The Effectiveness of the Implementation of Occupational Health and Safety (OHS) in Indonesian Medical Personnel During the Covid-19

Sunny Ummul Firdaus, Jamal Wiwoho, Muhamad Alief Hidayat
The Center for Democracy and National Resilience Studies, Institute for Research and Community Service, Universitas Sebelas Maret, Indonesia
Email: firdaussunny@staff.uns.id

https://doi.org/10.25134/unifikasi.v10i2.7938

ARTICLE INFO
ABSTRACT

This journal explains the effectiveness of legal protection for medical personnel, especially in implementing Occupational Safety and Health during the COVID-19 period. The number of COVID-19 cases that continue to develop in Indonesia certainly affects the implementation of OHS for medical personnel. Various problems also emerged in the first year of the spread of COVID-19, from medical personnel, instruments, and components supporting the implementation of OHS and the condition of COVID-19 in Indonesia. OHS accommodation for medical personnel has been listed in various laws and regulations in Indonesia. In this study, the author uses socio-legal legal research methods. The final result of this research is a study of the legal conditions of the laws and regulations governing the implementation of OHS for medical personnel in Indonesia, accompanied by various cases. This conclusion of the article provides the effectiveness of the implementation and compliance of das sollen and das sein law in Indonesia, especially regarding accommodating the implementation of Occupational Health and Safety (OHS) in accordance with legal regulations. With this issue, there is a need for synergy among the government, hospitals, healthcare workers, and relevant parties to ensure the implementation of OHS protection for medical personnel dealing with COVID-19 and the potential new mutated viruses emerging in Indonesia.

Introduction
At the beginning of 2019, the existence of COVID-19 as a pandemic became the most feared and dangerous scourge worldwide. This is marked by the very massive and fast development of COVID-19 globally. The rapid transmission process made the WHO designate COVID-19 as a public health emergency troubling the world KKMMD/Public Health Emergency of International Concern (PHEIC) on January 30, 2020. Furthermore, on March 11, 2020, WHO declared COVID-19 a pandemic. COVID-19 has been going on since two years ago until now. The first human cases of COVID-19, the disease caused by the novel coronavirus causing COVID-19, subsequently named SARS-CoV-2, were first reported by officials in Wuhan City, China, in December 2019. Retrospective investigations by Chinese authorities have identified human cases with the onset of symptoms in early December 2019. The addition of cases of the COVID-19 incident continues rapidly with the scale of the spread also expanding.

short, the evidence indicates that SARS-CoV-2 RNA can be detected in people 1-3 days before the onset of symptoms; The highest viral load, according to RT-PCR measurements, was observed on the day of onset of symptoms, then decreased over time. (47, 62-65) In general, the duration of RT-PCR positivity ranges from 1 and 2 weeks for asymptomatic persons and up to 3 weeks or more for patients with mild to moderate disease.  

Based on data from the Secretary General of the Executive Board of the Indonesian Doctors Association (Secretary General of PB IDI), an update on the number of health workers who have died from COVID-19 as of March 8, 2023. The total number of health workers who died from COVID-19 was 2,172 people. The number is broken down as follows: 756 doctors, 718 nurses, 421 midwives, 33 nutritionists, 25 employees in the field of environmental sanitation, 2 cardiovascular technicians, 25 dental and oral therapists, 22 medical laboratory technicians, 13 medical recorders, 14 community health workers, 40 pharmacy technicians, 11 optometrists, 7 health promotion personnel, 24 radiographers, 2 occupational therapists, 1 speech therapist, 12 electromedics, and 46 dentists. The number of health workers who died as a result of the COVID-19 outbreak will continue to be updated because they still require verification. The actual figure must be much higher. In fact, the current ratio of available doctors in Indonesia shows that one doctor can serve up to 1,400 people in Indonesia. (1:1,400)  

This mortality rate is inseparable from the bed occupancy rate (BOR) of the Covid-19 hospital which exceeds the maximum threshold of the World Health Organization (WHO).

