



Occupational risks in hospital cleaning work: perceptions from specialists in workers' safety and health

Riscos ocupacionais no trabalho de limpeza hospitalar: percepções de especialistas em segurança e saúde do trabalhador

Riesgos laborales en el trabajo de limpieza hospitalaria: percepción de expertos en seguridad y salud del trabajador

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ABSTRACT

Objective: to characterize occupational risks in the labor context of hospital cleaning service workers and discuss their implications for the work process, as perceived by specialists in occupational safety and health. **Method:** in this exploratory, qualitative study with specialists in the area of worker safety and health, data were obtained, in the first half of 2020, through semi-structured interviews, recorded in digital media, and subjected to categorical thematic content analysis. The study was approved by the research ethics committee, and free and informed consent was obtained from the participants. **Results:** the experts confirmed the risks of the hospital work environment, in addition to the cleaning service workers' high workloads. **Final considerations:** the experts' perceptions demonstrated the existence of different types of occupational hazards. Also highlighted were the lack of knowledge of the risks, the workers' vulnerability and the precariousness of their working conditions.

Descriptors: Occupational Health; Occupational Risks; Hospitals; Housekeeping, Hospital.

RESUMO

Objetivo: caracterizar os riscos ocupacionais no contexto laboral dos trabalhadores do serviço de limpeza hospitalar e discutir suas implicações ao processo de trabalho, na percepção de especialistas da área de segurança e saúde do trabalho. **Método:** estudo qualitativo exploratório, realizado com especialistas da área de segurança e saúde do trabalhador no primeiro semestre de 2020. Os dados foram obtidos por meio de entrevistas semiestruturadas, gravados em mídia digital e submetidos à análise de conteúdo temático-categorial. Obteve-se o consentimento livre e esclarecido dos participantes e aprovação do Comitê de Ética em Pesquisa. **Resultados:** identificou-se a reafirmação dos riscos ocupacionais do ambiente de trabalho hospitalar pelos especialistas, além das altas cargas de trabalho dos trabalhadores dos serviços de limpeza. **Considerações finais:** a percepção dos especialistas evidenciou a existência de diversos tipos de riscos ocupacionais. Ademais, destacam-se a falta de conhecimento dos riscos, a vulnerabilidade e a precariedade das condições laborais desses trabalhadores.

Descritores: Saúde do Trabalhador; Riscos Ocupacionais; Hospitais; Serviço Hospitalar de Limpeza.

RESUMEN

Objetivo: caracterizar los riesgos laborales en el contexto laboral de los trabajadores del servicio de limpieza hospitalaria y discutir sus implicaciones en el proceso de trabajo, desde el punto de vista de expertos del área de seguridad y salud laboral. **Método:** estudio cualitativo exploratorio, realizado junto a expertos del área de seguridad y salud laboral en el primer semestre de 2020. Los datos se obtuvieron por medio de entrevistas semiestructuradas, grabadas en medios digitales, y se sometieron al análisis de contenido temático-categorial. Se obtuvo el consentimiento libre y clarificado de los participantes y la aprobación del Comité de Ética en Investigación. **Resultados:** los expertos identificaron la reafirmación de los riesgos ocupacionales del ambiente de trabajo hospitalario, además de las altas cargas laborales de los trabajadores del servicio de limpieza. **Consideraciones finales:** la percepción de los expertos mostró la existencia de diferentes tipos de riesgos laborales. Además, se destaca el desconocimiento de los riesgos, la vulnerabilidad y las condiciones laborales precarias de estos trabajadores.

Descriptores: Salud Ocupacional; Riesgos Laborales; Hospitales; Servicio de Limpieza en Hospital.

INTRODUCTION

There are many political and organizational transformations in the working world, and the health sector has experienced them with the implementation of new production methods, outsourcing of services and work intensification. These have generated job instability and mobility, new situations of vulnerabilities, dissatisfaction in the work, and scarcity of human resources and inputs, which have translated into a series of health problems¹⁻³.

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Hospital institutions are organizations with a high level of complexity and have different approaches and perspectives, whether in connection with the health system, in their peculiar organizational system or through technological innovation⁴. In this context, there is a variety of professionals and activities generating different agents and occupational risks in the work environment⁵.

