

**ISSN 2597- 6052**DOI: <https://doi.org/10.56338/mppki.v7i7.5501>**MPPKI****Media Publikasi Promosi Kesehatan Indonesia**  
*The Indonesian Journal of Health Promotion***Research Articles****Open Access****Factors Contributing to the Successful Implementation of an OHS Management System in the Informal/SME Sector: : Literature Review****Ria Novasari Mei Astuti<sup>1\*</sup>, Doni Hikmat Ramdhan<sup>2</sup>**<sup>1</sup> Fakultas Kesehatan Masyarakat, Universitas Indonesia | email: [ria.novasari@hotmail.com](mailto:ria.novasari@hotmail.com)<sup>2</sup> Fakultas Kesehatan Masyarakat, Universitas Indonesia | email: [donihr\\_05@yahoo.com](mailto:donihr_05@yahoo.com)\* Corresponding Author: [ria.novasari@hotmail.com](mailto:ria.novasari@hotmail.com)**ABSTRACT**

The informal sector/SMEs (Small and Medium Enterprises) play a significant role in Indonesia's economy. However, this sector often faces various occupational safety and health (OSH) risks. An OSH management system can help SMEs manage OSH risks and improve their business performance. This study aims to examine the factors that contribute to the successful implementation of occupational safety and health (OSH) management systems in the informal sector/SMEs (Small and Medium Enterprises). The study employs a systematic literature review methodology following PRISMA (Preferred Reporting Items for Systematic Review and Meta-analysis). The study was conducted in April 2024, searching for relevant articles from reputable sources such as Google Scholar, ProQuest, and ScienceDirect. The review encompassed 16 relevant articles and revealed that the factors contributing to the successful implementation of OSH programs can be categorized into two main factors: external and internal factors. External factors play a crucial role in enabling the successful implementation of OSH management systems in the informal sector/SMEs. Supportive roles from the government, private sector, and relevant organizations play a crucial role in this success. These findings offer valuable insights for policymakers, practitioners, and researchers. Policymakers can craft supportive measures such as financial aid and clear regulations. Practitioners can leverage these factors to tailor effective OHSMS implementation strategies for individual SMEs. Future research holds the potential to develop more efficient models and conducting context-specific studies to improve OSH practices in this vital sector.

**Keywords:** Informal Sector/SMEs OSH Implementation; OSH Management System

## INTRODUCTION

According to the Ministry of Cooperatives and Small and Medium Businesses (Kemenkopukm), Indonesia had 64.2 million micro, small, and medium enterprises (MSMEs) in 2021. The most common type of MSME in this structure is micro-enterprises, defined as those with an annual maximum income of Rp 2 billion. In 2021, micro-enterprises numbered 63,955,369 units or 99.62% of all business units in Indonesia [1]. There has been no change in its share over the past ten years. Regardless of the level of work formality, safety is one of the important factors in the workplace. Employee ignorance about how to do their job safely, the causes of workplace accidents, and documentation and reporting systems are problems faced by MSMEs [2].