In general, confirmed cases of COVID-19 have shown an increasing curve since 2019 in all provinces in Indonesia. Based on data from ourworldindata.org, new confirmed COVID-19 cases per 1 million population, the graph of the addition of cases in Indonesia is predominantly sloping.  

This addition of COVID-19 cases certainly encourages the firmness and determination of several policies by the government, one of which is the implementation of the COVID-19 Vaccination. The national vaccination targets set are 208,265,720, where as of May 27, 2022, the phase 1 vaccination program has implemented as many as 200,112,862 doses, the vaccination phase 2 has implemented as many as 167,198,137 doses, and the 3rd stage vaccination has implemented as many as 45,034,435 doses. This policy for handling and overcoming the COVID-19 pandemic provides a separate obligation for medical personnel as part of the front line in overcoming COVID-19 which also places medical personnel in a position with great risk. This is based on the workload of medical personnel who are required to deal directly with COVID-19 patients and are at great risk of infection. The World Health Organization (WHO) estimates that around 80,000 to 180,000 health workers worldwide died from Covid from January 2020 to May 2021. Furthermore, WHO stated that data from 119 countries showed that, on average, two out of five health workers worldwide had to get full vaccination.  

The limitations of rapid testing and swab examination facilities, restricted healthcare infrastructure, and a lack of personal protective equipment during this pandemic.
can lead to anxiety, uncertainty, and fear among healthcare workers. Ultimately, this can impact their work approach and increase the likelihood of making mistakes.\(^9\)

Furthermore, the number of deaths among medical personnel in Indonesia also shows a large number. The COVID-19 Report noted that the number of health workers who died from the coronavirus in Indonesia was 2,029 as of September 15, 2021. In more detail, the number of deaths consisted of 730 cases of death to doctors, 667 cases of death to nurses, 388 cases of death to midwives, 70 cases of death to other medical personnel, 48 cases of death to pharmacists, deaths to medical laboratory technologists and dentists, each of which was respectively 47 and 46 cases. This incident was because, in the first year of the spread of COVID-19 in Indonesia, extraordinary chaos occurred, including those that had to be faced by medical personnel, one of which was the case of limited OHS Hospital instruments, namely the provision of Personal Protective Equipment (PPE). Especially, new mutation viruses of the Covid-19 type have been found, such as XBB and Eris. This spread also occurred rapidly, where the XBB virus, which is a new variant of COVID-19, originated from mutations of the Omicron variant. As of October 2022, it had spread to more than 35 countries, including Indonesia. Meanwhile, the emergence of the Eris variant in Indonesia first entered in early March 2023. Referring to GISAID data, at least 15 sequences were reported to be present in DKI Jakarta.\(^10\) With these findings, vigilance is needed to overcome the spread of the virus. This is an irony that should raise concerns that health workers, including doctors, nurses, and hospital staff, need legal protection from the government. Health workers have even more complex challenges deriving from legal regulation issues such as subpoenas, protests, and lawsuits related to the handling of COVID-19. Thus, legal aid institutions at hospitals are now urgently needed to solve various legal issues.\(^11\) This case shows that implementing Hospital OHS (OHS) at the beginning of the COVID-19 pandemic in Indonesia was still experiencing problems. In line with the current development of the COVID-19 case in Indonesia, improvements and changes have been made by the OHS regulations that oversee its implementation to ensure protection for medical personnel and appropriate operational standards. With this, the formulation of the problem can be drawn, namely, how are the regulations and legal products for OHS applied to medical personnel during the COVID-19 pandemic in Indonesia, and how effective is the implementation of OHS for medical personnel during the current COVID-19 pandemic in Indonesia.

**Research Methods**

The method used in this research is the socio-legal research method. Wheeler and Thomas state that socio-legal studies are an alternative approach that examines the doctrinal study of law. That is why socio-legal researchers use social theory for analytical purposes; they often do not aim to pay attention to sociology or other social sciences but to law and legal studies. The socio-legal approach is a combination of approaches within the social sciences, including political science, economics, culture, history, anthropology, communication, and

---

many other sciences, combined with approaches known in legal science, such as learning about the principles of law, principles, doctrines, and regulations.  

