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Legal Aspects of Occupational Health and Safety in Healthcare Facilities

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ABSTRACT

Occupational Health and Safety (OHS) is a fundamental legal and ethical mandate designed to protect workers, especially in high-risk environments such as healthcare facilities. Despite the existence of a solid legal framework in Indonesia—including Law No. 1 of 1970 and Ministry of Health Regulations No. 66/2016 and No. 52/2018—national data reveal a continued rise in workplace accidents and occupational diseases, with needlestick injuries (NSIs) representing a prominent and alarming hazard. This study investigates the legal and ethical dimensions of OHS implementation in healthcare service facilities, analyzing systemic gaps between regulatory provisions and practical enforcement. Factors such as high workload, lack of safety-engineered devices, underreporting of incidents, and inadequate regulatory oversight contribute to persistent occupational risks. Ethically, the ongoing prevalence of avoidable incidents like NSIs raises serious questions about the institutional responsibility to uphold principles of non-maleficence, justice, and professional duty of care. The study concludes with legal and ethical recommendations to enhance enforcement mechanisms, bridge compliance gaps, and build a holistic safety culture in healthcare settings.

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1. INTRODUCTION

Occupational Health and Safety (OHS) serves as an essential foundation for ensuring worker protection, safeguarding company assets, and promoting the well-being of communities and the surrounding environment. This mandate is explicitly stipulated in fundamental legislation, such as Law No. 1 of 1970 on Occupational Safety. However, despite the long-standing legal framework and commitment, the overarching goals of OHS in Indonesia have not been fully achieved.

National data consistently show a worrying increase in workplace accidents and occupational diseases. The 2022 National OHS Profile from the Ministry of Manpower highlights this trend, reporting 234,370 cases of workplace accidents in 2021, resulting in 6,552 worker fatalities—a significant 5.7% increase compared to 2020. This upward trend is further reinforced by data from BPJS Ketenagakerjaan, which reveals a dramatic

surge in Occupational Accident Insurance (JKK) claims—from 31,324 cases in 2019 to 121,531 cases between January and November 2023. This persistent and alarming rise underscores the urgent need for deeper legal and ethical scrutiny of current OHS practices, particularly in sensitive environments such as healthcare service facilities (fasyankes).

Healthcare facilities are inherently complex and high-risk workplaces. Their characteristics include a high labor intensity, reliance on advanced technologies, and the concentration of experts or specialists in healthcare services. The continuous nature of their operations means that potential hazards are ever-present. These hazards include biological risks (such as infectious agents), chemical exposure, physical dangers, ergonomic stressors, and significant psychosocial pressures. Increasing public demand for high-quality healthcare services further strengthens the urgency of having a robust Hospital Occupational Health and Safety System (K3RS).

The continued increase in workplace accidents and occupational diseases, as clearly demonstrated by national data and JKK claims, indicates systemic failures in the implementation and enforcement of effective OHS across Indonesia—not merely gaps in the legal framework itself. The existence of foundational laws such as Law No. 1 of 1970 and international conventions demonstrates a clear legal and political commitment to OHS. However, if accident rates continue to rise despite these legal instruments, it is logical to conclude that existing legal mandates have not been effectively translated into real protective measures on the ground. This points to deeper challenges in ensuring compliance, inadequate monitoring mechanisms, ineffective sanctions, or insufficient incentives for adherence. Therefore, a rigorous legal investigation into the practical effectiveness of current regulations and their enforcement mechanisms is urgently needed.

2. LITERATURE REVIEW

The issue of Occupational Health and Safety (OHS) in healthcare service facilities (fasyankes) has garnered increasing scholarly and policy attention due to rising rates of work-related accidents and diseases, especially among healthcare workers. According to Indonesia's National OHS Profile 2022, workplace injuries and illnesses have continued to increase significantly, with 234,370 cases of occupational accidents in 2021 and over 121,000 claims for occupational accident insurance (JKK) filed between January and November 2023. These figures reflect systemic challenges in policy enforcement and practical application, despite the existence of regulatory frameworks such as Law No. 1 of 1970 on Occupational Safety.

