



OCCUPATIONAL SAFETY AND HEALTH (OSH) CULTURE AS A DETERMINANT OF WORK PRODUCTIVITY AND MANAGERIAL PERFORMANCE IN HOSPITAL EMERGENCY SERVICES

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ABSTRACT

Background: Occupational Safety and Health (OSH) culture is a fundamental component of hospital management systems, particularly in emergency departments where healthcare professionals operate in high-risk and rapidly changing environments. A strong safety culture contributes not only to worker protection but also to the effectiveness of managerial functions and the quality of healthcare services.

Objective: This study aims to analyze the role of Occupational Safety and Health (OSH) culture as a determinant of work productivity and managerial performance in hospital emergency services.

Method: This study employed a library research approach using a descriptive-analytical method. Relevant literature, regulatory documents, and previous empirical studies were systematically reviewed to examine the relationship between OSH culture and managerial performance in Emergency Departments (EDs).

Result: The findings indicate that a strong OSH culture significantly enhances managerial performance by improving planning, organizing, supervision, decision-making, and risk management processes. Furthermore, an established safety culture promotes incident reporting, effective communication, leadership commitment, continuous quality improvement, and employee productivity. In contrast, OSH implementation that focuses solely on administrative compliance without fostering a genuine safety culture provides limited benefits for managerial effectiveness.

Conclusion: Integrating OSH culture into hospital governance is essential for strengthening managerial performance and improving the quality, safety, and efficiency of emergency healthcare services. Therefore, hospital management should prioritize the development of a sustainable safety culture as a strategic component of organizational performance.

INTRODUCTION

Occupational Safety and Health (OSH) is a fundamental component of modern healthcare service systems, as a strong OSH culture is directly related to workforce protection while also enhancing managerial effectiveness and the quality of healthcare services. (Masa et al.,

2022). Globally, occupational safety issues at healthcare facilities remain a serious concern. Organization as the International Labour Organization (ILO) and the World Health Organization (WHO) report the healthcare sector is recognized as one of the high-risk occupational sectors. to exposure

biological, injury sharp, tired work, and disturbances psychosocial. In addition, the report *Health at a Glance* by the OECD shows that culture safety at home illness in various countries still face challenges, especially in aspect communication, transition service and support management to safety Work (WHO, 2023) (ILO, 2023).

At the national level, workplace accidents remain a significant issue. BPJS Employment data show that the number of workplace accidents in Indonesia still reaches tens of thousands of cases each year. Although not all of these occur in the health sector, hospitals are among the work environments with the highest potential occupational risks, as a consequence of exposure to infectious materials, chemicals, radiation, and intense work pressure. The Indonesian government, through the Minister of Health's Regulation on Hospital Occupational Health and Safety (HOHS), has mandated that every hospital implement a comprehensive OSH management system. However, various evaluations have shown that in many hospitals, the implementation of Occupational Safety and Health (OSH) culture remains largely compliance-oriented rather than being fully embedded in the organizational culture and everyday work practices (Indonesian Ministry of Health, 2024).

At the local level, research conducted in several hospital areas shows that the implementation of OSH programs has not yet run optimally, whether in terms of compliance with the use of personal protective equipment, incident

reporting, or risk management systems (Siagian, 2020). The Emergency Installation (IGD) is a unit with highly dynamic work characteristics, high time pressure, and complex interprofessional interaction intensity (Solehati et al., 2024). These conditions increase the risk of workplace accidents, fatigue, and procedural errors if a safety culture is not firmly established.

A number of study previously show that implementation of OSH has connection positive with productivity Work Health workers (Kusumapradja, 2017) (Ade Aulya Apriliani, 2021). Studies conducted in several hospitals in Indonesia found that better OSH program implementation corresponds to higher levels of productivity and work satisfaction among medical and support staff (Mulyati et al., 2017). Research (Beni Agus Setiado, nd 2020) also shows that support management to safety Work influential significant to improvement performance organization and quality service health. These findings reinforce the assumption that safety culture not only impacts workforce protection, but also overall organizational effectiveness.

