



(RESEARCH ARTICLE)



The analysis of the implementation of Occupational Health and Safety (OHS) Programs at the South Buton Regency General Hospital

Nur Insan, Ruslan Majid and Syawal Kamiluddin Saptaputra *

Faculty of Public Health, Halu Oleo University, Indonesia.

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Abstract

Background: This study analyzes the implementation of the Occupational Health and Safety (OHS) program at the Regional Hospital of Buton Selatan using bivariate analysis. The results show that the OHS input variable (X1) has a moderate correlation with the OHS output (Y1) with a coefficient value of 0.434. The correlation between the OHS process (X2) and the OHS output (Y1) is categorized as low with a value of 0.390. Meanwhile, the combined correlation of input (X1) and process (X2) to output (Y1) is 0.475, which falls under the moderate category.

Method: The research used is qualitative phenomenology to understand and describe the dominant accident-causing factors from mining accident phenomena in transportation activities using trucks. The research employed a cross-sectional design conducted between July and August 2024. Using proportionate stratified random sampling, 60 employees participated by completing structured questionnaires. Data were analyzed using bivariate correlation to evaluate relationships between input (policies, resources), process (OHS management practices), and output (safety outcomes).

Results: Buton Selatan Regional General Hospital (RSUD Buton Selatan) has been a type C healthcare facility since 2022. As a government-owned hospital, its main vision is to become the best healthcare provider in Southeast Sulawesi by 2030. The implementation of the Occupational Health and Safety in Hospital (K3RS) program shows good management of facilities and infrastructure but still requires improvements in policies, human resources, and hazardous waste management.

Conclusion: The study highlights gaps in OHS program implementation, particularly in process components. Recommendations include increasing OHS-certified personnel, enhancing risk management protocols, and regular evaluations to ensure compliance and effectiveness.

Keywords: Occupational Health and Safety; Hospital

1. Introduction

Occupational Health and Safety (OHS) in hospitals is a vital aspect of ensuring the safety of workers, patients, companions, visitors, and the environment. As institutions characterized by intensive labor, technology, and expertise, hospitals face significant risks of work-related accidents and occupational diseases. Data from the International Labour Organization (ILO) indicates that 2.78 million workers die annually due to workplace accidents and occupational diseases, with 86.3% of these deaths attributed to occupational illnesses. Regulations in Indonesia, such as Law (1), mandate prevention, treatment, and recovery efforts for workers, (2) provides systematic guidelines for hospital occupational health and safety (OHS).

* Corresponding author: Syawal Kamiluddin Saptaputra

Hospitals are high-risk environments due to the involvement of patients, visitors, and non-medical workers. Potential hazards include musculoskeletal injuries caused by repetitive tasks, exposure to hazardous materials, and nosocomial infections. (3) highlights complaints such as muscle pain resulting from non-ergonomic work positions, which are common among medical and non-medical staff. Additionally, nosocomial infections caused by needle-stick injuries are a significant concern, as reported by (4).

Previous studies reveal that the implementation of hospital OHS (K3RS) often faces challenges. (5) reported that at Dr. Sam Ratulangi General Hospital, although K3RS policies were in place, a lack of coordination between the OHS team and management hindered effective implementation. Similarly, (6) found that OHS culture can be strengthened through consistent institutional policies, though these policies are often not translated into practical applications. Research by (7) at Prima Pematang Hospital also highlighted similar issues: written policies existed but were not optimally implemented.

At Buton Selatan Regional Hospital, a type-C hospital in Southeast Sulawesi, the K3RS program has been implemented following the Ministry of Health regulations. However, workplace accident reports for 2021-2022 showed an increase in incidents. In 2021, there were two needle-stick injuries among cleaning staff due to negligence, while in 2022, five similar incidents were reported, including injuries caused by cleaning fluids. Interviews with the hospital's OHS unit revealed that program implementation was suboptimal due to the presence of only one certified OHS professional working part-time.

This situation demonstrates that K3RS at Buton Selatan Hospital faces several challenges, including a lack of certified human resources, inadequate training, and weak internal coordination. (8) recommended raising OHS awareness through media such as posters, pamphlets, and banners to educate all parties, including medical staff and visitors.