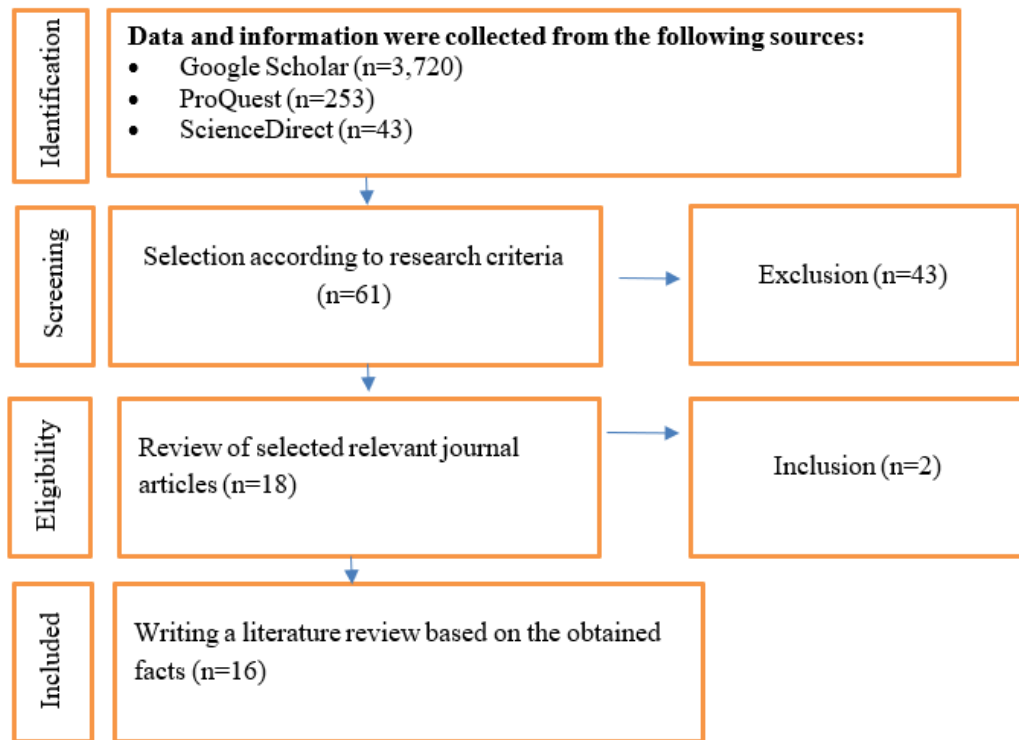
The informal/SME sector often faces various occupational safety and health (OHS) risks. These risks can stem from various factors, including unsafe and unhealthy work environments, inadequate workplace conditions such as poor ventilation, insufficient lighting, and exposure to hazardous chemicals, which can increase the risk of work accidents and occupational diseases. Another contributing factor is the lack of knowledge and awareness about OHS. Many employers and workers in the informal/SME sector lack adequate knowledge and awareness about OHS, which can lead to them neglecting OHS risks and failing to implement proper preventive measures. Furthermore, the informal/SME sector often faces resource constraints, such as funds, time, and personnel, which can hinder the implementation of OHS management systems. This is a prevalent issue in both the formal and informal sectors. According to ILO data, an average of 99,000 work accidents occur annually, with around 70% resulting in death or permanent disability [3].

OHS risks in the informal/SME sector can have a negative impact on worker health and safety, as work accidents and occupational diseases can lead to permanent disability or even death. Productivity and work efficiency: Sick or injured workers are unable to work optimally, which can lead to decreased productivity and work efficiency. Company performance: Work accidents and occupational diseases can cause financial losses for companies, such as medical costs, worker compensation, and government fines.

The operation of various informal sectors, including construction, is closely related to occupational safety issues. Therefore, occupational safety protocols and risk mitigation strategies should adopt a system approach, which includes the implementation of an Occupational Health and Safety Management System (OHSMS) [4]. Thus, this study aims to examine the Factors Contributing to the Successful Implementation of an OHS Management System in the Informal/SME Sector.

## METHOD

This research employs a systematic literature review methodology adhering to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analyses) guidelines. The methodology is meticulously implemented following appropriate protocols and procedures [5]. Article search was conducted on April 10, 2024, across three online journal databases: Google Scholar, ProQuest, and ScienceDirect. The subsequent stage involved screening, encompassing the selection of titles, abstracts, research years, and employed research methodologies. This was followed by a quality (relevance) assessment of the data extracted from the screened articles. The assessment was based on whether the articles presented complete text and satisfied the predetermined inclusion and exclusion criteria. The study adopted inclusion criteria for journals that discussed factors contributing to OHS implementation in the informal sector, literature published within the last five years, ranging from 2019 to 2023, from international journals. The study excluded research published prior to 2019 and review literature. A total of 3,720 literature studies were retrieved from the years 2019-2023. This study synthesizes previous research findings using a systematic literature review method, where researchers collect and analyze relevant literature based on predetermined criteria.



Picture 1. PRISMA Diagram

**RESULTS**

Here are selected studies on the factors contributing to the successful implementation of OSH in the informal sector

**Table 1.** Included Research

No	Researcher/Year	Title	Method	Research Result
1	(Kang et al., 2021)	Modern Cause and Effect Model by Factors of Root Cause for Accident Prevention in Small to Medium Sized Enterprises	Modern cause and effect model	Among the root causes of occupational accidents in SMEs in South Korea, unawareness, neglect, ignorance, carelessness, and misjudgment have a strong correlation with the occurrence of occupational accidents.
2	(Hanani & Yustini, 2023)	Occupational Safety and Health Education for Business Owners in the Layang-Layang Atidira UPPKA	Qualitative method	OSH training has been proven to effectively increase participants' knowledge by up to 60%, based on questionnaire results. Participants' enthusiasm was also evident in the debate session, where they actively answered questions. To improve safety, business actors are advised to attend financial management training and emergency response simulations.
3	(Landstad et al., 2022)	Management by values: A qualitative study of how small business owners in the cleaning sector view and implement their employer responsibilities with respect to occupational safety and health management	Qualitative method	This study found that small business owners tend to delegate OSH responsibilities to their employees. While aiming to create good working conditions, this indicates a lack of knowledge and understanding among business owners about effective OSH management.