The author uses this method to analyze the problems of implementing OHS in medical personnel during the COVID-19 pandemic. This method will analyze the laws and regulations that overshadow and become the basis for implementing OHS in healthcare facilities. This study will later become the basis for evaluating the effectiveness of the implementation of OHS procedures during emergency conditions such as COVID-19, which continues to develop to this day, so this socio-legal method aims to find recommendations and suggestions on regulations (Das sollen) and the application (Das sein) of these regulations based on juridical, philosophical and sociological considerations.

Results and Discussion
1. Regulations and legal instruments for OHS applied to medical personnel during the COVID-19 pandemic in Indonesia

Implementing the OHS program in hospitals includes developing OHS policies, cultivating OHS behavior, developing guidelines and standard operating procedures (SOPs), and emergency response management. “Occupational health should aim at the promotion and maintenance of the highest degree of physical, mental and social well-being of workers in all occupations; the prevention amongst workers of departures from health caused by their working conditions; the protection of workers in their employment from risks resulting from factors adverse to health; the placing and maintenance of the worker in an occupational environment adapted to his physiological and psychological capabilities.” In summary: “the adaptation of work to man, and of each man to his job.”

The implementation of OHS for medical personnel in all healthcare facilities is very important for the rights and obligations of medical personnel, which must be guaranteed to be carried out properly. Moreover, medical personnel as professionals who provide treatment for various diseases, including infectious disease outbreaks and emergency conditions such as COVID-19, require the presence of optimal and excellent medical personnel. This drives the need for incentives for medical personnel to carry out work and treat diseases well, such as guaranteeing the fulfillment and accommodation of OHS operations. To prevent the spread of massive transmission of the COVID-19 pandemic, the Health Quarantine Law provides a solution for the state to implement health quarantine.

The existence of a guarantee for OHS that protects medical personnel has been accommodated in various laws and regulations, including:

a. Law No.1 of 1970 concerning Occupational Safety

This Law accommodates regulations regarding work safety in general, where work safety certainly covers all workplaces, whether on land, on the ground, on the surface of the water, in the water, or in the air, which are within the jurisdiction of Indonesia. Furthermore, the

---

contents of this law are divided into several parts, namely requirements for work safety, supervision, guidance, the committee for safety and health at work, accidents, obligations and rights of workers, obligations when entering the workplace, obligations of administrators, and closing provisions. As for the conditions relating to the scope of work of medical personnel, the stipulation of this law stipulates work safety requirements to prevent and reduce accidents; assist in accidents; provide personal protective equipment to workers; prevent and control the incidence of occupational diseases, both physical and psychological, poisoning, infection, and transmission; maintain a good temperature and humidity; obtain harmony between the workforce, environmental work tools, work methods, and processes; adjust and improve security in jobs where the danger of accidents is increasing. Furthermore, in the supervision chapter, there is accommodation regarding this work safety implementation guideline carried out by the director as the general implementer of this Law. In contrast, employees and workplace safety experts are assigned to carry out direct supervision of its implementation by Article 5. the mental condition and physical ability of the workforce that they will receive or will transfer by the nature of the work assigned to them. In addition, the management must check all workers under their leadership, periodically to a doctor appointed by the entrepreneur and justified by the director.

Meanwhile, the coaching chapter is regulated regarding the obligations of the management regarding the appointment and explanation of new workers regarding the conditions and dangers as well as those that may arise in the workplace; all safeguards and protective equipment required in the workplace; personal protective equipment for the workers concerned; safe manner and attitude in carrying out their work. In addition, the management must guide all workers under their leadership to prevent accidents, eradicate fires, improve occupational safety and health, and fulfill and comply with all terms and conditions that apply to businesses and workplaces. Furthermore, in the chapter on the committee for fostering occupational safety and health as well as accidents, it is accommodated the existence of a committee for fostering occupational safety and health, and the management is required to report any accidents that occur in the workplace they lead.

