

Causes of resistance to the use of personal protective equipment by the cleaning and hygiene team*Causas de la resistencia al uso de equipos de protección personal por parte del equipo de limpieza e higiene**Causas da resistência ao uso de equipamento de proteção individual pela equipe de limpeza e higienização***Abstract**

This research aimed to identify what causes employees of the cleaning and hygiene team to stop using Personal Protective Equipment (PPE) and the problems that can be avoided with the use of equipment. It is also intended to promote greater knowledge about PPE. For the development of this work, a bibliographical research was carried out in books and articles taken from the internet that identified and analyzed the importance of PPE for the safety and health of workers and demonstrated that its proper use is essential for the reduction of risks to which are exposed. PPE is essential to protect the health and physical integrity of the worker. It is important to emphasize that the provision of PPE to the employee by the employer is not enough, as it is the obligation of the latter to carry out training on how to use it correctly and to supervise the employee in order to guarantee that the equipment is being used. It was found that safety management programs are still flawed, not only because of the workers' socio-cultural issues, but also because of the lack of more active programs, such as constant training and supervision to raise awareness about the importance of this equipment required by law.

Descriptors: Personal Protective Equipment; Hospital Security Management Software; Job Security; Cleaning and Hygiene Team.

Resumen

Esta investigación tuvo como objetivo identificar qué causa que los empleados del equipo de limpieza e higiene dejen de usar el Equipo de Protección Personal (EPP) y los problemas que se pueden evitar con el uso del equipo. También se pretende promover un mayor conocimiento sobre los EPI. Para el desarrollo de este trabajo se realizó una investigación bibliográfica en libros y artículos tomados de internet que identificaron y analizaron la importancia de los EPP para la seguridad y salud de los trabajadores y demostraron que su uso adecuado es fundamental para la reducción de riesgos a los trabajadores, que están expuestos. Los EPP son esenciales para proteger la salud y la integridad física del trabajador. Es importante recalcar que no basta con la provisión de EPP al trabajador por parte del empleador, siendo obligación de este último realizar capacitaciones sobre su correcto uso y supervisar al trabajador para garantizar que el equipo esta siendo usado. Se constató que los programas de gestión de la seguridad aún presentan fallas, no solo por cuestiones socioculturales de los trabajadores, sino también por la falta de programas más activos, como la capacitación y supervisión constante para concientizar sobre la importancia de este equipo requerido por ley.

Descriptores: Equipo de Protección Individual; Hospital; Programas de Gestión de Seguridad; Seguridad del Trabajo; Equipo de Limpieza y Saneamiento.

Resumo

Essa pesquisa teve por objetivo identificar o que levam os funcionários da equipe de limpeza e higienização a deixarem de usar os Equipamentos de Proteção Individual (EPIs) e os agravos que podem ser evitados com o uso dos equipamentos. Ainda pretende-se promover maiores conhecimentos sobre EPI. Para o desenvolvimento deste trabalho foi realizada pesquisa de cunho bibliográfico em livros e artigos retirados da internet que identificassem e analisassem a importância do EPI para a segurança e saúde dos trabalhadores e demonstrassem que sua utilização de forma adequada é essencial para a diminuição de riscos a que estão expostas. Os EPIs são fundamentais para proteger a saúde e a integridade física do trabalhador. É importante ressaltar que não basta o fornecimento do EPI ao empregado por parte do empregador, pois é obrigação deste realizar o treinamento de como usar corretamente e de fiscalizar o empregado de modo a garantir que o equipamento esteja sendo utilizado. Constatou-se que os programas de gestão da segurança ainda são falhos, não só por questões socioculturais dos trabalhadores, mas também pela falta de programas mais ativos, como treinamentos e fiscalização constantes para a conscientização sobre a importância destes equipamentos exigidos por lei.

Descriptores: Equipamento de Proteção Individual; Hospital; Programas de Gestão de Segurança; Segurança do Trabalho; Equipe de Limpeza e Higienização.