No	Researcher/Year	Title	Method	Research Result
4	(Yusuf & Irwanti, 2022)	Application of Occupational Health and Safety (K3) in Agrotourism	Mix method qualitative and quantitative	The implementation of OSH in Indonesian agritourism is still hampered and requires several strategic steps, such as government commitment, area planning, OSH evaluation, and training for OSH program managers.
5	(You Mei et. Al, 2021)	Put Safety First: Exploring the Role of Health and Safety Practices in Improving the Performance of SMEs	Quantitative method	It is crucial for businesses in developing countries to prioritize OSH practices to reap the dual benefits of enhancing SME performance and occupational safety. Effective OSH implementation requires long-term political commitment and sustained efforts at all levels. To attract, retain, and motivate the workforce, appropriate OSH practices must be integrated into inclusive SME planning and development policies.
6	(Thepporn dan Chutarat, 2019)	An Alternative Integrated Occupational Health, Safety And Environmental Management System For Small And Medium-Sized Enterprises (Smes) In Thailand	<i>Qualitative method</i>	Effective communication, concise documentation, and external support (such as consultation, audits, and training) are crucial for successful implementation. An active government role in enhancing the legal framework, financial support, and training is also necessary to encourage Thai SMEs to adopt integrated OHS&EMS and achieve sustainable improvements in safety and environmental performance.
7	(Raymond C. Sinclair dan Thomas R. Cunningham, 2014)	3 Safety activities in small businesses	<i>Mix method qualitative and quantitative</i>	Factors such as company size, OSHA inspections, and industry hazard perceptions influence the implementation of OSH practices. Barriers to implementing OSH programs in small businesses include limited resources, low motivation, and a culture of independence.
8	(Hesham Magd, Ahmed R Nzomkunda, Muthla Al Busaidi, 2020)	Exploring Health, Safety and Environment Management Practices across Small-Medium Enterprises in Oman: Review & Recommendations	Qualitative method	Small and Medium Enterprises (SMEs) in Oman face various challenges in implementing Occupational Health and Safety (OHS) practices, including inadequate OHS procedures, production pressure, rule violations, a poor safety climate, minimal OHS training, and weak management support. Other factors such as poor infrastructure, limited resources and expertise, lack of awareness of regulations, and the inability to objectively identify and manage OHS hazards also hinder OHS implementation in SMEs. Cost, management commitment, and a poor safety culture are also major challenges in implementing OHS practices in SMEs.
9	(Elizabeth Bluf, 2019)	How SMEs respond to legal requirements to provide information, training, instruction and supervision to workers about work health and safety matters	Qualitative method	The research findings indicate that SMEs in Australia face challenges in providing effective OHS information, training, instruction, and supervision. Only a few companies have a planned and systematic approach, with the majority using ad hoc methods. Improvements in the provision of OHS information, training, instruction, and