With highly specific human resources added to the outsourcing of labor, it becomes increasingly difficult to manage and control all the professionals present in these healthcare units in terms of Occupational Health. Thinking about the structure and organization of the hospital involves all care, technical and logistical support professionals, since they experience the same environments and potentially occupational risks^{1,2,6}.

Hospital cleaning service workers are part of the hospital support service, defined as non-healthcare services and responsible for hospital technical and logistical support^{3,7}. This occupation mostly has workers with low education and remuneration, early insertion in the labor market, who carry out repetitive activities that demand intense muscular effort, an accelerated work pace and need for decision-making^{2,8}. They are often subjected to precarious work relationships, with a predominance of musculoskeletal illness and have the need to direct health promotion actions⁹.

It is noteworthy that these workers represent a large contingent of professionals who are essential to maintaining a pleasant environment free of risks and injuries, especially related to infections, which may compromise care planning^{10,11} and safety maintenance in the work environment for other health team members.

The working conditions experienced in the hospital cleaning service contribute to health problems due to unhealthy activities and repetitive activities, in addition to the existence of precarious working conditions associated with the advent of outsourcing of labor, along with socioeconomic elements, such as low education, low pay, early entry into the job market of cleaning services and the mass presence of female labor due to the characteristic of the cleaning service being focused on domestic care^{8,12-15}.

In this context, some studies have confirmed the invisibility and lack of strategies and actions aimed at the health of these workers in promoting their health and preventing injuries in the cleaning service of the hospital unit^{8,12-14}. Although they are essential for the hospital unit operation through correct and organized performance of hospital support activities, in turn allowing the institution to perform its functions in user service^{8,16} efficiently and effectively, there is a lack of studies in the health area on this segment.

Thus, the relevance of studies in the area of Worker's Health aimed at this population is reiterated, as institutional routines are often marked by disputes and institutional technical prejudices, and by the relaxation of protection laws^{5,7}.

In view of the above, this study aimed to characterize occupational hazards in the work context of hospital cleaning service workers and discuss their implications for the work process from the perception of specialists in the field of occupational safety and health.

METHOD

This is an exploratory qualitative study which followed the recommendations of the Consolidated Criteria for Reporting Qualitative Research (COREQ), carried out in the first half of 2020. Interviews were conducted with specialists from the worker health and safety area in order to identify and characterize the occupational risks inherent in the activity of hospital cleaning service workers.

Professionals with at least five years of experience in the area of care with an emphasis on the hospital unit were included. Exclusion criteria were specialists who did not belong to Occupational Health and Safety and who did not meet the minimum time of professional experience.

The sample of participants was defined using the "snowball" technique, with the first participating individual indicating other potential participants¹⁷. This technique was chosen since carrying out studies on the subject of workers' health in sectors involving outsourced services has become a challenge in the context of political and economic changes, added to the weaknesses of employment relationships and the high turnover of employees. The first specialist interviewed was indicated by the main researcher.

Data collection was conducted through semi-structured interviews using the following questions: "Are there influences of occupational risks on hospital cleaning service workers in the hospital setting?" and "What are the risks to which these professionals are exposed?".

The interviews were recorded on digital media and their content was transcribed and checked by two researchers. Thematic-categorical content analysis was performed following the methodology comprising: (1) pre-analysis, with organization of the material and composition of the study corpus; (2) exploration of the material by which the data are systematically transformed and aggregated into units; and (3) treatment of the results with inference and interpretation, seeking to support the analyzes and give meaning to the interpretation for subsequent categorization¹⁸.

The research protocol was approved by the institution's research ethics committee. Informed consent was obtained from the participants who were instructed about the objectives, potential risks, benefits and confidentiality of individual data.

RESULTS AND DISCUSSION

Ten specialists in the field of occupational safety and health participated in the study: five occupational nurses, three occupational safety technicians, one occupational engineer, and one occupational physician. The average age of respondents was 41.1 years, with an average of 9.6 years of experience in the area.

In characterizing occupational risks in the work carried out by the interviewees, it was possible to describe their work characteristics and understand the relationships with the potential risks existing in the work environment.

