Building Safe Occupational Health for the Welfare of Workers

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Abstract

The combination of workplace safety and health promotion is an idea that connects efforts to make workers healthier and ensure their work environment is safer and more healthful. This study looks into the value of setting up a strong occupational health system as a way to boost workers' well-being. By doing workplace risk checks, using prevention plans, and supporting health activities, companies can lower the chances of work-related illnesses and injuries, while also making work more productive and satisfying for employees. This Literature Review was written using the library research method, drawing information from online sources like Google Scholar, Mendeley, and other academic websites. Through risk analysis, prevention efforts, and health promotion, businesses can greatly reduce occupational diseases and accidents, and also improve productivity and job satisfaction. The results show how important it is for both employees and employers to understand each other and for employers to take responsibility in providing a safe and healthy workplace.

Keywords: Occupational Health, Welfare Worker, Worksite Health Protection

Introduction

Occupational Health and Safety (OHS) aims to create a safe and healthy work environment for all employees. Occupational health refers to the best conditions from physical, mental and social aspects for workers in various fields. It is a medical discipline that covers all aspects of health and safety in the workplace, with an emphasis on the primary importance of preventing harm. Overall, work health and safety laws, standards, and initiatives seek to improve working conditions not only for employees, but also for their families, coworkers, clients, and other interested parties (1). Based on information from

the International Labor Organization (ILO), more than 2.3 million workers lose their lives every year due to occupational diseases and work-related accidents worldwide. These alarming statistics emphasize the urgent need to strengthen safe occupational health systems to improve worker well-being. The implementation of an effective occupational health system must pay attention not only to preventing accidents, but also taking promotional and preventive measures that are balanced between job demands and worker capacity. World Health Organization (WHO) underlines that a safe and healthy work environment can increase productivity by 20% as well as significantly reduce absenteeism due to work-related illnesses, conversely, ignoring health and safety in the workplace results in reduced worker performance, poor well-being, and huge economic losses for companies and countries.

The Healthy Workplaces: Model for Action framework has influenced the development of the Total Worker Health (TWH) initiative by the National Institute for Occupational Safety and Health (NIOSH), part of the US Centers for Disease Control and Prevention (CDC). TWH combines health protection and health promotion by integrating policies, programs, and practices that prevent injury and illness while promoting the overall well-being of workers (2). However, challenges remain, particularly in high-risk sectors such as construction, where the rate of work-related deaths—both caused by natural and human factors—is much higher than in other industries.

Between 1996 and 2005, approximately 20% of industrial accidents in Hong Kong, South Korea, and Japan were related to construction activities, indicating a lack of continuously implemented occupational health and safety management systems (3).

To overcome these challenges, it is important to strengthen workplace risk analysis and identify potential hazards, such as exposure to chemicals, heavy equipment, and poor ergonomic conditions. A proactive approach to OSH allows organizations to anticipate risks, establish prevention strategies, and build a culture of safety and well-being among workers. Therefore, this research aims to analyze the importance of developing a safe occupational health system as a strategic effort to improve worker welfare. It is hoped that the results can contribute to the formulation of policies and strategies that strengthen occupational health and safety in various industrial sectors and become the basis for creating safer, healthier and more prosperous workplaces (4).

Material and Methods

The data analysis process was conducted through thematic synthesis. Each source was evaluated and grouped based on frequently occurring themes, such as occupational safety, worker well-being, and management systems. This analytical approach identified the relationship between workplace safety practices and employee well-being outcomes. Data validity was ensured by comparing findings from at least three peer-reviewed sources published within the last five years to ensure reliability and relevance. The final interpretation was based on triangulation of literature findings to draw comprehensive conclusions about the role of occupational health systems in improving worker well-being. This study employed a library research method (literature review). The research process involved collecting and analyzing various academic sources related to occupational health, workplace safety, and worker well-being. Data were obtained from scientific journals, books, and official publications from trusted databases such as Google Scholar, Mendeley, and the official websites of international organizations such as the WHO and ILO. This research tool was used for the article called "Building Safe Occupational Health Systems for Worker Welfare." The approach taken was a literature review, and the information came from scientific articles, academic journals, and official reports that were relevant. The main tool used was a literature review sheet, which helped to check the quality, importance, and main points of each source used.