However, several studies have found no significant direct association between the implementation of OSH practices and managerial performance, especially when OSH is viewed only as fulfillment of administrative regulations without the internalization of safety values into organizational culture. In fact, managerial

performance plays a strategic role in decision-making, team coordination, resource management, and service quality supervision. This research gap shows that the relationship between OSH culture, productivity, and managerial performance in the Emergency Room still requires deeper empirical study.

This study is important because a strong OSH culture is believed to be capable of creating a safe work environment, improving the motivation and efficiency of healthcare workers, and supporting the achievement of hospital service targets. In an ER unit functioning as the frontline of emergency services, managerial effectiveness and work productivity have direct implications for patient safety and service quality. Therefore, an analysis of the influence of OSH culture on productivity and managerial performance in the Hospital Emergency Installation not only contributes academically to the development of knowledge in health management and OSH, but also provides practical implications for policy formulation and sustainable improvement of healthcare service quality.

METHODS

This study employs a library research approach. Literature research is a research method conducted by reviewing and analyzing various written sources relevant to the research topic, without conducting direct field data collection. The literature search was conducted through Google Scholar using the keywords "OSH culture," "work productivity," "managerial

performance," "emergency department," and "hospital management," combined with the Boolean operators AND/OR. The inclusion criteria applied in selecting the literature were: (1) publications from 2017 to 2025, to ensure the currency of the concepts and empirical findings discussed; (2) sources directly relevant to Occupational Safety and Health (OSH) culture, work productivity, and/or managerial performance in a healthcare or hospital setting; and (3) literature accessible in full text, comprising national and international journal articles, textbooks, legislative regulations, and official government reports. Sources were excluded if they were not directly relevant to the hospital or emergency care context, were duplicate publications, or were not accessible in full text. Based on this selection process, a total of 16 literature sources met the inclusion criteria and were used as the primary basis for analysis in this study.

The approach used is descriptive-analytical in nature, describing concepts, theories, and results of relevant previous studies. Content analysis was carried out by categorizing the selected literature into four thematic areas: (1) OSH culture as the foundation of healthcare organizations; (2) the influence of OSH culture on work productivity; (3) the influence of OSH culture on managerial performance; and (4) the synergy between work productivity and managerial performance within OSH culture. Each thematic category was then critically analyzed and synthesized to identify the conceptual, relationship between OSH culture, work productivity, and managerial performance,

particularly in the context of the Emergency Installation (ER).

RESULTS

Table 1 presents a synthesis of the 16 literature sources reviewed in this study,

summarizing each source's main findings and its relevance to the research question on OSH culture as a determinant of work productivity and managerial performance in hospital emergency services

Table 1. Synthesis of Reviewed Literature

No	Source (Author, Year)	Key Findings	Relevance to Research Question
1	Masa et al. (2022)	OSH culture is directly related to workforce protection and simultaneously enhances managerial effectiveness and the quality of healthcare services.	Establishes the conceptual foundation linking OSH culture to managerial performance (Theme 1).
2	ILO (2023)	The healthcare sector is one of the highest-risk occupational sectors, with exposure to biological hazards, injuries, fatigue, and psychosocial disturbances.	Establishes the global urgency of OSH culture in healthcare, underpinning the ER research context (Theme 1).
3	WHO (2023)	The “Health at a Glance” report shows that hospital safety culture still faces challenges in communication, service transition, and management support for workplace safety.	Highlights the international gap between OSH culture and management support (Theme 1).
4	Indonesian Ministry of Health (2024)	OSH implementation in many Indonesian hospitals remains largely compliance-oriented rather than embedded in organizational culture.	Justifies the national policy gap that motivates the study’s research question (Theme 1).
5	Siagian (2020)	Implementation of OSH programs (PPE compliance, incident reporting, risk management) has not yet run optimally at the local hospital level.	Supports the link between OSH culture and work productivity and situates local implementation gaps (Theme 2).
6	Solehati et al. (2024)	Emergency Installation (ER) units have highly dynamic work characteristics, high time pressure, and complex interprofessional interaction.	Frames the ER as a high-risk setting that requires a strong OSH culture, the study’s core context (Theme 1).
7	Kusumapradja (2017)	Implementation of OSH is positively associated with the productivity of healthcare workers.	Provides empirical support for the relationship between OSH culture and productivity (Theme 2).
8	Ade Aulya Apriliani (2021)	OSH implementation is positively associated with worker productivity; managerial decisions in high-risk units are often made under short time pressure.	Supports both OSH culture–productivity (Theme 2) and OSH culture–managerial performance under risk/time pressure (Theme 3).
9	Mulyati et al. (2017)	Better OSH program implementation corresponds with higher productivity and work satisfaction among medical and support staff.	Reinforces the empirical link between OSH culture and productivity at hospital level (Theme 2).
10	Beni Agus Setiado (n.d.)	Management support for workplace safety significantly influences	Directly supports the relationship between OSH culture and

