The Relationship of Occupational Health and Safety K3 to Employee Performance in the Workplace Systematic Review Prospective cohort study

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ABSTRACT

Occupational health and safety K3 ensures that people are not injured or become sick due to hazards in the workplace. ensuring that preventing the risk of frequent industrial accidents and diseases that cause the loss of workers' lives and or affect employee performance. K3 is a science that focuses on ensuring safety in the workplace. Occupational safety and health (K3) is defined as the science and application of technology regarding the prevention of work accidents and occupational diseases. By providing OSH protection, it is expected that workers can work safely, healthily and productively. Research purposes. To find out health and safety K3 on employee performance in the workplace. Method. Descriptive with observational cohort. Prospective. Results. Knowing the level of occupational health and safety K3 on employee performance at work. Conclusion. Therefore, it can be concluded that in occupational health and safety risks of OSH to improve the safety of health workers, which includes various occupational risk factors in the workplace, provide refresher training and routine induction training on OSH and use personal protective equipment (PPE). To ensure safety and health in the sector prioritizing the health of workers.

Keywords: *Employees, Health, Safety*

INTRODUCTION

Occupational health and safety OSH ensures that people do not get injured or become ill due to workplace hazards. it ensures that it prevents catastrophic losses in practice. occupational safety and health encompasses both moral and economic issues. OHS is a science that focuses on ensuring safety in the workplace.

Many activities in the construction sector, including manual handling of loads, are integrally risky to workplace health and safety, other construction activities that are highly risky to human life are noise, handling of hazardous loads, exposure to live wires, fire and equipment (Guan dkk., 2020). More workers in today's work are exposed to health risks or hazards associated with their jobs.

Hazards that appear in the form of radiation and noise are called physical hazards asbestos and disinfectants are called chemical hazards (J. Chen dkk., 2020).. Other hazards include those that manifest in the form of poor working postures, irregular working situations such as night work and shifts/rotation, increased use of large equipment, irregular working days and workplace violence.

Most African countries are in the construction industry with developing economies and poor cultural links to occupational health and safety issues (De Santiago-Martín dkk., 2020), the lack of attention given to OHS by industry and government, due to competing political, social and economic interests, OHS issues are largely ignored the lack of occupational health and safety policies the adverse impact is largely death, permanent disability, severe injury.

Providing occupational health services OHS plans the necessary measures to prevent diseases caused by workloads such as shift work, night work, and long working hours.

In order to implement work management in different job categories, it is important to develop a digital risk assessment for overtime-induced adverse events (ORAEs) for employees in different workplaces (Ashina dkk., 2021). The fact that periodic routine medical examinations (G. Chen dkk., 2020) are mandatory for workers in Taiwan, this study used OHS records to establish a practical assessment index for risk for ORAEs among different employee groups.

Work safety awareness in this study also examines how many employees receive a lot of information about the hazards associated with their work, dangerous workplaces and what actions employees should take to avoid injury, as well as information about when to report. (Nuwa, Kiik, & Vanchapo, 2019) accidents, it happens - regularity of training, occupational safety is not only the responsibility of managers, but also requires the commitment of workers. Therefore, positive worker behavior with informed compliance is key to ensuring that workplace accidents are prevented.

Meanwhile, occupational health and safety needs far exceed the legal requirements of state regulations. (Merlin & Vanchapo, 2021) Economic and human factors are two other important reasons for the need for OHS in an organization arising from the availability of OHS policies. Therefore, three key aspects of OHS policies are important for this study.

The principle of provision and use of personal protective equipment, the principle of regularity and space for occupational health and safety notices should be considered (Wambulwa et al., 2018). Information on safety measures taken by management in the event of employee injuries and illnesses.

RESEARCH METHODOLOGY

Search strategy

The search strategy for this study was a systematic database review that examined articles published from 2018 to 2022 (Karavani dkk., 2019). Searches were conducted from pubmed databases with keywords (mesh).

This research is K3 which examines the relationship between employee occupational health and safety and workplace performance. The keywords used in this literature search are "Employee [Mesh] AND health and safety [Mesh]" or "Workers and occupational health and safety".