The obligations and rights of workers include: a) providing correct information when requested by supervisory employees and or work safety experts; b) wearing the required personal protective equipment; c) fulfilling and complying with all required occupational safety and health requirements; d) Requesting the management to implement all the required occupational safety and health requirements; e) Expressing work objections to working where the requirements for occupational safety and health as well as the required personal protective equipment are doubted by him unless in special cases determined otherwise by the supervisory employee within the limits that can still be accounted for. Laws act as a means of social control and thus play an important role in supporting government programs.

b. Law No.24 of 2011 concerning Badan Penyelenggara Jaminan Sosial (BPJS) (Social Insurance Administration Organization)

BPJS is a legal entity to administers social security programs for the community and workers. BPJS can be in the form of BPJS Health and BPJS Employment, where BPJS Employment includes work accident insurance programs, old age insurance, pension benefits, and death benefits. In general, several things are regulated in this regulation, namely the

---

functions, duties of authority, rights, and obligations; registration of participants and payment of dues; BPJS organs; requirements, procedures for selecting determining, and dismissing members of the supervisory board and members of the board of directors; accountability; supervision; assets; the dissolution of BPJS; dispute resolution; relationship with other Institutions; ban; criminal provisions; other provisions; transitional and closing conditions. About the tasks carried out, BPJS is tasked with a) conducting and receiving participant registrations; b) collecting and collecting Contributions from participants and employers; c) receiving contribution assistance from the government; d) managing social security funds for the benefit of participants; e) collect and manage data on social security program participants; f) pay benefits and finance health services by the provisions of the Social Security program; and; g) provide information regarding the implementation of the Social Security program to Participants and the public. Furthermore, regarding worker protection, it is stated in article 15 that the employer must gradually register himself and his workers as Participants in BPJS by the Social Security program that is followed. Consequently, if the employer does not implement the provisions, the employee will be subject to administrative sanctions in the form of a written warning, fine, and not receiving certain public services. Article 17.

**c. Law No. 11 of 2020 concerning Cipta Kerja**

Cipta Kerja, a regulation to accommodate employment, provides accommodation regarding implementing protection for workers. In general, the job creation law protects workers’ rights, the implementation of employment opportunities, workers, and business conditions. In addition, this law also accommodates employment relationships, years of service, social security, and arrangements for migrant workers. Meanwhile, the accommodation of special matters relating to the protection of workers is contained in several government regulations, including:

1) Government Regulation No. 50 of 2012 concerning the Implementation of the Occupational Health and Safety Management System

The existence of regulations regarding OHS is part of the company’s management system, which covers the whole in the context of controlling risks related to working activities to create a safe, efficient, and productive workplace. This regulation also provides an obligation for every company to implement OHS. The OHS program includes establishing OHS policies, OHS planning, implementing OHS plans, monitoring and evaluating OHS performance, and reviewing and improving OHS performance. Furthermore, the entrepreneur must disseminate the established OHS policy to all workers/laborers, other people other than workers/laborers in the company, and related parties. At least the facilities and infrastructure for OHS implementation consist of organizations/units responsible for OHS, adequate budget, operating/work procedures, information and reporting, and documentation and work instructions.

2) Government Regulation No.82 of 2019 concerning Amendments to Government Regulation No.44 of 2015 concerning the Implementation of the Work Accident Insurance and Death Benefit Program

Guarantee work accident protection and death insurance regulations for participants who experience work accidents or diseases in the work environment. The participants in question consist of wage recipients (employees in companies, individual workers, foreigners who work for a minimum of 6 months) and non-wage recipients
(employers, workers outside of work relations, or independent workers who receive wages and do not work). In general, this regulation regulates participation and registration procedures, amount of fees and payment procedures, benefits and procedures for payment of guarantees, procedures for reporting and determining work accident insurance, participation in the construction service business sector, handling complaints, dispute resolution, administrative sanctions, and labor inspection. In connection with the application of OHS to workers, especially medical personnel, Article 25 provides accommodation regarding the benefits obtained by this guarantee, where these benefits are in the form of health services according to medical needs and compensation in the form of money.