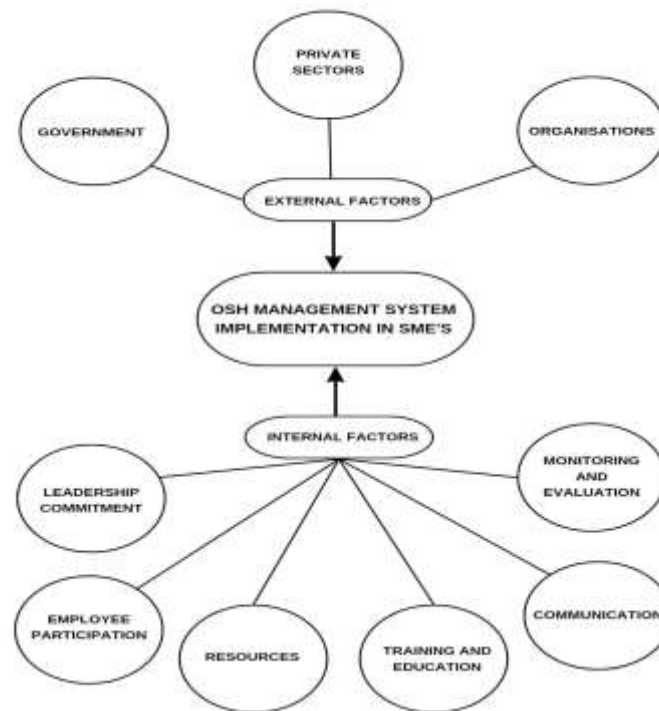
No	Researcher/Year	Title	Method	Research Result
				supervision are necessary to protect workers and comply with OHS regulations.
10	(Mubarak Al Alawi, et. Al, 2020)	Framework for Investigating the Level of Compliance to the OHS Regulatory by the Small and Medium Construction Companies in Oman	Qualitative method	While the provision of PPE (Personal Protective Equipment) programs is considered good, other areas show non-compliance. Further analysis is needed to understand the reasons behind non-compliance and develop strategies to improve OSH practices in the construction industry. This study also proposes a framework for achieving "Vision Zero Accidents" in Oman, which can guide construction companies in improving occupational safety and health.
11	(Bader Al Mawli , et.al 2021)	Construction SMEs safety challenges in water sector in Oman	Quantitative method	To enhance OSH implementation in these companies, the study suggests several measures, including strengthening management's commitment to OSH, fostering open communication about OSH concerns, clearly defining safety priorities for management, promoting fairness and employee empowerment in OSH practices, and implementing health and safety restoration and prevention measures. These recommendations aim to foster a safer and healthier work environment, ultimately improving the overall OSH performance of these companies.
12	(Garry Claxton et.al, 2022)	Toward an effective occupational health and safety culture: A multiple stakeholder perspective	Qualitative method	The study identified the need for comprehensive OSH improvements in Omani water sector SMEs, excluding individual OSH commitment, due to challenges like inadequate regulations, resource constraints, and limited OSH information for temporary workers. Therefore, enhancing management's OSH commitment, strengthening individual OSH communication, and involving all stakeholders in building a positive and sustainable OSH culture are crucial.
13	(Ashan Senel Asmone, 2022)	Prioritization of industry level interventions to improve implementation of design for safety regulations	Qualitative method	The implementation of Design for Safety (DfS) regulations in the construction industry faces challenges such as a lack of guidelines and commitment, limited review team capabilities, and suboptimal effectiveness of DfS professionals. To address these challenges, the study recommends eight industry-level interventions, including providing guidelines and training, strengthening the DfSP profession, promoting BIM, third-party audits, and DfS awards. These interventions are grouped into four main types: competence and knowledge, technological tools, inspection and auditing, and recognition and certification. These findings support efforts to enhance DfS through industry-level interventions in countries with DfS regulations.

No	Researcher/Year	Title	Method	Research Result
14	(Nachnul Ansori, Ari Widyanti, et.al 2021)	The Role of Safety Silence Motives to Safety Communication and Safety Participation in Different Sectors of Small and Medium Enterprises Investigation Results on Two Kinds of Industries in Indonesia	Quantitative method	Safety silence negatively impacts safety communication, while effective communication enhances safety participation, and industry scale differences should be considered when analyzing safety behavior in SMEs.
15	(Junko Saito, 2022)	Barriers and facilitative factors in the implementation of workplace health promotion activities in small and medium- sized enterprises: a qualitative study	Qualitative method	The success of workplace health programs hinges on active leadership and commitment from employers. This active leadership can manifest in enhancing access to health information, prioritizing health programs, and fostering an organizational culture of health learning. By demonstrating a strong commitment to employee health and well-being, employers can create a healthier and more productive work environment.
16	(Lara Lindert, et.al 2022)	Rural-urban differences in workplace health promotion among employees of small and medium-sized enterprises in Germany	Quantitative method	A German study examined the impact of workplace health promotion on employees in small and medium-sized enterprises (SMEs) in both rural and urban areas. The findings revealed that these programs enhanced job satisfaction and reduced stress-related complaints. While program participation was higher in urban settings and associated with a lower number of sick days, overall workplace health promotion yielded positive effects for employees in both locations.

## DISCUSSION

Occupational Safety and Health (OSH) implementation in the informal sector in Indonesia lags far behind the formal sector. This is due to a lack of knowledge and awareness, limited resources, and weak law enforcement [9]. The consequences include decreased productivity, work accidents, and occupational diseases that are not all recorded, given that accident records are currently only kept for BPJS Ketenagakerjaan participants. Government OSH policies are of course based on data, among other things. To improve the accuracy of occupational accident statistics and overall occupational safety and health performance in Indonesia, monitoring must be carried out for both the formal and informal sectors. Accurate and comprehensive data will serve as good input for policymakers.