Studies such as Adolph (2016) and data from RSUP Dr. Wahidin Sudirohusodo and RSU Haji Surabaya highlight the prevalence of needlestick injuries (NSIs) as a dominant occupational hazard in hospital settings. In particular, NSIs are often underreported, with some studies indicating that up to 88.2% of incidents are never formally recorded, posing challenges for risk assessment, legal accountability, and preventive interventions.

The Ministry of Health Regulation No. 66 of 2016 mandates the implementation of a comprehensive Hospital OHS Management System (SMK3RS), while Regulation No. 52 of 2018 applies similar mandates to non-hospital healthcare facilities such as community health centers (Puskesmas). However, literature reveals disparities in enforcement and implementation. For instance, 84.2% of medical staff at Puskesmas reported exposure to used needles, highlighting gaps between regulation and practice.

International data from the CDC and European Agency for Safety and Health at Work corroborate that NSIs are a global threat, with over 385,000 to 1 million incidents annually. The ethical implications are profound. Literature stresses that healthcare

institutions have a moral obligation grounded in deontological ethics to ensure safe working environments (non-maleficence), yet systemic issues such as high workloads, unsafe practices like "recapping," and lack of safety-engineered devices persist.

In addition to physical hazards, recent literature increasingly discusses psychosocial risks such as prolonged stress and burnout as contributors to occupational illness, particularly PTSD and musculoskeletal disorders. These conditions, while often overlooked, require a more holistic interpretation of OHS, extending beyond legal mandates to include mental well-being.

Overall, literature indicates that while legal provisions for OHS in Indonesia are robust, significant shortcomings in implementation, monitoring, and cultural compliance remain. Future studies and policy frameworks must bridge this regulatory-practice gap by integrating ethical, systemic, and legal perspectives to strengthen worker protection in healthcare settings.

3. METHODS

This study employs a qualitative normative legal research method with a juridical-analytical approach. The primary focus is on the evaluation and interpretation of statutory regulations and ethical principles related to Occupational Health and Safety (OHS) within healthcare service facilities (fasyankes). The research investigates the extent to which existing laws—particularly Law No. 1 of 1970 on Occupational Safety, Minister of Health Regulation No. 66 of 2016, and Minister of Health Regulation No. 52 of 2018—are effectively implemented in healthcare institutions, and analyzes the ethical implications of compliance and non-compliance.

The study uses secondary legal materials as its main data source, including legislation, government regulations, academic journals, legal commentaries, and institutional reports such as the National OHS Profile 2022 from the Indonesian Ministry of Manpower and data from BPJS Ketenagakerjaan. Additional references include case studies on needlestick injuries (NSI) and occupational disease statistics from various healthcare settings in Indonesia.

The analysis technique used is qualitative descriptive, aiming to systematically examine the normative framework and identify gaps between legal mandates and their implementation in practice. The researcher also explores ethical frameworks—especially principles of non-maleficence, justice, and professional duty of care—to provide a comprehensive understanding of institutional responsibilities in ensuring safe working environments for healthcare personnel.

This research does not involve empirical fieldwork but instead focuses on document analysis and the doctrinal legal method, where legal norms are interpreted in light of current data and contextual challenges. The outcome is expected to provide critical insights into the adequacy of legal enforcement and the ethical integrity of occupational safety practices in Indonesia's healthcare facilities.