Inclusion Criteria

The inclusion criteria in this study are: available Free full text or freely downloaded articles (open access). Articles published using English or Indonesian, The subjects of this study were employees (Shah dkk., 2019). With the study design used is an observational study. Various safety hazards/risks and recommendations were identified in the literature, related to safety culture, isolation, safe environment, and education and training. The outcome measured was occupational health and safety.

Exclusion Criteria

Exclusion criteria used in this study are: Articles published in Arabic, Spanish, Polish, English, Japanese Chinese. Articles with observational design and random controller trail.

Research Objectives

The purpose of the study is to provide the results of a systematic critical review of problems that occur in various regions (Taiwan, West Africa, Australia, Slovak Republic, South Africa, Finland, Nebraska, China).

Quality assessment strategy and data synthesis

All identified studies were assessed independently by all authors for relevance based on title and abstract (Rodriguez-Wallberg dkk., 2023). Full-text versions of all potentially relevant, disagreements between authors were decided through a discussion forum. Screened data were presented in flowcharts according to PRISMA (preferred items of systematic review and meta-analysis) items.
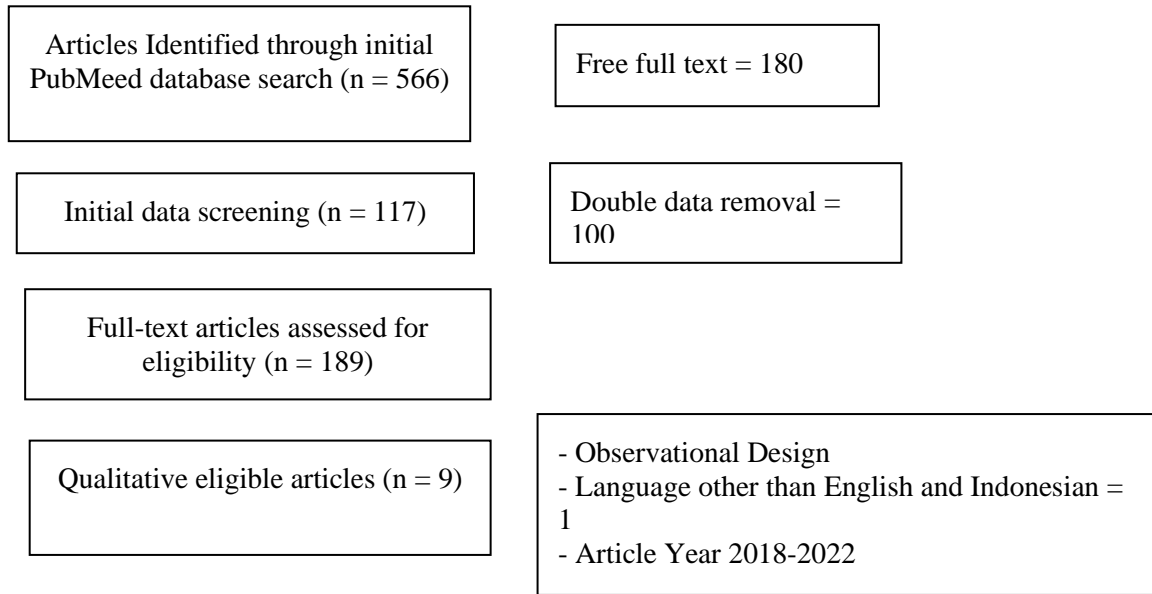
RESULT AND DISCUSSION

Articles Identified through initial PubMeed database search (n = 566)		Free full text = 180

Initial data screening (n = 117)		Double data removal = 100

Full-text articles assessed for eligibility (n = 189)	

Qualitative eligible articles (n = 9)		- Observational Design - Language other than English and Indonesian = 1 - Article Year 2018-2022

Figure 1: PRISMA flow diagram for article selection in a systematic review.

