



USE OF PERSONAL PROTECTIVE EQUIPMENT IN STERILIZED MATERIAL CENTER

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ABSTRACT

CME in hospitals have significant importance in the prevention and control of infections, as one of the all phases of the sterilization process development agents. The task of each employee involved in the said process is extensive, requiring training and constant review of the techniques involved. That theme was chosen due to the observation in the practice of non-use of PPE in the CME and the interest in analyzing what the literature focuses on the subject, trying to understand the difficulties in adhering to the non-use of such equipment. The aim of this article is to analyze the publications on the use of PPE in CME, identify factors that hinder adherence to PPE in CME and risks related to failure to use PPE in CME. This research was conducted through an integrative literature review method that provides an assessment of scientific studies in a systematic and expanded form. They were selected for this integrative review 10 (62%) scientific articles database LILACS and 06 (38%) based studies Pubmed / Medline. We conclude that the protection of health workers from exposure to infectious diseases and risks in CME requires a combination of controls, one of which is the use of PPE. It is important to recognize that his protection as a health professional also involves other prevention strategies.

KEYWORDS : Descriptors: Nursing. Sterilized Material Center. Equipments for individual safety

1 INTRODUCTION

The sterilized material plant (CME) is the service unit for the cleaning, packaging, sterilization, storage and distribution of sterile materials (BRASIL, 1999).

The CME in hospitals has significant relevance in the prevention and control of infections as one of the main development agents of all stages of the sterilization process. Health professionals working in this sector are exposed to several risks, mainly biological risk. It is important to recognize that the protection of a health professional involves several prevention strategies, among them the use of Personal Protective Equipment (EPI).

In this way, it is verified that the EPI is of vital importance, since it must avoid contact with the infectious agent, or body fluid that can contain the infectious agent, creating a barrier between the worker and the infectious material. This theme was chosen due to the observation in practice of the non use of PPE in CME and the interest in analyzing what the literature approaches on the subject, seeking to understand the difficulties in adherence to the non use of these equipments.

The objectives of this article are to identify the factors that make it difficult to comply with PPE in the CME and the risks related to the non use of PPE in the CME from the national literature.

2 MATERIALS E METODS

This research was carried out through an integrative review of the literature. In this context, according to the stages of elaborating an integrative review, the following questions were defined: What are the difficulties encountered by WEC professionals in adhering to IPEs? What are the risks that these professionals are exposed when they do not use these protective equipment?

The second stage of this integrative review is the search or sampling of the literature, which was performed through the MEDLINE database. Was Aldo used the LILACS database, which is a cooperative database of the BIREME System.

As for the period of the bibliographic survey of this research was systematically carried out in the research portal of the Virtual Health Library (VHL) and in the Pubmed database throughout the months of January, February and March of 2016.

With this search, we have reached a total result of 38 publications. Then the titles and abstracts were read, reducing the total to 18 studies. After reading in full the 18 studies, two studies were excluded that did not meet the scope of the research, remaining 16 articles.

3 RESULTS AND DISCUSSION

Foram selecionados para esta revisão integrativa 10 (62%) artigos científicos da base de dados LILACS e 06 (38%) estudos da base Pubmed/Medline.

According to Martins et al. (2011), it is evident that hospitals have a high accident rate due to the activities performed by their employees. Therefore, it is fundamental to use PPE in order to minimize risks and sensitize employees to their existence and the best ways to avoid them.

According to Neis et al., (2011), CME needs trained professionals to reach its goals and objectives. One of the strategies for this to happen is the education of the employee in his place of work, being essential for his learning, because it allows to experience the activities that will develop. In this context, it should be noted that no employee knows better the problems of a sector than the professional who performs their activities for hours and days and thus, can benefit the evolution of the sector with ideas and suggestions that result in the proper functioning of this.

According to Ouriques (2013) the work is performed in a CME needs wide attention because it is minutiae and repetitions of employees who perform their activities, however, it is noteworthy that only attention does not prevent the consequences of an accident.