4. RESULTS AND DISCUSSION

A. National Trends in Occupational Accidents and Occupational Diseases in Indonesia

The 2022 National OHS Profile issued by the Ministry of Manpower explicitly states that the goals of Occupational Health and Safety (OHS) have "not yet been fully achieved," indicating a rapid and alarming increase in both occupational accidents and occupational diseases (ODs). This national profile is intended to serve as a strategic reference for formulating OHS policy. Further evidence from BPJS Ketenagakerjaan reinforces this trend, revealing a dramatic and sustained surge in Occupational Accident Insurance (JKK) claims. The number of claims rose from 31,324 cases in 2019 to 32,094 in 2020, then sharply jumped to 104,769 in 2021, remained high at 103,349 in 2022, and continued to climb to 121,531 between

January and November 2023. This consistent increase signals a persistent and potentially worsening problem across various sectors, including the healthcare industry.

The continuous rise in occupational accidents and ODs, despite the government's recognition of "substantial investment" in OHS, suggests a fundamental mismatch where policy efforts and resource allocation may be misdirected or insufficient to address the root causes. There appear to be significant challenges in ensuring that national-level OHS investments and initiatives are effectively translated and matched by strong implementation at the enterprise or employer level. If significant government resources are allocated to OHS, yet measurable outcomes—such as accident rates and claims—continue to rise, it logically implies that the expected impacts of these policies have not materialized.

This situation may stem from several factors, including the lack of effective monitoring and evaluation mechanisms to track the utilization and outcomes of OHS initiatives, weak legal enforcement systems that fail to penalize non-compliance, inadequate incentives for employers to prioritize safety, or a failure to address deeper systemic issues such as resource disparities, prevailing cultural barriers, or insufficient training to drive real safety improvements. Therefore, there is an urgent need to critically evaluate the efficacy and efficiency of OHS policies in Indonesia.

B. Case Study: Needlestick Injuries (NSIs) Among Healthcare Workers

Needlestick injuries (NSIs) are globally recognized as a high-risk occupational hazard in healthcare settings. International data from the Centers for Disease Control and Prevention (CDC) and the European Agency for Safety and Health at Work report alarming figures, estimating that between 385,000 to one million NSI cases occur annually among healthcare personnel.

In Indonesia, NSIs also represent an urgent and significant problem. A specific study revealed that 31.1% of 193 surveyed healthcare workers reported having experienced an NSI. Even more concerning, 84.2% of 178 medical staff at community health centers (Puskesmas) admitted to having been exposed to used needle sticks.

Hospital-level data further support the high prevalence:

- RSUP Dr. Wahidin Sudirohusodo Makassar documented 39 NSI cases out of 57 total occupational accidents between 2019 and 2021, making NSIs the most dominant type of injury.
- RSU Haji Surabaya reported 22 NSI cases from 2010 to 2019, with NSIs accounting for 87% of all reported occupational accidents in 2015 alone.

Nurses are consistently identified as the most disproportionately affected professional group, comprising 40% to 52.4% of NSI incidents. Additionally, younger and female healthcare workers are shown to be particularly vulnerable. Alarmingly, 88.2% of NSI cases go unreported, with most workers unaware of proper reporting procedures. This widespread underreporting represents a critical systemic failure in OHS management. Legal frameworks, such as Ministry of Health Regulation No. 66 of 2016 and No. 52 of 2018, explicitly mandate the reporting of OHS incidents, including injuries. However, if nearly 9 out of 10 NSI cases are not officially reported, it implies a severe underestimation of the actual scale of the problem. This directly impairs the effectiveness of risk assessment, leads to misallocation of resources, and hinders the development of targeted and effective policy interventions, as decisions are made based on incomplete data. Furthermore, underreporting may conceal institutional negligence and deny affected workers access to post-exposure prophylaxis, medical care, or rightful compensation, violating the fundamental principles of justice and beneficence.

2. Causes and Impacts of NSIs (Health and Ethical Implications)

Common causes of NSIs include unsafe practices such as *recapping* used needles—still performed by 37.7% of workers and responsible for 63.7% of NSI cases during such activities. High workload and time

pressure ("busyness") are also significant contributing factors, accounting for 55% of NSI incidents. Additionally, unsafe injection practices have been widely identified as risk factors. Most NSIs occur beside patient beds (83.4%) or during blood-drawing procedures.

