

Awareness Analysis on the use of Personal Protective Equipment: A Case Study in Health Unit

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Abstract— Personal or collective protective equipment refers to tools that have the function of minimizing certain accidents in addition to the protection against certain diseases that can often be caused by the work environment. This research aims to analyze the perception of employees of a health unit regarding the importance of the use of individual protection equipment. Therefore, a qualitative and exploratory research with field research was performed. During the field research a questionnaire was applied to 11 employees of a Health Unit in Natividade- RJ. Despite the imminent risks related to the labor environment, the inconsistency of the use of personal protective equipment is still one of the main aggravating factors that cause the most serious work accidents. Employees were aware of the need to use collective and individual protection equipment, however, during routine activities; professionals often do not use the equipment. It's hoped that research can support further studies and highlight the importance of safety and health in the workplace.

Keywords— health, safety, awareness, engineering.

I. INTRODUCTION

It is known that the work environment is not always a safe and suitable place for the activities involved in it. Thousands of people die every day in various fields of work. According to the International Labor Organization - ILO, annually, more than 2 million people are affected by accidents and occupational diseases.

According to data from the International Labor Organization, global costs reach 7 trillion reais per year. Given this, it is understood the need to make organizations aware that financial and mainly human losses cannot be treated as something ordinary and normal in the workplace, thus creating the perception that it is necessary to acquire the awareness that safety comes first place. Risks in the workplace affect the health and

the welfare of workers in any work activity (LIMA et al., 2019).

The working conditions in the Basic Health Units have been unfavorable to the health of professionals working in this context (CARVALHO et al., 2013). Accidents at work show a health problem worldwide, as they can be extremely lethal or harmful, particularly involving young people and in productive times, which has social and economic consequences. Thus, it is important to discuss the importance of safety management.

Silva et al. (2018) relate the use of personal protective equipment and collective protective equipment to individual and collective safety, respectively. However, many professionals feel uncomfortable using the

equipment, failing to follow occupational safety and health standards. Employees need to be aware of the need for appropriate use of protective equipment and that they significantly minimize unforeseen cases (ALMEIDA, 2015).

In this context, this research aims to analyze the perception of employees of a health unit about the importance of the use of individual protection equipment. Therefore, a qualitative and exploratory research with field research was performed.

II. THEORETICAL REFERENCE

2.1 OCCUPATIONAL HEALTH

It's estimated that about 125 million occupational accidents occur annually, where 220,000 die (ABREU, 2002). Given this scenario, occupational health issues are increasingly emphasized in scientific research. Since the time of Bernardino Ramazzini, 1700, considered the father of occupational medicine, health and the working environment are situations that permeate the most diverse analyzes and studies (SERRA NETO, 2015). In 1948, with the advent of the World Health Organization, the concept was established that "health is the complete physical, mental and social well-being, and not only the absence of diseases and illnesses" and "the enjoyment of maximum degree of health that can be achieved is one of the fundamental rights of every human being" (LIMA, 2009).

Among the various terms associated with health, occupational or occupational health is related to the physical and mental well-being of an individual in their work environment. This is exclusively dedicated to the promotion and prevention of workers' health. Occupational health guarantees not only workers' health, but also productivity, quality of products and services, employee motivation and satisfaction, that is, it is an important strategy for the quality of life of those involved with the work environment and society at work general (OLIVEIRA, 2017).

According to Santos and Freitas (2009), occupational health, also called occupational health, is a subarea of health that covers ergonomics, toxicology, epidemiology, industrial hygiene and other work-oriented sciences and individual or collective health.

According to Lima (2009, p. 29), "occupational health has an approach to prevention, screening and early diagnosis of work-related health problems, in addition to the existence of cases of occupational diseases or irreversible damage to worker". The integrity of the

physical and mental health of an individual, regarding the work environment, can be affected when he is subject to acquire an occupational disease, either due to the situation that is the environment or the most diverse issues.

2.2 PROTECTIVE EQUIPMENT

Personal Protective Equipment is a personal use tool designed to neutralize certain accidents and to protect against possible diseases caused by working conditions (SOUZA, 2017). According to Cisz (2015), the use of protective equipment is related to behavioral safety, a term that refers to the application of scientific knowledge of Behavioral Psychology in occupational safety issues.

Protective equipment is developed according to the risk inherent to the function of an employee and its exposure period, being mandatory and appropriate to the characteristics of each work environment (GOZZI, 2016). Its purpose is to preserve the physical integrity of the worker (ZOCCHIO, 2012). Protective equipment is an effective tool for minimizing occupational injuries, accidents and other hazards present in the workplace (BALKHYOUR et al. 2019).

The worker will be more receptive to personal protective equipment if it is comfortable and pleases. To do this, equipment must be practical, well protected, easy to maintain, strong and durable (ARAUJO, 2013). Proper use of personal protective equipment provides a better quality of life at work. Due to the large amount of equipment and the different environments of use, it is necessary to evaluate the protective equipment used by workers, so that it can be protected without loss of productivity (OLIVEIRA, PILON, 2012).