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Introduction

Despite the scientific, technological, economic, social and behavioral modifications of the human being, it appears that some issues are still worrying, among them, occupational diseases and accidents at work. These issues, in addition to having consequences for individuals themselves, cause damage to institutions and to the social group¹.

Safety has always been part of the human agenda. Since the beginning, people have sought ways to protect themselves, trying to minimize the effects of the dangers inherent in life's activities².

The use of Personal Protective Equipment (PPE) was legally born from the Consolidation of Labor Laws (CLT) through Decree Law No. 5,452, of May 1, 1943. It is provided for in Regulatory Standard NR-6, the PPE It is equipment for personal use, with the purpose of neutralizing certain accidents and protecting against possible illnesses caused by working conditions^{2,3}.

Its use is trivialized due to lack of knowledge of norms and legislation. Few realize the complexity involved in the choice of PPE, thus causing acceptance problems on the part of workers and unnecessary expenses for companies. The quality and ergonomics of this equipment are also fundamental for the good performance of the workers' functions, in addition to the correct instructions for use⁴.

As discussed in the literature, accidents at work in the hospital area are worrisome. Professionals are not aware of the importance of injuries, infections or contamination. The causes of accidents are due to the excessive pace of work, fatigue, lack of use of PPE and its misuse. This study also raises the possible lack of supervision^{5,6}.

Guidance on work equipment and the activities to be carried out, training is also provided on PPE for a better understanding by workers. These trainings have to be constant, because in addition to the turnover of employees, their level of education is low^{6,7}.

The concern with the health of workers at the hospital unit has been present since 1700, through the publication of Ramazzini, who questioned the contamination of employees while carrying out their work and was consolidated after the recognition of risk actions, through the use of PPE and the relationship between pathogenic agents and their professional activity⁸.

Guidance on the use of PPE and its importance must be provided daily to employees. The employer must provide training on the use, conservation and storage of PPE. It is important to record these trainings, and the same must be signed by the employee⁹.

The use of PPE is related to individual safety, which is indispensable for the safety of workers. But in practice, this is not what you see. Many workers feel uncomfortable with using the equipment. And they do not fulfill their duties of use. Some laws and regulations guarantee workers their right to Personal Protective Equipment. However, these guidelines are not always followed¹⁰.

For success in the implementation of PPE, it is necessary to understand the meaning of the existing forces between the professional's beliefs and the intrinsic and extrinsic factors of the work environment. This

understanding will be able to rescue the necessary professional valuation, capable of motivating individuals to establish ethical practices, for the prevention and control of infections, as well as a change in behavior¹¹.

In order to guide and supervise the daily routine of Hospital Cleaning and Sanitation employees, to help with awareness and prevention, hospitals, in addition to Nurses, rely on the help of Safety technicians or members of the Internal Commission for Accident Prevention (CIPA), which has the responsibility and power to take the necessary actions in case of non-compliance with the process. Must be involved in the process, seeking to raise points that may bring risks of accidents and taking the necessary actions to minimize the incidence of these⁹.

This research aimed to identify the main reasons that lead employees in the cleaning and sanitation sector to stop using PPE during the execution of their activities and the problems that can be avoided with the use of the equipment. It is also intended to provide readers with greater knowledge about PPE, as well as to present basic information about personal safety equipment, which is fundamental for the physical health of these professionals.

Methodology

This is a bibliographic research of a narrative nature, whose methodological procedure is important in the production of scientific knowledge capable of generating, especially in less explored themes, the postulation of hypotheses or interpretations that will serve as a starting point for other researches⁸.