NSIs carry severe health consequences due to the high risk of transmission of bloodborne pathogens. These include Hepatitis B (32% of NSI cases), Hepatitis C (30%), and HIV (5%). Such exposures can result in chronic illnesses, long-term health complications, and even life-threatening conditions for healthcare workers.

The high prevalence and serious, yet preventable, health impacts of NSIs raise deep ethical concerns regarding institutional responsibility. Healthcare institutions have a clear moral obligation, rooted in deontological ethics (moral rules and duties), to ensure a safe working environment and actively minimize harm (non-maleficence) to their employees. The continued occurrence of NSIs—especially those caused by preventable factors such as unsafe recapping or excessive workloads—strongly indicates a failure to uphold this basic duty of care. This situation places healthcare workers in conditions of "certain, significant, and unmitigated harm risk," forcing them into difficult ethical dilemmas between professional duty and personal safety. It also highlights the inherent tension between productivity demands and safety obligations.

Although individual behavior like *recapping* contributes to NSIs, deeper analysis reveals that the root causes are often systemic—including high workload pressure ("busyness") and limited access to safety-engineered devices (SEDs) that can reduce these risks. Practical training and adherence to Standard Operating Procedures (SOPs) have been shown to effectively reduce NSI rates. However, if healthcare workers continue to engage in unsafe practices such as recapping or consistently operate under intense pressure, it can be concluded that existing training is insufficient, safety standards are not consistently enforced, or the healthcare system itself inadvertently encourages unsafe behaviors—such as due to time constraints, understaffing, or a lack of appropriate safety equipment.

This underscores that legal interventions must go beyond simply mandating training. Instead, they should aim to address systemic pressures and possibly mandate the adoption of engineered safety technologies (engineering controls) to truly reduce risks.

C. Other OHS Challenges in Healthcare Facilities

In addition to the widespread issue of needlestick injuries (NSIs), healthcare facilities (fasyankes) face a range of other significant occupational health and safety (OHS) challenges:

- Nosocomial Infections: These infections, acquired by patients during their stay in hospitals, represent a major concern. They pose a dual threat—compromising both patient safety and the health and safety of healthcare workers.
- Other Occupational Diseases (ODs): The healthcare environment exposes workers to a variety of other occupational illnesses. These include various forms of dermatitis (commonly caused by frequent exposure to chemicals and irritants), musculoskeletal disorders such as Carpal Tunnel Syndrome from repetitive tasks, tendinitis from overuse, and back injuries often resulting from patient handling or heavy lifting. Additional risks include respiratory problems, hearing loss due to noise exposure, and even work-related cancers.
- Psychosocial Hazards: Increasing attention is being paid to psychosocial risks such as chronic workplace stress, intense pressure, and monotonous job routines. These factors are now recognized as major contributors to occupational illnesses, including mental health conditions

such as Post-Traumatic Stress Disorder (PTSD).

- General Workplace Accidents: Common incidents such as slips, trips, and falls, along with accidents involving both medical and non-medical equipment, remain prevalent hazards in healthcare facilities.

The wide range and diversity of identified hazards and occupational diseases in healthcare environments—particularly the explicit inclusion of psychosocial risks such as stress and fatigue—clearly demonstrate that effective OHS in the healthcare sector requires a truly holistic approach. This approach must go beyond addressing physical safety alone and include the critical dimensions of psychological and mental well-being.

Although most OHS regulations and public discourse tend to focus on acute physical injuries (such as NSIs) or infectious disease prevention, the documented prevalence of musculoskeletal disorders and psychological issues suggests that these chronic, often less visible hazards remain significantly under-addressed. Therefore, the existing legal and ethical frameworks must evolve to adequately cover these broader dimensions of worker health.

This may require the development of specific legal provisions to manage workload, ensure access to psychological support, and implement comprehensive ergonomic interventions. Such gaps highlight a substantial disconnect in the comprehensiveness and modern-day relevance of current legal and ethical structures governing OHS in healthcare settings.