The health services in question include basic and supporting examinations, first-level and advanced care, inpatient class I hospitals, intensive care, diagnostic support, handling, special services, medical devices and implants, doctor/medical services, surgery, blood services, medical rehabilitation, home care for participants who do not allow treatment to the hospital and diagnostic examinations. The monetary compensation provided includes reimbursement of transportation costs, compensation for temporary incapacity to work, compensation for partial anatomical/partial functional disability/permanent total disability, compensation for death and funeral costs, periodic compensation paid at once, rehabilitation costs, and replacement of dentures/tools costs. Hearing aids/glasses, as well as educational scholarships for children of participants who die or are disabled. This protection also includes workers who are not registered as participants of state guarantees through BPJS Ketenagakerjaan; the employer is obliged to fulfill workers’ rights by this regulation. Suppose the employer does not carry out the things that have been accommodated in this arrangement. In that case, it will be subject to administrative sanctions such as written warnings, fines, and not receiving certain public services.

3) Government Regulation No. 88 of 2019 concerning Occupational Health

The existence of regulations regarding occupational health in encouraging the implementation of OHS in the world of work certainly plays an important role, where occupational health itself is an effort aimed at protecting everyone who is in the workplace so that they live healthy and free from health problems and bad influences resulting from the profession. The implementation of occupational health in question includes disease prevention, health promotion, disease management, and health restoration. Furthermore, each of these sections, of course, has its respective standards of implementation, such as in disease prevention efforts, there are: an a) identification, assessment, and control of potential health hazards; b) fulfillment of occupational health requirements; c) protection of reproductive health; d) health checks; e) work worthiness assessment; f) providing immunization and prophylaxis for high-risk Workers; g) implementation of standard precautions; h) Occupational Health surveillance. Meanwhile, efforts to improve health include increasing health knowledge, cultivating clean and living behavior, cultivating occupational safety and health in the workplace, applying occupational nutrition, and improving physical and mental health.

Next, in terms of implementing disease management efforts, several things are carried out in the form of first aid for injuries and illnesses in the workplace, diagnosis and management of diseases, and handling medical emergency cases. In terms of health
recovery efforts, medical recovery and work recovery are carried out by medical needs. The implementation of occupational health certainly requires support in human resources, health service facilities, occupational health equipment, and recording and reporting per Article 9. Training for medical personnel at least includes health training in Occupational or occupational health and safety company hygiene, whereas further training in occupational medicine, occupational health, or occupational safety and health company hygiene is excluded for Health Workers. They already have competencies obtained through formal education in occupational medicine or occupational health. Furthermore, it is related to the support of the necessary facilities in the form of equipment for measurement, inspection, and other equipment, including personal protective equipment, by the risk factors/hazards of occupational safety and health in the workplace. The most important thing that is also regulated in this regulation is the involvement of the Central Government, Regional Government, and the community, who are responsible for implementing Occupational Health in an integrated, comprehensive, and sustainable manner.


As stated in previous laws and regulations, a social security program in the form of work accident insurance, death insurance, old age insurance, and pension insurance certainly needs development, especially with the COVID-19 condition. This regulation aims to protect participants, business continuity, and the continuity of the implementation of employment social security programs during non-natural disasters that spread COVID-19. Generally, this regulation includes contributions, benefits, and validity adjustments. The adjustment of this contribution is one of the government’s efforts to seek the fulfillment of social security amid the spread of COVID-19. This aims to provide accommodation for participants to remain guaranteed by social insurance in the event of a work accident due to the implementation of OHS that is not optimal, the existence of accommodation for old age, pensions, and so on. These adjustments include a) slack in the deadline for payment of work accident insurance contributions (JKK), old age security contributions (JHT), and monthly pension benefits (JP), b) relief from JKK contributions and JKM contributions; c) postponement of payment of Part of JP’s dues.