Results and Discussion

The findings of this study emphasize that the integration of occupational health and safety (OHS) systems plays a pivotal role in promoting worker welfare and organizational sustainability. Various studies reviewed consistently demonstrate that strong OHS implementation not only reduces occupational accidents and diseases but also contributes to higher levels of job satisfaction, productivity, and mental well-being among employees. Research shows that regular safety training and good communication between management and workers can increase awareness of hazards and reduce the number of workplace accidents.

Tabel 1. Literature Review Checklist

No	Assessed Components	Assessment criteria	Information
1	Article Identity	Title, author, year, journal source	Ensure completeness of source data.
2	Source Credibility	Indexed in Scopus/DOAJ, published within the last ≤5 years	Ensures academic validity
3	Research Objective	Explains the relationship between occupational health and worker welfare	Explains the relationship between occupational health and worker welfare.
4	Research Methodology	Quantitative, qualitative, or mixed methods	Identifies the avpproach of each study
5	Discussion Focus	Occupational health and safety, policy, work behavior, mental health, welfare	Categorizes literature themes
	Main Findings	Results related to occupational health and worker welfare	Summarizes study outcomes
7	Relevance to the Research Title	Degree of alignment with the research topic	Scored 1–5 (1 = not relevant; 5 = highly relevant).

Each reviewed article is scored 1–5 for every component: 1–2 = Low relevance, 3 = Moderate relevance, 4–5 = High relevance. Scores are then used to select articles that qualify for further analysis.

Tabel 2. Literature Review Matrix

No	Author & Year	Research Objective	Focus	Main Findings	Relevance (1–5)
1	Kim H (2024) (9)	To explore the psychosocial safety climate for restaurant employees and its impact on meaning of work and resilience	Psychosocial safety climate	A positive psychosocial safety climate strengthens employee resilience and reduces work stress	5
2	Zodpey S, Sharma K (2014) (10)	To analyze transformative learning approaches	Public health education	Transformative learning enhances critical thinking and	3

		in public health education		competence in health professionals	
3	Morgan CP, Bowyer M, MacNaughton J (2023) (11)	To review transformative learning opportunities in interprofessional healthcare education	Interprofessional learning	Collaboration through transformative learning improves team-based safety culture	4
4	Rojo J et al. (2023) (12)	To apply Mezirow's Transformative Learning Theory in nursing and health education	Transformative learning theory	Encourages reflective practice and professional responsibility in healthcare	3
5	Zafran H et al. (2024) (13)	To explore transformative learning for occupational therapy educators	Occupational therapy education .	Promotes adaptability and resilience relevant to worker well-being	4
6	Ryan CL et al. (2022) (14)	To synthesize applications of transformative learning theory in health professions	Health professions education	Builds awareness of workplace ethics and professional safety responsibility	3
7	Smith M et al. (2025) (15)	To analyze anti-oppression pedagogy within health professions	Health education & anti-oppression pedagogy	Encourages inclusive, safe environments for health workers and learners	4
8	Chiwuze UC et al. (2024) (16)	To assess the legal framework and enforcement mechanisms of OHS in manufacturing	Legal framework for OHS	Strong legal frameworks and enforcement improve worker safety and welfare	5
9	Van Schalkwyk SC et al. (2019) (17)	To review transformative learning as pedagogy for health professions	Pedagogy & transformative learning	Deepens learner engagement and supports professional accountability	3
10	Müller J et al. (2025) (18)	To examine transformative learning in under-resourced healthcare contexts	Transformative learning in low-resource settings	Builds innovation and resilience among health professionals in challenging environments	4
11.	Merzal CR (2023) (19)	To discuss pedagogy for transformative teaching and learning in health promotion	Health promotion pedagogy	Transformative pedagogy supports awareness of worker welfare and empowerment	4