Legal and Regulatory Framework for Occupational Health and Safety (OHS) in Healthcare Facilities

A. Overview of National OHS Legislation

The foundational legal instrument for Occupational Health and Safety (OHS) in Indonesia is Law No. 1 of 1970 on Occupational Safety, which establishes general principles and obligations regarding workplace safety. The implementation of OHS is further guided by a series of national regulations that reflect a systematic approach to occupational health:

- Minister of Manpower Regulation No. 5 of 1996 on OHS Management Systems (SMK3), which introduced a structured system for managing OHS.
- Government Regulation No. 50 of 2012 on the Implementation of OHS Management Systems, which reinforces the mandatory adoption of SMK3.
- Minister of Manpower and Transmigration Regulation No. PER.02/MEN/1980 on Medical Examinations for Workers, which specifically addresses the provision of health checks for employees.
- Law No. 17 of 2023 on Health, which broadly mandates that workplace managers must undertake all forms of health efforts through prevention, promotion, treatment, and rehabilitation for their workers.

The evolution of OHS regulations—from basic safety laws (e.g., Law No. 1/1970) to system-based management regulations (e.g., Ministerial Regulation No. 5/1996, and Government Regulation No. 50/2012)—demonstrates a deliberate legal shift toward a more proactive, systematic, and integrated approach to OHS. This shift marks a transition from mere prescriptive rules to a holistic management philosophy.

Therefore, legal analysis of OHS effectiveness should not be limited to compliance with isolated safety rules. Instead, it must critically assess the functionality, comprehensiveness, and robustness of the entire SMK3 framework as implemented in healthcare facilities. This includes evaluating policy formulation, planning precision, implementation consistency, monitoring and evaluation rigor, and commitment to continuous improvement. Any identified failures in OHS outcomes can be traced back to deficiencies within one or more components of this structured management framework, providing a systematic approach to legal inquiry.

B. Specific OHS Regulation in Hospitals (Minister of Health Regulation No. 66 of 2016)

Minister of Health Regulation No. 66 of 2016 on Hospital Occupational Health and Safety (K3RS) is a specific and comprehensive regulation that mandates all hospitals to implement K3RS. Its goal is to ensure that OHS is optimal, effective, efficient, and sustainable within hospitals. The regulation outlines a detailed K3RS management system (SMK3RS), structured into five key phases: policy establishment, meticulous planning, careful implementation, strict monitoring and evaluation, and ongoing performance review and improvement. The planning must be risk-based and reviewed annually.

The regulation covers a broad spectrum of OHS aspects, including systematic risk management, hospital safety and security, comprehensive occupational health services, hazardous material (B3) management, fire prevention and control, infrastructure safety, medical equipment safety, and emergency preparedness protocols.

Mandatory incident reporting is required under K3RS and must be integrated into the hospital information system, submitted monthly and annually. K3RS evaluations are carried out both internally (at least every 6 months by the hospital's K3RS functional unit) and externally (as part of hospital accreditation). The integration of K3RS assessments into broader hospital accreditation processes serves as a powerful legal and administrative mechanism to enforce compliance. By directly linking OHS compliance to hospital accreditation status, the regulation ensures that a hospital's operational legitimacy, public standing, and ability to attract patients depend on its adherence to OHS standards. This creates a strong institutional incentive for hospitals to prioritize OHS—elevating it from a mere legal obligation to a matter of institutional survival, financial sustainability, and reputational integrity.

Thus, it is necessary to explore how effectively this accreditation mechanism drives real improvements in hospital OHS and demonstrably reduces occupational hazards such as NSIs.

C. Specific OHS Regulation in Non-Hospital Healthcare Facilities (Minister of Health Regulation No. 52 of 2018)

Minister of Health Regulation No. 52 of 2018 on OHS in Healthcare Facilities (Fasyankes) was specifically designed to apply to non-hospital healthcare facilities, including community health centers (Puskesmas), clinics, and other primary care settings. The regulation clearly mandates OHS implementation in all such facilities and outlines a management framework similar to that used in hospitals, though potentially adapted to scale.