The worker may use the equipment for its intended use, being responsible for the maintenance and use of the equipment, reporting to the manager of any malfunction or failure (OIT, 2015). It is noteworthy that companies are required to offer free personal protective equipment in perfect condition and operation. (PONTELO; CRUZ, 2011).

III. MATERIAL AND METHODS

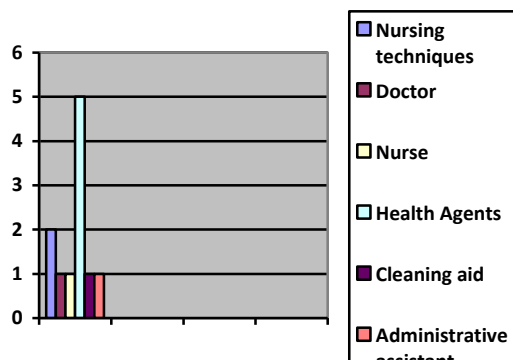
A research is bibliographical, qualitative and exploratory. Initially, a bibliographic study was performed. That done, a field research was conducted at the Health Unit object of study. The data collection instrument used was an interview with the aid of a questionnaire. The questionnaire was designed to be answered by 11 employees of the organization.

At this stage, workers were interviewed to identify the main causes of the lack of use of protective equipment

and their knowledge about the importance of using such equipment.

IV. RESULTS AND DISCUSSIONS

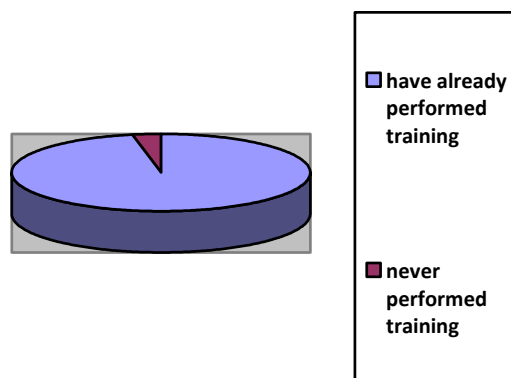
Healthcare workers are exposed to multiple chemical, physical, biological, psychosocial and ergonomic hazards (TINOCO et al., 2019). The research had the following groups: 1 doctor; 1 nurse; 5 health agents; 1 cleaning aid; 1 administrative assistant; 2 nursing techniques, as shown in Graph 1.



Graph. 1: number of employees

Everyone involved in the workplace needs to know about work safety, from the general helper to the manager of the organization, because only through knowledge the environment will be free from work accidents, therefore understanding should happen through training, exposure, pamphlet, security competition, bulletin, announcement, conversation, communication and newsletters.

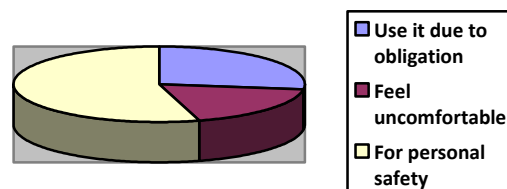
Of the respondents, 36.36% answered that they never conducted training on the importance of safety in the organizational environment and consequently the need to use protective equipment, Graph 2. According to Zonta et al. (2012) many collaborators continue to practice the same failures resulting from inability to practice due to lack of qualification or improvement.



Graph. 2: percentage of employees who never performed training

It is of utmost importance that the company guides its employees regarding aspects of health and safety at work. As result of the lack of information about accidents and occupational diseases, the organization is injured, because when the employee gets sick, he or she leaves his / her job, causing delay in production and generation of expenses. Personal protective equipment helps to protect health professionals from pathogens (BALOH et al., 2019). However, the effectiveness of these equipment is often hampered by inadequate disposal methods (REDDY et al., 2019).

Regarding the opinion of workers about the need for the use of personal protective equipment, 27.27% said they use it due to obligation, 18.18% say they feel uncomfortable and 54.55% said they use the equipment for personal safety, Graph 3.



Graph. 3: Workers' opinion about the use of protective equipment

Due to concerns or lack of knowledge, many questions are asked by employees about the efficiency and need to use protective equipment. According to Araujo (2015), any company must offer safe working conditions when hiring an employee, being essential that the worker is made aware and encouraged to use the mandatory safety equipment correctly. It is noteworthy that educational measures need to focus on training and continuing education (SOUZA et al. 2016).

V. CONCLUSION

Based on the information studied, it can be analyzed that there is still some resistance to the use of personal protective equipment. However, employees are becoming aware of the need for prevention and adapting to safety methods so as not to suffer the consequences of accidents.

In general, it is noted that employees are aware of the need for the use of personal protective equipment and the risks of misuse or not of personal protective equipment. However, it is extremely necessary to reinforce the

importance of the workers to carry out their activities as safely as possible.

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