In order to carry out this work, a bibliographical research was carried out in books and articles taken from the internet that identified and analyzed the importance of PPE for the safety and health of workers and demonstrated that its proper use is essential for the reduction of risks to which are exposed. For this purpose, LILACS, SciELO, Google Scholar, Ministry of Labor and Employment and COFEN databases were searched, in addition to books available in the institution's library. The texts were found when typing and searching the descriptors: Personal Protective Equipment, Hospital, Safety Management Programs, Occupational Safety, Cleaning and Sanitation Team. The survey was carried out from February 2021 to May 2022.

In total, 29 articles were analyzed and 18 articles were selected for the work and 2 books. The criteria used to select articles were: (1) Time of publication; and (2) objectivity of the topic addressed. For the exclusion of articles, the criteria were: (1) Little relevance of the bibliographic reference; (2) Little security of the data presented in the references. In addition, official documents were used, such as the labor guide.

Results and Discussion

PPE are all products or devices for individual use used by workers with the aim of protecting against risks that threaten the health and safety of this class. In the current context, PPE intended not only for the safety of the individual who uses it, but also for third parties in order to prevent infections¹².



According to Regulatory Norm No. 6, the employer is obliged to provide employees with free PPE, suitable for the risk, in perfect working order and conservation. The employee, on the other hand, must use personal protective equipment following the employer's recommendations and store them properly after the end of their work activities. However, it is important to emphasize that the provision of PPE to the employee by the employer is not enough, as it is the obligation of the latter to carry out training on how to use the PPE correctly and to supervise the employee in order to guarantee that the equipment is being used¹³.

When analyzing the adoption of recommendations for the use of personal protective equipment, it appears that many professionals consider that its use hinders the development of professional activities. It is very relevant that, considering the reality of each service, professionals receive specific training for the correct use of PPE. An alternative is permanent continuing education, which enables the employer to work with its employees, encouraging the active participation of the entire team, even when there is a need to propose solutions for the difficulties encountered¹⁴.

The cleaning and sanitizing team is one of the main categories subject to exposure to biological material. They have a high number of daily exposures and with this work it will be possible to create strategies to reduce the adverse

events and incidents of biological risks of the referred team with investment of the institutions in training and continuing education programs, inspection, as well as the collective awareness of the professionals of this category.

Individual protection equipment





According to Law n.º 6.514/1977, more specifically the Regulatory Standard (NR-6), PPE is every device for individual use intended to protect the health and physical integrity of the worker, including gloves, aprons, eye and face protectors and earphones, respiratory protectors and lower limbs. It is the employer's responsibility to provide PPE appropriate to the risk and to train workers on the correct way to use and conserve it¹⁵.






PPE is any device or product, for individual use, used by the worker, intended to protect against risks capable of threatening their safety and health. Its objective is to protect the employee, and it can also be used to protect the patient or materials that are being handled and if you want to ensure non-contamination.

PPE must be registered with the Ministry of Labor and Employment (MTE). Their registration is issued after testing to ensure the effectiveness of these equipment, and a certificate of approval is subsequently issued⁹.

In Chart 1 it is possible to verify the types of PPE.

Chart 1. Types of PPE. Ouro Preto do Oeste, RO, Brazil, 2022

Equipment	Recommendation	Illustration
Mask with chemical filter	For when the professional needs to handle toxic chemical substances, such as germicides that emit strong odors or based on manufacturers' recommendations ⁹ .	
PPF2/N95 Mask	For the protection of airborne diseases [tuberculosis, chickenpox, measles and SARG (severe acute respiratory syndrome)] ⁹ .	
Rubber glove	For the protection of the skin from exposure to biological material and chemicals. Must have a long barrel when exposure to the forearm is expected ⁹ .	
Acrylic glasses	For eye mucosa protection. It must be made of acrylic material that does not interfere with the professional's visual acuity and allows for perfect adaptation to the face. It must offer side protection and a device that prevents fogging ⁹ .	