12.	Halupa C (2015)(20) To design transformative curriculum for health sciences education	Health sciences curriculum	Curriculum based on transformative learning enhances professional responsibility and safety awareness	3

The reviewed articles revealed a strong link between organizational safety culture and employee well-being. A work environment that prioritizes safety fosters a sense of belonging and commitment among employees, ultimately leading to increased motivation and reduced employee turnover. Conversely, neglecting OHS can lead to chronic stress, fatigue, and decreased performance. From a policy perspective, various literature sources highlight that legal and institutional frameworks play a crucial role in ensuring effective OSH implementation. Countries with clear labor regulations and robust oversight mechanisms tend to have lower workplace accident rates. Furthermore, technological innovation is also a crucial factor in modernizing OSH practices. The use of digital applications and real-time data monitoring systems can improve hazard reporting and risk identification in the workplace.

The outcomes of this review of literature bring to light several noteworthy discoveries connected to creating a work environment that is healthy and safe, along with its contribution to the well-being of workers. Three primary themes surfaced, stemming from an assessment of chosen writings using a matrix and sheet designed for reviewing literature.

The success of programs that train for safety in the workplace is also very important. Workers can become more conscious of dangers, enhance their attitudes regarding safety, and lower the number of incidents at work through well-designed safety training (5). The effect, however, shifts depending on how risky the industry is and the excellence of its performance (6). Putting into action a system that manages occupational health and safety (OHSMS) provides a lot of benefits across many different fields of industry. Studies indicate that putting a well-organized OHS system in place aids in lowering accident occurrences, improving the culture of safety, and boosting the wellness of employees (7). Elements of working conditions like support from coworkers, having control over the job, and communicating have a substantial influence on how well workers are doing. When conditions are not good and demands at work are too high, there is a chance of rising stress and declining productivity, whereas a workplace that provides support can boost contentment with work and the ability to bounce back (8).

Conclusion

The collection of studies scrutinized underscores the idea that programs aimed at occupational health and safety serve not only as preventive actions but are also vitally important to an organization's productivity and long-term viability. When a robust safety-conscious work environment is present, it usually results in higher levels of employee drive, lower employee turnover, and sustained financial advantages for companies. Additionally, integrating the encouragement of mental well-being into frameworks for occupational health and safety is increasingly seen as critical, since psychological pressure adds to occurrences and absences in the workplace. Another significant topic of conversation involves consequences for policy and how things are managed. Companies that take a forward-thinking stance — integrating systems for managing safety with ongoing education for employees — usually see a more pronounced feeling of confidence and cooperation between the workforce and those in management positions. This reinforces the Total Worker Health (TWH) framework, which brings the objectives of the organization into harmony with the physical and mental wellness of the workforce. Further studies need to investigate how well OHS monitoring and training systems that are computer-based perform, as integrating technology has demonstrated capacity to improve hazard reporting and how risks are conveyed across different industries.

References

1.   Ebikake-Nwanyanwu MA, Woripre TD. Legal Aspects of Occupational Health and Safety: Ensuring Worker Well-Being. International Journal of Innovative Legal & Political Studies. 2025;13(1):39-53.

2.   Pronk NP, McLellan DL, Dennerlein JT, Anderson P, Karapanos M, Nagler E, Schmidt D, Spoonheim J, Wallace LM, Sorensen G. Building capacity for integrated occupational safety, health, and well-being initiatives using guidelines for Total Worker Health® approaches. Journal of occupational and environmental medicine. 2021 May 1;63(5):411-21.

3.   Saputra F, Mahaputra MR. Building occupational safety and health (K3): Analysis of the work environment and work discipline. Journal of law, politic and humanities. 2022 May 20;2(3):105-14.

