

# Knowledge and Preventive Measures of Occupational Hazards among the Workers Working in Different, Factories, Industries and Health Care Settings: A Review

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#### Abstract

An occupational health hazard is described as a possible harm to a person's health after leaving a toxic workplace, which is a serious public health concern. The most frequent risks in their workplace include eye fatigue, eye pain, neck injuries, musculoskeletal issues, stress, professional burnout, anxiety, depression, and some common psychological hazards that might arise during dental treatment. A total eight numbers of relevant original descriptive (cross-sectional) studies of the recent five years restated to knowledge and preventive measures of occupational hazards among the workers working in different, factories, industries, and healthcare settings were selected for this present review. The knowledge of the employees regarding occupational hazards is very important for the provision and establishment of occupational health and safety measures.

**Keywords:** Health Care Workers, Knowledge Regarding Occupational Hazards, Occupational Health, Occupational Disease, Occupational Injuries, Preventive Measures of Occupational Hazards

### 1. Introduction

An occupational health hazard is described as a possible harm to a person's health after leaving a toxic workplace, which is a serious public health concern. It can also be described as any behavior, substance, method, or circumstance that raises the risk of an illness or accident at the workplace. A few of the occupational risks that workers must deal with include infectious diseases, back injuries, latex injuries, radiation exposure, hazardous chemical exposure, emotional and physical stress, work overload, and workplace violence<sup>1</sup>.

World Health Organization (WHO) estimates that worker incapacity and poor health result in a 10–20 percent decline in a nation's GDP (GNP). Additionally, it is estimated that occupational injuries account for 8% of unintentional injuries and more than 10 million healthy years of life lost to premature death or disability.

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Occupational accidents are important problems for both social and economic life in all countries of the world. When looking through the literature; it becomes clear that workplace and occupational safety have been the focus of several researches<sup>3</sup>.

Despite the fact that work-related illnesses can ideally be prevented by recognition, evaluation, and proper control measures, developing nations have not yet fully embraced effective occupational health and safety

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practices and their promotion in the workplace. Personnel working in laboratories and hospitals are more likely to be exposed to biological dangers<sup>4</sup>.

This study sought to evaluate the extent of knowledge as well as the preventive actions taken by employees working in various industries and sectors. It is considered that the information to be obtained regarding the employees' current knowledge level will further help to improve their health status.

# 2. Methodology

A total eight numbers of relevant original descriptive (cross-sectional) studies of the recent five years restated to knowledge and preventive measures of occupational hazards among the workers working in different, factories, industries, and healthcare settings were selected for this present review. This study conducted a broad literature search using keywords such as occupational health, occupational disease, occupational injuries, health care workers, knowledge regarding occupational hazards preventive measures of occupational hazards. The sources for the collection of the information were PubMed, Scopus, Medical Literature Analysis and Retrieval System Online (MEDLINE), and Cumulative Index to Nursing and Allied Health Literature (CINHAL). Included research studies on related topics were collected from 2017 onwards till 2022.

Sl No	Inclusion criteria	Exclusion criteria
1.	Original studies related to the topic of interest	Article those were not original and confused content
2.	Accessible articles from High quality Scopus index journals	Articles from Non listed journals
3.	Collected recent studies published from 2017 till 2022	Studies for with only abstracts is available.

# 3. Result and Discussion

According to the findings of the study, the majority of nurses (92%) are aware of physical hazards, and 62.5 percent are aware of musculoskeletal disorders that cause occupational health hazards. In addition, 91 percent of nurses are aware of chemical hazards and factors, as well as various chemicals that cause occupational health

hazards. Only 22.7 percent of nurses claimed they were given the finest possible protective equipment, which is one of the leading causes of bad practice. In terms of reporting habits, only 14.5 percent of nurses report workrelated musculoskeletal disorders, 64 percent of nurses report needle stick injuries, and 35 percent of nurses report workplace violence, including small incidents. When compared to workplace violence and work-related musculoskeletal disorder, needle ill injury had a higher rate of reporting. As per the findings of the study, nurses had an average of 68.1 percent understanding of occupational health risks (adequate knowledge). The link between education and knowledge was statistically significant. The percentage of people who practiced occupational hazard prevention was 25.4 percent (poor practice). Age, designation, work experience, and previous in-service education or training all had statistically significant effects on the practice<sup>5</sup>.

43.4 percent of workers reported experiencing workplace accidents involving falls, 42.7 percent had complete knowledge of latex allergies, 52.7 percent had knowledge of dermatitis and respiratory issues, and 42 percent had knowledge of accidental fires. Burns account for 39.4% of cases, electric shocks for 36.7%, full knowledge of biological pathogens for 59%, and respiratory diseases for 54%. Skin allergies and understanding of the use of personal protective equipment (48.7%) to avoid respiratory issues account for 67.4% of occurrences, whereas accidental falls account for 44%. Other common incidents include the use of first aid kits in minor accidents (71.4%), respiratory issues (60%), reporting incidents (60%), and incident documentation systems (58%) respectively. The sum of the results showed that 73.3 percent of the participants knew everything there was to know about occupational health and safety, according to the questionnaire. Less than 1% were only marginally aware, 3.3 % were somewhat aware, and 22.6% were aware of the same<sup>6</sup>.

The majority of survey participants had a moderate degree of knowledge and practices regarding workplace safety, according to the results. The majority of survey participants (72%) were aware of health risks and the impact of dust on health (58 percent). Sixty-six percent of the participants thought that the noise made when creating a sculpture was damaging. Wearing gloves is crucial when working with chemicals, according to the majority of participants (58%) who claimed that exposure to chemicals (inhaled sprays, spilled on the body) throughout the course of their jobs creates health problems (74 percent). Only 34% of workers knew about the safe working procedures in their place of employment. The majority of managers and front-line employees, however, had insufficient knowledge of health and safety risks, according to another survey that looked at awareness and attitudes regarding personal protection<sup>7</sup>.

The study's findings show a significant relationship between age and education level for health workers' awareness of occupational health and safety programs. Findings also indicate a highly significant relationship between health workers' participation in training courses and their knowledge of occupational health and safety programs<sup>8</sup>.

## 4. Conclusion

As can be seen, the awareness of the employees regarding occupational hazards is very important for the provision and establishment of occupational health and safety measures. There have been significant social and economic repercussions for employees, families, enterprises, countries, and communities as a whole as a result of the burden of illness and the root causes of occupational diseases and injuries. This study offers numerous tips for extending future researchers' perspectives to the entire area. Studying other factors that contribute to occupational dangers as well as their effects is possible. Future research can also be conducted as a comparative study, comparing the occupational risks faced by healthcare workers with those faced by other non-medical workers.

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