<p>Acrylic face shield</p>	<p>For face protection. It must be made of acrylic material that does not interfere with the professional's visual acuity and allows for perfect adaptation to the face. Must offer side protection. Indicated during the mechanical cleaning of instruments (Sterilization Center, Purges), necropsy area and laboratories⁹.</p>	
<p>Waterproof apron, long-sleeved overcoat</p>	<p>For the protection of professional clothing and skin⁹.</p>	
<p>Waterproof closed shoes or boots</p>	<p>Protect the professional's skin, in humid places or with a significant amount of infectious material (surgical centers, purges, sterilization center, necropsy areas, environmental cleaning situations and others)⁹.</p>	
<p>Surgical mask</p>	<p>For the protection of the oro-nasal mucosa as well as for the environmental protection of the professional's respiratory secretions. The mask must have a weight that guarantees an effective barrier, it has been recommended that it be made with at least three layers⁹.</p>	
<p>Hat</p>	<p>For protection from exposure of hair and scalp to organic matter or chemicals, as well as environmental protection of scalp and hair scales⁹.</p>	

Note: Despite not being registered as PPE, in health care, the surgical mask and the cap are considered devices that also ensure the protection of the professional⁹.

Cleaning and sanitizing team

Among the various fields of professional activity, investigated worldwide, the hospital environment stands out, stage of labor action of several professions. These workers can be classified into two major groups: health professionals and professionals who provide support for the operation of the hospital institution, as is the case of workers in the Hospital Cleaning and Sanitation Service¹⁶.

The Hospital Cleaning and Sanitation Service has a body of workers who, for the most part, are part of the hospital environment on an outsourced basis, have low education and salary and an early insertion in the labor market. They have no academic training and work in the environment where they live with sick people, suffering and, often, with death.

They are responsible for cleaning the floor, walls, disinfecting environments, collecting garbage,



decontaminating materials, furniture, cleaning beds, transporting materials to the Material and Sterilization Center and collecting, washing and drying clothes.

In the hospital environment, these workers live with a high demand for tasks, which can make the work fragmented and stressful, causing potential impacts on the health of these workers, such as: fatigue, physical, mental and emotional disorders and occupational accidents. In this sense, Cleaning and Sanitation professionals in their work routine, handle potentially infectious materials, and, in the case of a hospital environment, occupational exposure to these materials can result in an accident at work^{5,1}.

They may have an accident as a result of the actions of other health professionals who, by incorrectly disposing of the materials used in hospital procedures, facilitate the occurrence of accidents. This highlight is corroborated when it is shown that the accidents that occurred are predominantly with sharps, due to the improper disposal of needles in the common trash and on the floor¹⁷.

Internal commission of accident prevention

The new NR 5 came into effect on May 24, 1999, which regulated the provisions of article 163 of the CLT, establishing new rules for the functioning of the Internal Commissions for the Prevention of Accidents at Work (CIPA)¹⁸.

Companies with more than twenty employees must have a CIPA set up, which aims to prevent work-related accidents and illnesses, in order to make work permanently compatible with the preservation of life and the promotion of workers' health³.

Through CIPA, we seek to help monitor and keep the work environment safe, encourage the use of equipment and its correct use, observe and analyze the environment in order to identify risk points, contributing to health and safety at work. The CIPA will be composed of representatives of the employer and employees, elected in an annual vote, thus electing new employees for the new fiscal year, where those elected must hold monthly meetings proven in the minutes^{14,18,19}.

Its attributions consist of identifying the risks of executing the employment relationship, preparing the risk map, counting on the participation of the largest number of workers. Some of the attributions of the members of CIPA are: to identify the risks of the work process and to prepare the risk map, with the participation of the largest number of employees, to periodically carry out observations on the environment and on working conditions, aiming at possible situations that offer risks for employees and perform at each meeting the assessment of compliance with the goals set in their work plan and discuss identified risk situations¹⁹.

The employer must provide CIPA members with the necessary conditions for the performance of their duties, having to, for this, guarantee enough time to carry out the tasks contained in the work plan.