After processing the data referring to the interviews of specialists in the Safety and Health area, the following categories emerged: *Occupational risks and vulnerabilities in the work environment; Internal materiality workload in the work environment; and Shortage of monitoring and educational measures in health in the work environment.*

Understanding the repercussions of work as an aggravating factor for diseases, it is essential to address the way in which the work activity is performed, the work organization, in addition to knowing how individuals face the risks, diseases and accidents related to work¹⁹.

Occupational risks and vulnerabilities in the work environment

Specialists unanimously affirmed the influence of occupational hazards on the health of hospital cleaning service workers. This category was composed of 66.2% of Registration Units (RUs) and three Significance Units (SUs).

Working conditions consist of physical elements, instruments and work equipment, and organizational support. Risk-generating work situations are caused according to the nature of the activity and by external factors which can lead to the occurrence of physical injury to the worker^{2,7,20}. It was identified through the SUs that the specialists reaffirmed the risks present in the hospital work environment, being defined as risk of environmental contamination at work and risk of accident at work in the work routine of HCSWs (Hospital Cleaning Service Workers). Thus, chemical, biological and accident agents stand out according to the following statements:

There is an influence of occupational risks on the health of hospital cleaning professionals, the environment is very conducive to the illness of these professionals. (S2)

The risks that these professionals encounter are environmental risks (...) biological risk is very present in their routine (...) chemical risk due to the use of cleaning products (...) risk of accidents with contaminated materials, sharps and risk of falling due to the dynamics of the activity. (S1)

There is a great chemical risk, they handle cleaning products all the time (...) At times, they are exposed to physical risk due to moisture during the cleaning and washing period. (...) They are exposed to biological risks, exposure to bacteria and viruses, and with this they can contract serious diseases such as HIV and hepatitis in the same way as health professionals. (S5)

They may be exposed to ionizing radiation depending on the workplace. (S8)

It is reiterated that hospital cleaning workers are exposed to different workloads depending on the existence of different risks, including physical (inherent in the environment such as excessive temperature and moisture), chemical (due to contact with cleaning and disinfection products, in addition to discarding chemotherapy), physiological (depending on the characteristics of the job, with excessive physical exertion, repetitive movements, inappropriate postures, unadapted work station), psychosocial (social devaluation of work, loss of motivation), and biological (due to contact with sharp objects during transport for disposal, cleaning of care areas).

In this scenario, unhealthy work activities contribute to worker's illness, even in their absence from work. There are many occupational diseases that these workers are exposed to, such as the risk of skin diseases, dermatitis, intoxication by chemical products, infectious diseases such as HIV and hepatitis, respiratory diseases such as bronchitis and allergic rhinitis, among others²¹.

Other possibilities of illnesses arising from work are repetitive strain injuries/work-related musculoskeletal disorders (RSI/WMSDs), low back pain, contact dermatitis, infectious and contagious diseases, among others^{12,14,21}.

Another factor related to the work environment described by the study participants was the risk of accidents to the detriment of the work activity of hospital cleaning workers. The risks of accidents identified were those due to sharp materials and the risk of falling, according to the statements.

They are at risk of falling due to working at heights, having to carry out general washing, which includes high ceilings and walls, and the risk of falling from their own height due to the inadequacy of the type of footwear. (S9)

Risks of accidents, such as falls, working with wet floors. (S5)

Among the accidents identified as a result of their activities are those with sharps, which include removing waste from production sites until its final removal from hospital units. Accidents with sharps mostly result from incorrectly disposed materials and which are often underreported, either by workers due to lack of knowledge that they need to be notified, and because they can lead to illness with serious prognoses.

The main one is biological with sharps, mainly because they are improperly discarded by health professionals. (S4)

In addition to contact with bloody material, there is the risk of contamination due to an accident with sharps, which is what is seen the most. (S7)

Studies show accidents with biological material as the greatest damage to workers, and HCSW appear in second place with the highest number of accidents in the units, with accidents with sharps having the highest records^{12,16} resulting from incorrect disposal of the material in an inappropriate place, and often due to failure to comply with the safety rules of the HCSW²².