In conclusion, implementing K3RS requires strong commitment, actionable policies, and adequate human resources. Regulatory support, such as (9) and (10), must be translated into effective programs to reduce workplace accidents, improve employee performance, and enhance the quality of hospital services.

2. Material and methods

This research employed a cross-sectional research design to assess the implementation of the Occupational Health and Safety (OHS) program at Buton Selatan Regional Hospital. The research focused on evaluating the relationship between input, process, and output variables to determine the effectiveness of the OHS program.

Data were collected from a representative sample of 60 hospital employees using proportionate stratified random sampling, ensuring the inclusion of both medical and non-medical staff. Structured questionnaires were used to gather information on input factors such as policies, resources, and facilities, process factors including risk management practices and safety training, and output factors related to safety outcomes and incident frequency.

The data were analyzed using bivariate correlation analysis, with a focus on identifying correlations between the various variables. Ethical considerations, including informed consent and confidentiality, were strictly adhered to throughout the study. The findings from this research provide valuable insights into the strengths and weaknesses of the current OHS program at the hospital and offer recommendations for enhancing its implementation. By addressing identified gaps in resources and management practices, the hospital can improve the safety and health of its workforce, ultimately leading to better service delivery and reduced workplace risks.

3. Results

The results of the correlation analysis between the input, process, and output variables in the implementation of the OHS Program at RSUD Buton Selatan. This table presents the correlation test results between the variables Input (X1), Process (X2), and Output (Y1) in the implementation of the Hospital Occupational Safety and Health Program (OHS) at Buton Selatan Regional Hospital.

Table 1 Correlation of Input, Process, and Output Variables

Correlation Test	Coefficient Value	Category
Input (X1) → Output (Y1)	0.434	Moderate
Process (X2) → Output (Y1)	0.390	Low
Input (X1) & Process (X2) → Output (Y1)	0.475	Moderate

Source: Primary Data, 2024 (processed).

The table shows the correlation test results between the variables Input (X1), Process (X2), and Output (Y1) in the implementation of the Hospital Occupational Safety and Health Program (K3RS) at Buton Selatan Regional Hospital.

The correlation between Input (X1) and Output (Y1) is 0.434, categorized as a moderate correlation. This indicates that policies, human resources, funding, and facilities have a fairly significant influence on program outcomes.

The correlation between Process (X2) and Output (Y1) is 0.390, classified as a low correlation, suggesting that the implementation process needs improvement to have a greater impact on the output.

The combined correlation of Input (X1) and Process (X2) with Output (Y1) is 0.475, which falls into the moderate category, indicating that the combination of both contributes more effectively than individually.

Table 2 Input Variable Assessment (X1)

OHS Hospital Input Indicators	Average Score	Category
Policy (X1.1)	58.88	Poor
Human Resources (X1.2)	51.66	Poor
Funding (X1.3)	37.22	Poor
Hospital Facilities & Infrastructure (X1.4)	80.00	Good
Total Average	56.94	Poor

Source: Primary Data, 2024 (processed).

Table 2 shows that the implementation of the K3RS Program at RSUD Buton Selatan still faces significant challenges in the input aspect. Policies (X1.1) and Human Resources (X1.2) received poor average scores of 58.88 and 51.66, respectively, reflecting inadequate policy support and insufficient quality of human resources. Additionally, funding (X1.3) is highly limited, with a score of 37.22. Although facilities and infrastructure (X1.4) scored well at 80.00, the overall input score of 56.94 indicates a pressing need for significant improvement.

Description: This table summarizes the evaluation results of the input elements of the K3RS Program based on four key indicators. The results can be seen in Table 3.

Table 3 Output Variable Assessment (Y1)

OHS Hospital Output Indicators	Average Score	Category
Occupational Health (Y1.1)	58.88	Good
Occupational Safety (Y1.2)	58.89	Good
Optimization of OHS Program (Y1.3)	58.33	Good
Total Average	58.70	Good

Source: Primary Data, 2024 (processed).