For Rodrigues et al. (2011), the PPE used in a correct way protects not

only the collaborator but above all the group, avoiding or minimizing the spread of microorganisms that cause infection and spread diseases in the hospital environment. In this way, it is not only the institution that needs to do its part with the provision of PPE's in the necessary sizes and quantities, but the employee also needs to make proper use of them and keep them, without justification for non-use, since it safeguards their integrity physics. =

Tipple et al. (2011) points out that the main role of personal protective equipment is to protect staff and reduce opportunities for micro-organism transmission in hospitals. Over the last 20 years there has been a tendency to eliminate the inappropriate use of aprons, gowns and masks in CMEs due to the lack of evidence that they are effective in preventing infections.

For Gil, Camelo and Laus (2013), the decision to use or not to use personal protective equipment should be based on an assessment of the level of risk associated with a specific activity or intervention and take into account current health and safety legislation. However, several studies have identified that both lack of knowledge of guidelines and non-adherence to guidance and recommendations are widespread and that education and in-service training is required.

Beinner et al. (2015) point out that CME is a very critical sector of the hospital because it works with dirty and contaminated materials, needing proper sterilization in order to eliminate or reduce existing microorganisms.

Costa and Fugulin (2011) point out that since the mid-1980s the use of gloves as an element of personal protective equipment has become part of day-to-day clinical practice for health workers. Espindola and Fontana (2012) agree that the two main indications for the use of gloves are to protect the hands from contamination with organic matter and microorganisms, and to reduce the risk of transmission of microorganisms to patients and professionals.

Gloves should not be used unnecessarily because their prolonged and indiscriminate use can cause adverse reactions and skin sensitivity (Tipple, 2011). As with all items of personal protective equipment the need for gloves and selection of appropriate materials should be subject to a careful evaluation of the task to be performed and its risks related to patients and health professionals (Silva et al., 2010). The risk assessment should consider:

- that is at risk (whether it is the patient or the health care worker) and whether sterile or non-sterile gloves are necessary;
- the potential for exposure to blood, body fluids, secretions and excretions; contact with skin, mucous membranes during general care and invasive procedures.

Gloves should be discarded after each activity for which they were used in order to avoid transmission of microorganisms to other sites or to other patients. (TIPPLE, 2011; MAGAGNINI,; ROCHA; AYRES, 2011).

Masks provide barriers to infectious materials and are often used with other personal protective equipment such as aprons and gloves. When used correctly, masks and eye protection provide protection to the mouth, nose and eyes during procedures at the CME where there is a high potential for contamination and biological hazards. All masks have some degree of resistance to fluids but must meet specified standards for protection against penetration of blood and body fluids (GOMES; GOMES; MATTOS, 2013).

Respirators are used for procedures in each specific case, where particulates and secretions create a high risk of infection for the CME worker. Eye and face protection provides a barrier to infectious substances and are commonly used in conjunction with other personal protective equipment such as gloves, gowns and masks. The type of face and eye protection depends on the specific working conditions and potential exposure (TRIPPLE, 2011).

Ascarí et al. (2013) and Costa and Fugulin (2011) in their studies analyzed that the nursing professionals give the development of the activities in the CME an engagement in the care process, feeling co-participants with the change in the way in which the practice in CME is performed.

Axe; Gelbcke (2011) point out that the work developed by the nursing professionals in CME is differentiated by the peculiarity that this sector requires of the working professionals, since it requires not only technical knowledge but, above all, scientific knowledge of the developed processes. The multidisciplinary work must meet the needs not only of nursing but of all professionals who perform services in this sector, with a view to making it efficient and effective to what is proposed, which is the sterilization of materials.

It is important to note that unhealthy workplaces, especially hospitals, which deal daily with various infectious diseases have a high chance of causing accidents to their employees, as well as presenting several risks to the health of the worker as well as to the patients' health. In this way, it is imperative to seek improvements and adaptations in the working conditions of the CMEs in order to safeguard the lives and safety of these employees and present a quality of life appropriate to these (ESPINDOLA; Fontana, 2012).

Awareness, prevention, risk recognition in the work environment and ongoing training are essential for the safety of health professionals and patients.

4 CONCLUSION

The protection of health personnel from exposures of infectious diseases and risks in CME requires a combination of controls, one of which is the use of PPE. It is important to recognize that their protection as a health professional also involves other prevention strategies.

It is important to note that, unfortunately, PPEs are not always available in sufficient quantities for all workers, which they often refuse to use, and this is one of the essential points for further research on the importance of using this equipment to safeguard the safety of EMC professionals and to encourage the creation of educational programs to seek the qualification of these professionals.

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