4.   Naji GM, Isha AS, Mohyaldinn ME, Leka S, Saleem MS, Rahman SM, Alzoraiki M. Impact of safety culture on safety performance; mediating role of psychosocial hazard: An integrated modelling approach. International journal of environmental research and public health. 2021 Aug 13;18(16):8568.

5.   Bęś P, Strzałkowski P. Analysis of the effectiveness of safety training methods. Sustainability. 2024 Mar 26;16(7):2732.

6.   Hutchinson D, Luria G, Pindek S, Spector P. The effects of industry risk level on safety training outcomes: A meta-analysis of intervention studies. Safety science. 2022 Aug 1;152:105594.

7.   Kineber AF, Antwi-Afari MF, Elghaish F, Zamil AM, Alhusban M, Qaralleh TJ. Benefits of implementing occupational health and safety management systems for the sustainable construction industry: a systematic literature review. Sustainability. 2023 Aug 22;15(17):12697.

8.   Kim H. Psychosocial safety climate for building restaurant employees' meaning of work and resilience. Journal of Human Resources in Hospitality & Tourism. 2024 Jan 2;23(1):128-48.

9.   Zodpey S, Sharma A. Advancing reforms agenda for health professionals' education through transformative learning. Indian journal of public health. 2014 Oct 1;58(4):219-23.

10.   Morgan CJ, Bowmar A, McNaughton S, Flood B. Transformative learning opportunities during interprofessional healthcare practice experiences in higher education: Viewed through the lens of a threshold concepts framework. Focus on Health Professional Education: A Multi-Professional Journal. 2019 May 1;20(2):41-54..

11.   Rojo J, Ramjan L, George A, Hunt L, Heaton L, Kaur A, Salamonson Y. Applying Mezirow's Transformative Learning Theory into nursing and health professional education programs: A scoping review. Teaching and Learning in Nursing. 2023 Jan 1;18(1):63-71.

12.   Zafran H. A narrative phenomenological approach to transformative learning: lessons from occupational therapy reasoning in educational practice. The American Journal of Occupational Therapy. 2020 Jan 1;74(1):7401347010p1-6.

13.   Ryan CL, Cant R, McAllister MM, Vanderburg R, Batty C. Transformative learning theory applications in health professional and nursing education: An umbrella review. Nurse Education Today. 2022 Dec 1;119:105604.

14.   Webb J, Raez-Villanueva S, Carrière PD, Beauchamp AA, Bell I, Day A, Elton S, Feagan M, Giacinti J, Lukusa JP, Kingsbury C. Transformative learning for a sustainable and healthy future through ecosystem approaches to health: insights from 15 years of co-designed ecohealth teaching and learning experiences. The Lancet Planetary Health. 2023 Jan 1;7(1):e86-96.

15.   Smith M, McGuire-Adams T, Eady K. Anti-oppression pedagogy in health professions: a scoping review. Advances in Health Sciences Education. 2025 Feb;30(1):281-320.

16.   Chinweze UC, Onyejegbu DC, Ogbuke MU, John DJ, Antai GO, Agboti CI. The legal framework for occupational health and safety in the manufacturing sector: Assessing compliance and enforcement mechanisms in Nigeria. Pakistan Journal of Criminology 16 (4). 2024 Oct:1437-50.

17.   Van Schalkwyk SC, Hafler J, Brewer TF, Maley MA, Margolis C, McNamee L, Meyer I, Peluso MJ, Schmutz AM, Spak JM, Davies D. Transformative learning as pedagogy for the health professions: a scoping review. Medical education. 2019 Jun;53(6):547-58.

18.   Müller J, Meyer R, Bantjes J, Archer E, Couper I. Handle with care: transformative learning as Pedagogy in an under-Resourced Health Care Context. Teaching and Learning in Medicine. 2025 May 27;37(3):412-21.

19.   Merzel CR. Pedagogy for transformative teaching and learning. Pedagogy in Health Promotion. 2023 Dec;9(4):231-3.

20.   Halupa C, editor. Transformative curriculum design in health sciences education. IGI Global; 2015 Apr 30.