Work accidents

Accident at work is what occurs due to the exercise of work at the service of the company, or even due to the

exercise of work by special insured persons, causing bodily injury or functional disturbance that causes death, loss or reduction of capacity for permanent or temporary work¹¹.

According to the Regulatory Standard (NR-32), professionals who work in health services, when carrying out their daily activities, are exposed to occupational risks, known as physical, chemical, biological, ergonomic and psychological risks^{7,19}.

Related diseases

The correct handling of PPE is fundamental to guarantee the health and protection of the worker, avoiding negative consequences in cases of accidents at work. In addition, the PPE is also used to ensure that the professional will not be exposed to occupational diseases, which can compromise the work and life capacity of professionals during and after the active phase of work.

Health professionals can acquire infections during the development of their occupational activities, infections such as hepatitis B and C and the human immunodeficiency virus (HIV) have been described in health workers after accidental exposure to biological material, whether by percutaneous injuries and/or contact of contaminated blood with mucous membrane or non-intact skin⁷.

Accidents with sharps infected with blood thrown into the trash are responsible for 80 to 90% of transmissions of infectious diseases among health workers⁷.

When having an accident, the transmission of diseases by droplets can also occur, which is technically a type of contact transmission of some infectious agents transmitted by air, both directly and indirectly. We can also mention poisoning accidents that are caused by ingestion, inhalation or absorption by any integument of the body, of chemical materials, food or contaminated water, harmful to health. Contact dermatitis (or contact eczema) is an inflammatory reaction on the skin resulting from exposure to an agent capable of causing irritation or allergy, also caused by the lack of use of PPE^{8,14,19}.

That is, PPE are synonymous with health, well-being and the preservation of life itself, as the consequences of an accident at work can be as light as a small, shallow cut on the hand to more serious situations, such as death.

Continuing education

Continuing education is a practice in which the personal and professional development of workers is fundamental for the improvement of skills, as well as a greater vision of the reality in which they are inserted, aiming at building knowledge.

Organizations must ensure that their operations and activities are carried out in a safe and healthy way for their employees, meeting the legal health and safety requirements, governed by the Consolidation of Labor Laws (CLT) and Regulatory Standards dealing with Occupational Health and Safety¹⁵.

In addition to guidance on work equipment and the activities to be carried out, training is also provided on PPE for a better understanding by workers. These trainings have to be constant, because in addition to the turnover of



employees, their level of education is low. When the company invests in training programs, it is valuing its employees and, consequently, giving them access to work accident prevention actions^{14,1}.

Thus, it is necessary to identify the factors that influence the adoption of preventive measures, to enable, expand and direct permanent education and training practices so that adherence to PPE happens in all situations in order to ensure that this professional is safe at work¹⁷.

Final Considerations

This work sought to identify what are the main reasons that lead employees in the cleaning and sanitation sector to stop using PPE during the execution of their activities and the problems that can be avoided with the use of equipment. The study pointed out several flaws in the use of PPE, problems in the safety management of employees, highlighting the low qualification of the workforce, high turnover of workers, misuse of PPE, lack of guidance and excessive tasks.

Required by law as one of the ways to prevent accidents, just requiring the use of PPE and simply providing it does not prevent accidents from happening. In addition to the concern to provide training and awareness of the risks of non-use or incorrect use of equipment, it is important to take into account the choice of the most appropriate equipment for the function and the employee, aiming at comfort and mobility, as well as a better acceptance by their users.

Lack of information and lack of awareness about the safety of protective equipment are reasons for resistance to the proper use of PPE and which lead to its removal at some point in the work. This unsafe act can cause accidents, serious or not, but accidents that cause inconvenience to all.

It appears that lack of knowledge and lack of guidance are the main factors for not using PPE. It is necessary to evaluate the adaptation of PPE in relation to its users, materials used and to intensify the awareness of workers about the use of the equipment, so that the work environment becomes safer and brings more quality of life during the performance of their functions.

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