This table presents the evaluation results of the output from the implementation of the K3RS Program at RSUD Buton Selatan based on three indicators. Occupational Health (Y1.1) scored an average of 58.88 (good category), reflecting success in maintaining employee health. Occupational Safety (Y1.2) recorded a score of 58.89 (good category),

indicating that safety aspects are fairly well managed, though further improvements are needed. Meanwhile, Optimization of the K3RS Program (Y1.3) achieved a score of 58.33 (good category), demonstrating the program's effectiveness in reducing workplace accidents. These results indicate that the K3RS program has had a positive impact but requires further strengthening for optimal outcomes.

4. Discussion

This discussion delves into the analysis of the implementation of the Occupational Safety and Health (K3) Program at the South Buton Regional General Hospital (RSUD). The research findings highlight several critical factors influencing the program's success and areas where improvements are urgently required. Specifically, the study focuses on two key aspects of the K3RS implementation: the input variables and the process variables, both of which impact program outcomes. The findings indicate that input variables, which encompass policies, human resources, funding, and facilities, exhibit a moderate correlation with program outcomes, with a correlation coefficient of 0.434. This level of correlation reflects the significant role that clear policies and adequate resources play in supporting the success of the K3RS program. Policies that are well-defined and supported by sufficient funding and qualified human resources serve as the foundation for a robust occupational health and safety program.

However, while the input variables demonstrate a moderate positive relationship with the program outcomes, the study reveals that the implementation process of K3RS presents a different challenge. Process variables, including risk management, hazardous and toxic material (B3) management, and facility maintenance, show a low correlation with program outcomes, with a correlation coefficient of 0.390. This weaker correlation suggests significant challenges in the practical field implementation of the program. The findings highlight several underlying issues contributing to these challenges, including poor interdepartmental coordination, limited availability of certified K3 professionals, and resource constraints. These factors impede the effective execution of K3RS processes, thus undermining the program's overall impact.

Theoretically, the effectiveness of the K3RS implementation relies heavily on the integration of key managerial components, including planning, organization, leadership, and control. As proposed by (11), the successful execution of any organizational program is contingent upon the alignment and integration of these components. Unfortunately, the findings of this study suggest that these elements have not been fully incorporated into the implementation of the K3RS program at RSUD South Buton. For instance, while there are existing policies and plans, the lack of clear operational guidelines and insufficient leadership commitment in overseeing program activities hamper effective implementation. Moreover, the absence of systematic control mechanisms, such as regular monitoring and evaluation, contributes to the inability to address emerging challenges promptly.

Another critical issue identified in this study is the lack of a strong safety culture within RSUD South Buton. A strong safety culture, as emphasized by (6), is integral to the success of any occupational safety and health program. It involves fostering an environment where safety is prioritized at all levels of the organization and where all employees feel responsible for maintaining workplace safety. Unfortunately, the findings reveal that RSUD South Buton has yet to fully establish such a culture. Weak coordination between various departments and a lack of communication regarding safety protocols are some of the factors preventing the cultivation of a robust safety culture. Furthermore, the hospital does not have an adequate number of certified K3 professionals, as required by the Minister of Health Regulation ((12)). This shortage of qualified personnel exacerbates the challenges faced in implementing the program effectively.

These challenges have several practical implications that require immediate attention and intervention. To improve the implementation of the K3RS program, RSUD South Buton must adopt a systematic approach to ensure that K3 policies are executed effectively. This begins with securing adequate funding to support program activities and providing sufficient workforce support to implement the program's components. Training and education for all healthcare personnel should be prioritized to strengthen their competence in applying K3RS standard operating procedures (SOPs) as outlined in (9). Regular training sessions should be conducted to ensure that all employees, including medical and non-medical staff, are familiar with safety protocols and are capable of responding to emergencies appropriately.

Additionally, a more comprehensive monitoring and evaluation system must be developed to track the progress and effectiveness of the K3RS program. This system should include periodic audits, feedback mechanisms, and performance evaluations to identify areas for improvement and ensure that corrective actions are implemented in a timely manner. Such measures are consistent with (13), which underscores the importance of preventing unsafe work behavior as a fundamental component of fostering a proactive safety culture. By identifying and addressing potential hazards before they result in accidents, RSUD South Buton can create a safer work environment for its employees and patients.

While the implementation of the K3RS program at RSUD South Buton has a solid foundation in terms of policies and initial program planning, there is a pressing need for significant improvements in the program's execution. Addressing resource limitations, enhancing interdepartmental coordination, and fostering a safety-first mindset across all levels of the organization are essential steps toward achieving the program's objectives. Leadership commitment is also vital in ensuring that the necessary resources and support systems are in place to drive the program forward.