Table 2: Summary of Study Results

Study	Subject	Location	Results
(Lingkungan & Liu, 2022)	Consists of 5505 working employees.	Seven Taiwanese companies/factories	Showed that the relationship of digital risk of overwork-related adverse events (ORAEs) To reduce the risk of h-OrAEs, active control and to cerebrocardiovascular risk
(Segbenya & Yeboah, 2022)	Consists of 120 employees out of 200 workers in the sector.	Economic sector contribution Ghana West Africa.	Showing that the relationship of Occupational Health and Safety Performance in the Construction Sector
(Wright et al., 2021)	None	Labor in Australia's remote health sector:	Showing that the relationship Labor safety in the remote health sector
(Konstantinou et al., 2020)	Consists of 96 Social Labor Offices, and 52 Regional Labor Inspectorates for	European labor inspectors in the Czech Republic, Greece and	Showing that the relationship of Health and Safety Inspections in the

	Occupational Health and Safety.	the Slovak Republic	Workplace: A Review Among Three Countries
(Rikhotso et al., 2022)	None	Indicators of Physical Health of Workers in South African Industry	Showing that the relationship of occupational health and safety as an Indicator of Physical Health of Workers in Industry
(Rantala et al., 2022)	Consists of employing around 200 people.	In five Finnish companies	Showing that the relationship of Occupational Health and Safety Risk Skills
(Sedani et al., 2019)	Consists of 448 people in the industrial sector	Nebraska Department of Labor.	Showing that the relationship of Occupational Health and Safety Strategies
(Q. Chen et al., 2022)	Consists of 500 company employees	Jiangsu, China	Showing that the relationship of Environmental Occupational Health Safety and Development
(Liu, 2022)	Does not exist	Chinese construction company	Showing that the relationship of Unsafe Construction Establishment Efficient Occupational Health and Safety (OHS) Behavior and Testing Programs

Occupational health and safety OHS

Work requires working in compliance with OHS regulations, which take into account the safety of construction workers and the public at large (Black dkk., 2019). The law (Act 651) compels every employer to provide a safe working environment, safe working methods, and proper equipment and machinery for their employees.

Employers are liable for work-related injuries, especially those that cause injury or death to the worker during the worker's employment.24 has several regulatory frameworks on health and safety, such as the Factories, Offices and Shops Act 1970,

Act 328; Workers' Compensation Law, Act 1987 (PNDC 187); National Employment Act 2003, Act 651; Code of Practice on Health and Safety on Construction Sites27; Building Regulations and Mining Regulations 1970, LI 665.25 The regulatory frameworks have specific provisions on how workers and their management should ensure occupational health and safety measures.

In addition, health and safety can be addressed if employers will ensure continued safety awareness28; and hire competent safety officers.29 Other measures include the adoption of a safety policy30 (Dobson & Giovannoni, 2019). having workplace inspection checks, training and coaching,31 compliance with regulations, periodic safety performance reviews, awareness of site responsibility for health and safety. OHS policies provide strategic and overarching direction, and management commitment to OHS and how OHS-related issues should be addressed.32 Consideration should be given to policies on the provision and use of personal protective equipment (PPE), policies on regularity and allocated places for posting notices on occupational health and safety.

Policies on procedures for the right use of tools to reduce industrial diseases and accidents on site. In addition, it includes knowledge of the safety measures taken by management for its workers in the organization against injuries and illnesses.32 This OSH awareness also looks at the extent to which employees are well informed about the hazards associated with their jobs, hazardous work locations and what steps workers should take to avoid injuries as well as knowledge about reporting injuries when they occur.32 In addition, OSH awareness looks at the regularity of OSH training provided to workers in general and safety officers in particular ARTICLE 2.

OHS training is very important, the work performed has a very high risk of danger. Human factors are the main cause of accidents (Jain dkk., 2019). By conducting safety training, companies can increase employees' employee safety awareness, access safe operation skills and abilities to handle and respond to emergencies (Powles dkk., 2020). This not only realizes safety in production but also highlights the need for building a corporate safety culture and the importance of employee rights and interests (Gnocchi dkk., 2022). Safety training for employees is an important step to ensure safety and improve employees' safety awareness and perception (Middeldorp dkk., 2020).

Safety training is especially important to teach employees about safety training and compliance, which will offer accident prevention and control. Safety training is also a major concern for a successful OHS program Article 10.

CONCLUSION

Based on the results of the literature search, it shows that there is a relationship between motivation and the performance of posyandu cadres. This can be proven by 10 articles that have been reviewed showing that the better one's motivation, the greater the responsibility one has, so that cadres become more active in carrying out posyandu activities.

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