In Indonesia, the government's policy on OSH, namely occupational health for the informal sector through POS UKK, is a very good initial step for implementation reference, which is further expected to combine safety aspects. An overview of the implementation of this policy can be seen from several studies related to the evaluation of POS UKK implementation in various regions in Indonesia, one of which is a quantitative study in the informal sector in Semarang with independent variables including coworker support, business owner support, and Puskesmas support, while the dependent variable is the involvement of informal workers in POS UKK. The research results show that the majority of the involvement of informal workers in POS UKK is still low (51.43%). Coworker and business owner support is categorized as good, but the same cannot be said for the role of Puskesmas as a mentor. Statistically, coworker support ( $p = 0.000$ ,  $OR = 30.8$ ), business owner support ( $p < 0.001$ ,  $OR = 10.6$ ), and Puskesmas support ( $p < 0.001$ ,  $OR = 13.5$ ) are proven to have a significant relationship. This shows that strengthening factors have a significant relationship in increasing the involvement of informal workers in POS UKK to ensure program sustainability. The success of implementation is certainly not only until the formation of a POS UKK but also its sustainability. Puskesmas as a mentor is expected to be a strengthening factor that consistently accompanies the informal sector in maintaining its occupational safety and health [10].



**Picture 1.** Factors Contributing to the Implementation of OHS management systems in SME's

Based on the literature above, the factors that contribute to the successful implementation of OSH programs can be categorized into two main groups, namely external and internal factors.

### External Factor

**Role of the Government:** The government play vital role in promoting and supporting the implementation of OSH in the informal sector [9]. This can be done through various steps, such as [31]:

- Developing clear and easy-to-understand law, OSH implementation regulations and guidelines for each informal sector and providing evaluation plans [13].
- Increasing the capacity and training of OSH inspectors and auditors in the informal sector.
- Committing to consistently accompanying the informal sector in improving occupational safety and health and ensuring its sustainability.
- Providing training for the informal sector to implement an OSH management system.

**Private Sectors and Organisations:** The private sector and organizations can play an important role in promoting and improving the implementation of OSH (Occupational Safety and Health) in the informal sector through their Environmental, Social and Governance (ESG) initiatives. ESG principles emphasize responsible business practices by considering the environmental, social, and governance impacts of a company's operations. By integrating OSH into their ESG strategies, private sector entities can significantly contribute to improving the safety and health of workers in the informal sector. The contributions of the private sector and organizations, both professional and otherwise, can act as a symbiotic relationship [17].

### Internal Factor

1. **Leadership Commitment:** Company leaders need to demonstrate a strong commitment to OSH by allocating adequate resources, delegating clear responsibilities, and creating a safe and healthy work culture [27].
2. **Employee Participation:** Employees' participation is crucial in every OSH program including hazard identification, risk assessment, and developing solutions to address those hazards [7]. Location and socio cultural of the employee can be one of the participation factor [23].
3. **Resources:** Companies should allocate adequate resources to support OSH implementation, such as employee training, safety equipment purchases, and OSH management system development.

4. Training and Education: Employees require comprehensive and ongoing OSH training to improve their knowledge and skills in working safely [11].
5. Communication: Effective communication and participation between management, employees, and other stakeholders are crucial for ensuring the successful implementation of OSH [2].
6. Monitoring and Evaluation: Companies need to regularly monitor and evaluate the performance of their OSH programs to identify areas for improvement and ensure compliance with OSH regulations and standards.

The interplay between internal and external factors contributing to successful OSH implementation in the informal sector is illustrated in Figure 2. These factors, when combined and implemented effectively, can significantly contribute to the success of OSH programs in the informal sector, leading to improved safety and health outcomes for workers.

## CONCLUSION

In conclusion, implementing an Occupational Health and Safety (OHS) management system in the informal/SME sector presents unique challenges. However, by focusing on a combination of internal and external factors, significant progress can be made. Internally, strong leadership commitment, employee participation, and a culture of safety are crucial. Externally, government support, access to resources, and collaboration with larger organizations are essential. By addressing these factors and tailoring OHS systems to the specific needs of the informal/SME sector, a safer and healthier work environment can be achieved for all.

## SUGGESTION

By fostering synergy between internal and external factors, it is anticipated that the safety and health of informal sector workers will be enhanced, productivity will be increased, safer, healthier work environment and all of those benefits can be more sustainable.

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