The findings of this study highlight the importance of strengthening the integration of managerial components, particularly in terms of planning, organization, and control. Furthermore, efforts should be directed toward cultivating a strong safety culture by involving all stakeholders, including management, staff, and external partners, in promoting safety practices and addressing safety concerns. By adopting these measures, RSUD South Buton can reduce workplace accident risks, improve employee and patient safety, and enhance the overall effectiveness of its K3RS program.

In conclusion, the implementation of the K3RS program at RSUD South Buton demonstrates both strengths and areas for improvement. While the foundation for the program is established through existing policies and plans, the challenges identified in this study underline the need for strategic interventions to overcome barriers and enhance program outcomes. With a concerted effort to address these challenges, RSUD South Buton has the potential to set a benchmark for occupational safety and health programs in healthcare facilities.

5. Conclusion

The conclusion of this study highlights the implementation of the Occupational Safety and Health (K3) Program at the South Buton Regional General Hospital (RSUD), which has a solid foundation in policies and programs aligned with regulations but lacks optimal implementation. The research findings indicate that input variables, such as policies, human resources, funding, and facilities, have a moderate correlation with program outcomes, while process variables show a lower correlation. This indicates weaknesses in execution, particularly in coordination, resource management, and the availability of certified experts. These challenges have contributed to an increase in workplace accidents and work-related illnesses, which could be minimized through better risk management. Therefore, RSUD South Buton needs to strengthen its K3 management system by improving workforce training, ensuring adequate budget allocation, and fostering a strong safety culture in the workplace to provide optimal protection for healthcare workers, patients, and all related parties.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Law of the Republic of Indonesia Number 36 of 2019 concerning Health. In Indonesia
- [2] Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016. In Indonesia
- [3] Marshal M. Factors Associated with Musculoskeletal Disorders in Kitchen Cook Workers at H. Adam Malik Central General Hospital, Medan City in 2018. University of North Sumatra; 2019. In Indonesia
- [4] Ismara K. Behaviors to prevent stab and cut injuries. Yogyakarta: UNY Press; 2020. In Indonesia
- [5] Dolontelide MC, Rampengan SH, Wahongan GJP, Surya WS. Evaluation of the Implementation of the Occupational Health and Safety Management System at Pancaran Kasih General Hospital, Manado. *J Kesehat Tambusai*. 2023;4(4):7191–9. In Indonesia
- [6] Rosita R, Nastiti FE. Occupational Health and Safety Training for Students of Darul Hidayah Health Vocational School. *Community Service Ambassador*. 2022;1(2):19–24. In Indonesia
- [7] Ivana A, Widjasena B, Jayanti S. Analysis of hospital management commitment to occupational safety and health (K3) at Prima Medika Hospital, Pemalang. *J Kesehat Masy*. 2014;2(1):35–41. In Indonesia

- [8] Ferina F, Isnaeni B, Wulansari EM. The Role of the Ministry of Health in Controlling the Risk of Covid-19 for Health Workers Based on the Regulation of the Minister of Health Number 66 of 2016 Concerning Occupational Safety and Health in Hospitals. *J Lex Spec.* 2021;2(1). In Indonesia
- [9] Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016. Concerning Occupational Safety and Health in Hospitals. In Indonesia
- [10] Regulation of the Minister of Health Number 52 of 2018 concerning Occupational Safety and Health in Health Service Facilities. In Indonesia
- [11] Tun Huseno SE. Kinerja pegawai: Review of dimensions of leadership, organizational mission, organizational culture and job satisfaction. Media Nusa Creative (MNC Publishing); 2021. In Indonesia
- [12] Decree Of The Minister Of Health Of The Republic Of Indonesia Number 432/Menkes/Sk/Iv/2007 Concerning Guidelines For Occupational Health And Safety (k3) Management In Hospitals. In Indonesia
- [13] Hasibuan H, Purba B, Marzuk M, Sianturi ME, Armus A, Gusty S, et al. Occupational Safety and Health Engineering. Yayasan Kita Menulis; 2020. In Indonesia