		organizational performance and healthcare service quality; OSH culture determines the quality of managerial functions.	managerial performance (Theme 3).
11	Sintiyah (2018)	OSH culture is an integral part of organizational culture reflecting shared values, perceptions, attitudes, and behaviors; leadership commitment to safety strengthens legitimacy and subordinates' trust.	Supports both the conceptual foundation of OSH culture (Theme 1) and its influence on leadership/managerial performance (Theme 3).
12	Rubaida et al. (2025)	The ER holds a strategic OSH position due to time pressure, case complexity, and biological exposure risk; a strong OSH culture reduces workplace accidents and medical errors, increasing operational efficiency.	Provides ER-specific evidence for both the foundation of OSH culture (Theme 1) and its effect on productivity (Theme 2).
13	Sudarta (2022)	Safety culture is formed through management commitment, open communication, compliance with SOPs, and active participation in incident reporting.	Explains the mechanisms underlying OSH culture formation (Theme 1).
14	Musyafak (2020)	OSH culture functions as a bridging mechanism that integrates healthcare workforce productivity and managerial performance.	Directly supports the synergy between productivity and managerial performance (Theme 4).
15	Bajow & Alkhalil (2024)	Safety culture strengthens formal organizational structure (regulations and SOPs) and shapes supportive informal behavior such as team collaboration and coordination.	Explains the structural-cultural synergy between productivity and managerial performance (Theme 4).
16	Aji et al. (2022)	Emergency services demand cross-professional teamwork within a short time and under high pressure.	Supports the synergy theme by emphasizing coordination needs in emergency settings (Theme 4).

1. OSH culture as Foundation Organization Health services

Occupational Safety and Health (OSH) culture is an integral part of organizational culture that reflects collective values, perceptions, attitudes, and behaviors in support of workplace safety (Sintiyah, 2018). In the context of hospitals, especially in the Emergency Installation (ER), OSH culture holds a strategic position because this unit operates under high time pressure, diverse case complexity, as well as risk of biological exposure, injuries from medical instruments, and significant psychosocial burden (Rubaida et al., 2025). Therefore, OSH culture is not only essential for protecting

healthcare workers but also forms the foundation of effective emergency service management.

Theoretically, safety culture is formed through management commitment, open communication, compliance with standard operational procedures (SOPs), and the active participation of healthcare workers in incident reporting (Sudarta, 2022). OSH culture is essential not only for protecting healthcare workers but also for supporting effective emergency service management, as it creates a balance between service efficiency and human resource protection.

Within the framework of modern safety

management, OSH culture is not only interpreted as compliance with formal regulations, but rather as a system of values internalized in daily work practices. Organizations with a mature safety culture generally demonstrate characteristics such as proactive leadership, effective two-way communication, and the existence of organizational learning mechanisms from every work incident. Thus, OSH culture becomes both a structural and cultural element that strengthens healthcare service governance.

2. The Influence of OSH Culture on Productivity Work in the Emergency Room

Work productivity in healthcare services refers to the ability of healthcare workers to produce effective, efficient, and quality services without disregarding patient and worker safety (Siagian, 2020). From a management theory perspective, a safe work environment is the primary determinant in improving individual and team performance. When healthcare workers feel physically and psychologically protected, they tend to work with higher concentration, lower error rates, and better-managed stress levels.