There are several potential health problems with the occupational risks to which hospital cleaning service workers are exposed, and when unveiling the causal factors that generate occupational risks, it appears that the problem is still only subjectively explored. There is a need for better planning in order to prevent and minimize damage to the workers under analysis²¹.

Internal materiality workload in the work environment

This category looks at conditions related to workloads. According to the interviewees' point of view, these conditions can influence the way the worker performs their function and generates disorders in their health. This category obtained a quantity of 41 RUs (66.2%) and two SUs.

Workloads are conceptualized as elements of the work process that interact with each other and with the worker's body. This process brings adaptation of the worker to the inserted environment, being characterized by wear or loss in their physical and mental capacity^{23,24}. According to the interviews, the participants mentioned the existence of internal materiality workloads (physiological and psychological).

Physiological loads are presented by the characteristic of the work in the hospital cleaning service when they perform their work for the entire period standing, along with adopting uncomfortable and inadequate postures for body biomechanics, in addition to handling excessive weight. The statements of the interviewees below confirm the existence of these charges:

They have a high demand for physical effort, I've never seen anyone do posture training on body mechanics. (S2)

High demand for activities, pick up weight all the time, pushing all the time due to the characteristic of the profession. (S6)

Physiological loads are defined as loads that do not have a visible materiality external to the human body, but are defined through transformed body processes, such as performing a physical effort, and remaining in an uncomfortable anatomical position during the work period²³.

It is reiterated that exposure to physiological loads can cause this class of workers to develop numerous occupational diseases, highlighting the manifestation of repetitive strain injuries (RSI) or work-related musculoskeletal disorders (WMSDs) related to repetitive and uncomfortable execution activities²⁵. It is added that RSI/WMSDs can be of great quantity, since the hospital cleaning activity is characterized "by a dynamic and intensive labor demand, requiring repetitive and uncomfortable manual movements for the worker"²¹.

Psychological loads were reported through intensified work, working together in sectors that generate bonds between patients, living with death, aggressive treatments, professional devaluation, mass female presence, as shown below:

Due to their vulnerability, they are subject to psychosocial risks, many of them work in sectors where there are constant deaths and in sectors that end up creating bonds with patients. (S1)

They present cognitive risk due to the lack of respect of the institution's professionals in relation to the service, they despise it for being a profession without training requirement, the majority of this service are people with a low education level and largely composed of women. (S9)

Psychological loads materialize "through the human body, in its psychological and bodily processes and can be classified into psychological overload and psychological underload"²⁴. The potential psychosocial factors for the worker to develop occupational diseases in the work environment are stress, violence, excessive work hours, and bullying, among others. Moreover, biopsychological well-being at work²⁵ is constituted by a subjective analysis of social, cultural, economic, political and environmental factors such as national policies, social protection, living standards and working conditions and community support.

Psychological loads are grouped into two groups: the first is related to all situations that can cause psychological overload, exemplified by situations of prolonged tension; and the other is related to the loss of worker control due to subordination "to the machine", such as partialization of their tasks, which leads to monotony and repetitive work. They are also socially produced and cannot be understood as isolated risks²³.

Shortage of monitoring and educational measures in health in the work environment

This category emerged with 24.1% of RUs and four SUs in view of the difficulties encountered by specialists in performing actions that reduce the occupational risks to which workers in the hospital cleaning service are exposed.

According to the interviewees, continuing education is the best way to promote and provide a safe work environment and reduce damage to health due to exposure to occupational hazards. However, they highlighted the existence of difficulties in adopting these measures in relation to workers in the hospital cleaning service.

A factor identified as a determinant of exposure to environmental risks was the non-use of measures that can minimize the risks in the workplace, such as the non-use or inappropriate use of PPE by HCSWs, as well as hand hygiene during work and knowledge about hospital dynamics and the environment that is inserted during the workday.

They use PPE inappropriately, often not even knowing its purpose. They have a lack of hand hygiene, handle contaminated materials, and can be vehicles to spread disease. Lack of knowledge of the hospital structure, it is very important that they know the dynamics of the sector and what they are dealing with. (S3)

The use of PPE is primary education, it is the minimum that the company must offer to comply with legislation and provide safety in the workplace. (S10)

There is a recommendation regarding occupational safety in health services that workers in the hospital cleaning service should participate in programs or institutional campaigns aimed at biosafety; this training raises awareness about existing occupational risks and safety measures based on knowledge and training are carried out, in addition to fire prevention, vaccination campaigns and others²⁶.

