not comply with standards required for proper care, workers will suffer physically and psychologically, because they will be unable to do their job as they conceive it and have learned in their professional training.

In a work environment, the main characteristic required of the furniture is staff comfort, which ultimately affects worker satisfaction with job performance and the workplace.

Workers’ comfort is actually given by the sum of several factors: available working area, temperature and temperature range, external and internal noise (from communication and equipment) and lighting. When these factors become sources of discomfort, the immediate consequences are soon manifest in individuals in the form of adverse effects on health.

Human resources are one of the most complex components of any organisation, because the other resources depend on the presence of those who are to use them. In nursing, the quantitative and qualitative characteristics of human resources have been drawing the attention of nursing service administrators, in connection with inappropriate staff scaling, for instance, which has adverse implications for the quality of care, and the occupational diseases caused by the increased pace of work and consequent exploitation of workers, which lead to absenteeism and early retirement.

Communication is key to group thinking processes, because it governs today’s world. In that regard, communication is the “common denominator” in the proposal to introduce and conduct team work. Accordingly, if communication is effective and efficient, tasks can be carried out with greater quality and less suffering for workers and users.

It was suggested that personal protective equipment of appropriate quality should be supplied in sufficient quantity. It is up to the employer institution to provide workers with this material, to train them in using it and supervise them to use it correctly.

Studies have shown that sharps accidents among nursing workers tend increasingly to be connected with organisational characteristics and with numbers of staff available in the work environment. Accordingly, strategies for intervention to prevent accidents with sharps should include safety education to inspire personal caution, in addition to providing safe needle devices and ensuring the work environment complies with legal requirements. Nonetheless, however, continued professional development for healthcare workers has been the least expensive and most efficient measure for preventing accidents with sharps.
Studies have demonstrated the correlation between nursing workers’ susceptibility to vertebral column lesions and the cumulative, regular movements involved in transporting patients, which predispose spinal pain\textsuperscript{13,25}. A number of factors are involved in the procedures of moving and transporting patients, particularly lack of physical space, insufficient staff numbers, unsuitable equipment (such as beds without locking wheels, gurneys and wheelchairs in need of maintenance), lack of auxiliary materials\textsuperscript{26}. These data are consistent with the findings obtained by observation. From this standpoint, introducing strategies and instruments to minimise the use of force during patient handling and transport will reduce the risk of musculoskeletal lesions in nursing workers\textsuperscript{27}.

How individuals are situated in the work environment exerts decisive influences on the specific ways they fall ill and die at and through work\textsuperscript{28}. Accordingly, in view of the centrality of work in society, the field of Workers’ Health has come to occupy ample, substantive terrain. It must also be borne in mind that life expectancy has increased, as expressed in population aging and increased numbers of older workers. The consequences include increased exposure to occupational risks, labour accidents and occupational diseases. In that context, Workers’ Health has become even more important and has encouraged the efforts of various workers’ groups to secure better working conditions\textsuperscript{29}.

At present, health workers have to contend with adverse labour situations, such as policies providing for scant investment in human and material resources, which expose them to a range of occupational risks and, as a result, to physical and psychological wear and tear\textsuperscript{18}.

It is thus necessary to rethink traditional models of work organisation and, through workers’ participation in processes of decision-making and change, to afford more flexible conditions in order to foster health promotion and better quality of life for workers\textsuperscript{30}.

The humanisation of health care favours the formation of labour situations that respect the dignity both of health professionals and of the patients who use health services. Although a slow process, humanisation of the healthcare system is of the utmost importance to the work process, because it enables workers to offer patients, directly or indirectly, involvement, love and compassion\textsuperscript{31}.

Studies in the field of Workers’ Health report a growing tendency for concern not only with the physical aspects of workers’ health, but also with their mental health. Although a slow process, humanisation of the healthcare system is of the utmost importance to the work process, because it enables workers to offer patients, directly or indirectly, involvement, love and compassion\textsuperscript{31}.

Here, ergonomics should be applied as a fundamental strategy for preventing the development of spinal disorders among nurses\textsuperscript{34,35}. Underscoring the importance of such measures, the study setting was an outpatient clinic where access has to be facilitated for debilitated and/or mobility-impaired patients.

In addition to such measures, participants also mentioned building a general-purpose space where workers could enjoy their rest and meal times and where they could purchase food products, like a snack-bar. That suggestion is significant not only to the health personnel working there, but also to users, who often wait long periods waiting to be seen.

Building snack-bars and/or rest areas for health personnel is essential to the work process, because occupying the whole working day with work is a risk factor, entailing 2.55 times greater likelihood of accidents. A rest pause is an important factor, which affords relief to workers’ fatigued muscle and tendon groups and mental health\textsuperscript{36}.

In view of these workers’ suggestions, a constant endeavour is required to build a new paradigm in the labour sphere, in which workers can feel themselves to be an integral part of a production process that values the work they do, raises their self-esteem and contributes to improving their quality of life and their personal and job satisfaction.

Unstinting efforts should be made to assure safe and decent working conditions by planning and implementing specific measures to protect workers’ health\textsuperscript{6,35}. The necessary changes will occur only to the extent the working class assimilates the magnitude of health-related factors and seeks really decent, safe working conditions, rather than espousing the cause of additional pay for unhealthy and hazardous duty\textsuperscript{6}.

**FINAL CONSIDERATIONS**

This study offers evidence that, in the study setting, the work of nursing takes place under precarious conditions and with a need for continuous investment, given that the five types of occupational risk (physical, chemical, biological, ergonomic and accident) are present in the nursing work environment.

Professional nurses are exposed to a very wide range of occupational risks, making for a day-to-day workplace experience rife with health disorders resulting from inappropriate structure, equipment and physical space and shortage of workers in nursing teams.

Accordingly, the proposals that emerged suggested making structural reforms to the physical space, modernising equipment, increasing human resources quantitatively, improving work organisation (which included improving modes of communication between hierarchical levels in the nursing staff) and introducing a workers’ health policy at the institution.

This study attests to a substantial need for a workers’ health centre to implement a workers’ health policy through measures designed to neutralise the occupational risks the workers are exposed to, promote their health and safety and treat those who fall ill.
In addition to the many proposals for physical and structural changes at the institution, it must also be emphasised that the workers were concerned to be valued as human persons in order to build a world of work with due regard for decency and dignity, which would reflect in their satisfaction with their own work.

The nursing is challenged to reorient its professional practices so as to change its work process in such a way as to minimise the impact of its social division and its organisation, which leads to physical and psychological wear and tear for workers. Health professionals should increasingly commit to improving their own health and their rights to work with dignity and safety for all, so as to promote health, as advocated by workers’ health policy.

REFERENCES