In the ER, productivity is not only measured by the quantity of patients treated, but also by response speed, accuracy of clinical actions, triage accuracy, and the effectiveness of multidisciplinary team coordination. A strong OSH culture promotes compliance with safety procedures, consistent use of personal protective equipment, and clear communication in emergency situations. These conditions contribute to a reduction in workplace accidents

and medical errors, which ultimately increase efficiency unit operations (Rubaida et al., 2025). Safety culture is also associated with a reduction in absenteeism resulting from work-related injuries and fatigue. If occupational risks can be minimized, then service continuity is better maintained and workload is not distributed unevenly. However, some studies show that if OSH implementation is purely administrative in nature and not supported by leadership commitment, then its impact on productivity becomes limited. This confirms that the cultural dimension, not just written policy, is the key factor in improving work productivity in the emergency room.

3. The Influence of OSH Culture on Managerial Performance

Managerial performance in the ER encompasses functions of planning, organizing, controlling, decision-making, and resource management in highly dynamic and risky situations. OSH culture plays a role as a determinant that influences the quality of the implementation of these managerial functions (Beni Agus Setiada, nd).

First, a strong safety culture encourages the creation of a transparent incident reporting system without a blame culture (*no-blame culture*). This system allows management to obtain factual data for conducting evaluations and implementing sustainable improvements. Second, leadership commitment to workplace safety strengthens leadership legitimacy and improves subordinates' trust (Sintiyah, 2018). In transformational leadership theory, a leader's

attention to the welfare and safety of subordinates is an important factor in improving motivation and organizational performance.

Third, OSH culture creates clear and structured work standards, which facilitates the monitoring and evaluation of performance. In the ER, managerial decisions often must be made in a short time under high-risk conditions (Ade Aulya Apriliani, 2021). An organized, safety-based work environment helps managers reduce uncertainty and improve decision-making accuracy. Thus, OSH culture not only influences operational aspects, but also strengthens managerial capacity to manage the risks and complexity of emergency services.

4. Synergy between Productivity and Managerial Performance in OSH Culture

Healthcare workforce productivity and managerial performance are two mutually interconnected and interdependent dimensions. Effective management creates a safe and efficient work system, while a productive healthcare workforce supports the achievement of hospital service targets. OSH culture functions as a bridging mechanism integrating both of these aspects (Musyafak, 2020).

From an organizational theory perspective, safety culture strengthens formal structure through regulations and SOPs, and also shapes supportive informal behavior, such as team collaboration and coordination (Bajow & Alkhalil, 2024). This synergy is very important because emergency services demand cross-professional teamwork within a short time and under high pressure (Aji et al., 2022). Without

a strong safety culture, the potential for conflict, miscommunication, work fatigue, and procedural errors can increase, which ultimately lowers productivity and hinders managerial effectiveness.

On the other hand, when OSH culture is consistently embedded, an organization is capable of creating a stable, adaptive, and sustainably improvement-oriented work environment. This strengthens organizational resilience in facing operational pressures and improves the overall quality of emergency services.

CONCLUSION

Based on the theoretical review and conceptual analysis presented in this study, it can be concluded that Occupational Safety and Health (OSH) culture is an important determinant of work productivity and managerial performance in hospital emergency services, especially in the Emergency Installation (IGD). Occupational Safety and Health (OSH) culture functions not only as a mechanism for protecting healthcare workers from occupational accidents and workplace hazards but also as a strategic approach to improving organizational performance.

In the context of the IGD, which has characteristics of high-risk work, intense time pressure, and complex cross-professional coordination, workplace safety culture becomes the primary foundation in maintaining operational stability. A consistently internalized OSH culture promotes transparency in incident

reporting, strengthens leadership, improves procedural compliance, and supports systematic risk management. These conditions, both directly and indirectly, contribute to improvements in healthcare workforce productivity and the effectiveness of managerial functions.

The implementation of OSH that is purely administrative in nature, without the internalization of safety values, tends not to give a significant impact on organizational performance. Therefore, strengthening OSH culture must be positioned as an integrated managerial strategy within hospital governance systems, not merely as fulfillment of formal regulations.

Occupational Safety and Health (OSH) culture can be understood as a strategic organizational factor that bridges healthcare workforce productivity and managerial performance in emergency services. Strengthening leadership commitment, open communication systems, and organizational learning from every work incident are important steps in building a sustainable safety culture. This study confirms that the success of hospital emergency services is not only determined by clinical competence, but also by the strength of workplace safety culture as the foundation of organizational management.

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