The outsourcing of labor was another aspect raised by the study participants as a justification for the lack of follow-up in the work environment of HCSWs and health promotion measures. Most workers in these activities are outsourced, which makes it difficult to monitor them as well as the use of educational measures about a safe work environment, as observed in the statements:

The greatest difficulty is to involve, educate and guide these professionals about the concept of occupational hazards and why they are exposed to them (...) when they start training they are fired due to the nature of the work. (S5)

Lack of training due to the very high turnover of these workers. (S2)

A serious problem encountered is the outsourcing of this service, as it is not up to the Worker's Health Service to control health measures, qualification and knowledge about accidents that occur. (S7)

The reality of the working world has been present in recent years, with an increase in informal work, a precarious hiring system with low wages, longer hours, professional devaluation, financial instability and lack of social security^{16,21,27}.

Congruent with the precariousness of work, hospital cleaning services are contracted for the most part by outsourced companies. With the outsourcing of the service, the occupational health sector of the hospital units somehow cannot implement control of safety and prevention measures and strategies for this group of workers²⁸.

It was also found in the speeches of the specialists that the precariousness and outsourcing of cleaning services at the hospital make it difficult to monitor the health conditions which can harm the health of workers.

The greatest difficulty is to involve, educate and guide these professionals about the concept of occupational risks and why they are exposed to them. (S5)

I receive a lot of notifications of accidents with sharps, but I think this number is higher because some notifications are not communicated by the cleaning company. (S8)

In addition, highly vulnerable situations related to the work processes of the HCSWs were observed. Promoting health and preventing injuries to the worker aims to control risk factors that cause diseases or accidents and provide better well-being during the workday²⁹. It is also noteworthy that the literature points out difficulties in workers' access to the Brazilian Unified Health System³⁰.

Based on the assumption that the work environment must guarantee safe conditions for carrying out work activities, it is incumbent upon the Specialized Service in Safety Engineering and Occupational Medicine (*Serviço Especializado em Engenharia de Segurança e em Medicina do Trabalho - SESMT*) to provide workers with appropriate personal protective equipment (PPE) for the risks involved, following guidance by a technically qualified professional, along with guidance on proper use, storage and preservation³¹. However, certain elements, such as changes in legislation on protective measures, low wages and precarious work contracts are beyond the occupational control of worker health services^{21,32}.

Study limitations

The identification and participation of only workers' health and safety specialists is considered as a limitation, since the worker's perception must also be considered to identify health determinants in the work environment.

FINAL CONSIDERATIONS

The existence of different types of occupational hazards in the work context of hospital cleaning service workers was evidenced. The specialists' perception of the work environment indicated environmental, physical, chemical, biological, ergonomic and accident risks which are represented by physical elements, instruments and work equipment, in addition to exposure to biological material due to the hospital's characteristics.

In addition to the specialists' perception of the risks related to the hospital structure and environment, the type of daily activity and work tools used by cleaning workers, the risks due to exposure to internal materiality workloads (physiological and psychological) were described, making these workers vulnerable for occupational disorders, mainly the manifestation of repetitive strain injuries (RSIs) or work-related musculoskeletal disorders (WMSDs) related to repetitive and uncomfortable activities. Psychological loads were referred to by working with and bonding with patients, living with death, in addition to the psychological burden referred to by professional devaluation, the presence of mass female labor and professional devaluation.

Another factor identified as occupational risk and a determining factor for worker vulnerability and illness was the lack of monitoring and the use of health education measures in the work environment, with emphasis on not using PPE or using it inappropriately by the HCSWs, as well as hand hygiene during work and knowledge about hospital dynamics and the environment that they are inserted in during the workday. It is noteworthy that the lack of knowledge about the occupational risks of hospital cleaning workers is related to conditions dictated by the current social, political and economic model, meaning that it is informal work, precarious labor, and has a predominance of females and low education as a social condition.

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