A key feature of Regulation No. 52/2018 is the explicit inclusion of "standard precaution implementation" as a core component of OHS. This includes specific requirements for safe handling of needles and sharps to prevent injuries. Other key standards include the application of ergonomic principles, regular health checks for workers, immunization provision, and comprehensive hazardous material (B3) and waste management. Incident reporting is required on a biannual and annual basis.

Although both Regulation No. 66/2016 (for hospitals) and Regulation No. 52/2018 (for non-hospital facilities) mandate sharps management and OHS implementation, there is strong evidence of disparities in enforcement, oversight, and resource capacity. Large, accredited hospitals typically have sufficient resources, dedicated OHS personnel, and undergo rigorous external audits. In contrast, smaller facilities such as Puskesmas or independent clinics often face limited operational budgets, shortages of dedicated OHS staff, and weaker external oversight mechanisms.

The alarming statistic that 84.2% of Puskesmas medical staff have been exposed to used needles strongly suggests that despite explicit legal mandates in Regulation No. 52/2018, implementation and practical effectiveness remain poor in primary healthcare settings. These disparities raise

concerns about equitable protection for healthcare workers across different types of facilities, and whether enforcement mechanisms are adequately adapted to resource-constrained environments.

D. Legal Implications of Non-Compliance with OHS Regulations

Violations of OHS regulations may lead to direct legal sanctions, as stipulated under Law No. 1 of 1970, including the possibility of imprisonment or substantial fines for non-compliance. Beyond these direct legal consequences, failure to comply with OHS standards can also result in increased legal claims and litigation against healthcare facilities for substandard services or negligence resulting in harm.

Inadequate protection of workers can impose significant financial burdens on institutions—such as compensation for injuries, productivity losses due to absenteeism, and increased insurance premiums—and severely damage a facility's reputation and operational viability. Responsibility for managing health and safety falls under moral, financial, and legal obligations. Legal mandates are essential, as moral and financial responsibilities alone often prove insufficient to ensure a truly safe and healthy work environment.

Therefore, a strong legal framework is crucial to guarantee compliance and prevent harm.

5. CONCLUSION

This analysis underscores the complexity and urgency of the legal and ethical dimensions of Occupational Health and Safety (OHS) in healthcare service facilities (fasyankes) in Indonesia. The data reveal a consistent increase in workplace accidents and Occupational Diseases (ODs), with particular concern around the underreported and recurring cases of Needlestick Injuries (NSIs). These patterns indicate a significant gap between the existing regulatory framework and its practical implementation in the field.

This implementation gap not only reflects challenges in legal enforcement but also highlights systemic issues, including excessive workloads, insufficient adoption of engineered safety technologies, and potential regulatory oversight disparities between large hospitals and smaller non-hospital healthcare facilities. From an ethical standpoint, the ongoing nature of preventable incidents raises serious concerns about the moral obligations of healthcare institutions to ensure a safe and equitable working environment, in line with the ethical principles of non-maleficence and justice.

RECOMMENDATIONS

Analysis of the Effectiveness of Minister of Health Regulation No. 52 of 2018 in Preventing Needlestick Injuries at Community Health Centers (Puskesmas)

Critical Review of Hospital Compliance with Minister of Health Regulation No. 66 of 2016 in the Management of Sharp Waste and Its Impact on Occupational Accident Incidence

Legal and Ethical Responsibilities of Healthcare Facilities in Addressing Excessive Workload as a Risk Factor for Occupational Accidents and Other Occupational Diseases

Moral Obligation and Legal Duty of Healthcare Institutions in Establishing a Holistic Workplace Safety Culture

Ethical Dilemmas and Legal Protection for Healthcare Workers Facing the Risk of Nosocomial Infections and Occupational Diseases through the Lens of Standard Compliance and Enforcement.

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