The amount of the postponement of this contribution provides accommodation to the employer for his obligations, where the employer is obliged to collect a pension insurance contribution of 1% of the worker’s wages. Furthermore, the employer must pay and deposit a pension insurance contribution of 2% of the worker’s wages to the Employment BJPS. Meanwhile, delays for medium and large businesses as a result of the COVID-19 pandemic, can be done by submitting a request for a postponement to BPJS Employment, and further verification will be carried out for a maximum of 3 days and immediately notify the rejection or approval within one day after verification. Furthermore, after approval of the application, the employer must fulfill it within a certain period. Of course, this mechanism also applies to micro and small business delays. The submission of this delay will certainly have implications for the application of a fine if it is not fulfilled within the stipulated period, in which the delay will be subject to a fine of 0.5% for each month of delay.
The granting of relief from the JKK Contribution and JKM Contribution starting from the JKK Contribution and JKM Contribution for the third month of participation is intended to prevent or reduce the occurrence of moral hazard (moral hazard) that new participants use. So with this, it encourages efforts to fulfill rights and guarantee the implementation of OHS along with the fulfillment of risks that workers will face, especially medical personnel, related to the existence of guarantees for the fulfillment of achievements in terms of social security.

e. Minister of Health Regulation No.66 of 2016 concerning Hospital Occupational Safety and Health

This regulation provides accommodation regarding managing and controlling risks related to Occupational Health and Safety in hospitals (OHS) to create healthy, safe, safe, and comfortable hospital conditions. The implementation of OHS is the obligation of every hospital, and this implementation includes the establishment and development of hospital OHS and the implementation of OHS standards. The OHS includes establishing OHS policies, OHS planning, implementing OHS plans, monitoring and evaluating OHS performance, and reviewing and improving OHS performance. Furthermore, Article 5 also explains the existence of an OHS policy, which includes establishing policies and objectives of the OHS program, the determination of the OHS organization, and the determination of funding support, facilities, and infrastructure. This plan is determined by the head or hospital director and is prepared according to the level of risk factors.

The OHS plan includes OHS risk management, safety and security in hospitals, occupational health services, management of hazardous and toxic materials from occupational safety and health aspects, fire prevention and control, hospital infrastructure management, and medical equipment management from safety aspects. And Occupational health and preparedness for emergencies or disasters. Furthermore, in terms of the implementation of OHS, the review in the form of policy determination, planning, implementation of plans, and monitoring and evaluation plays an important role in ensuring the implementation of OHS. The implementation standards for OHS include risk management, safety, and security in hospitals, occupational health services, management of hazardous and toxic materials from occupational safety and health aspects, fire prevention and control, hospital infrastructure management, and medical equipment management from safety and health aspects. Work and preparedness for emergency or disaster conditions.

Of course, the implementation of OHS must also be balanced with the preparation of education and training to increase understanding, ability, and skills regarding the implementation of OHS. The government will later hold this training, local government, and accredited training institutions. Furthermore, recording and reporting are also important things to do by Article 23 that hospitals are required to record and report the implementation of OHS, which is integrated with the hospital management information system. Furthermore, recording and reporting are carried out monthly or annually, including incidents of infectious diseases, non-communicable diseases, incidents of work-related accidents, and incidents of occupational diseases. Furthermore, to create an optimal implementation of OHS, it is necessary to establish a functional work unit responsible for implementing OHS, which is also integrated with a separate occupational health service unit or the outpatient service unit in the hospital. As for things that must also be done in the implementation of OHS, namely the existence of an assessment of hospital OHS as well as guidance and supervision, which have direct implications for the improvement of the implementation of OHS through a)
advocacy, socialization, and technical guidance; b) training and capacity building for OHS human resources; c) monitoring and evaluation. As for the guidance and supervision of OHS, the Minister, the head of the provincial health office, and the head of the district/municipality health office may impose administrative sanctions in the form of an oral warning or a written warning to hospitals that do not administer OHS.

f. Decree of the Minister of Health of the Republic of Indonesia Number 432/MENKES/SK/IV/2007 concerning Guidelines for Occupational Health and Safety (OHS) Management in Hospitals

The existence of this regulation is motivated by the possibility of potential hazards that can occur in hospitals. The potential hazards that can arise are biological factors (viruses, bacteria, and fungi); chemical factors (antiseptic, anesthetic gas); ergonomic factors (wrong way of working); physical factors (temperature, light, noise, electricity, vibration, and radiation); psychosocial factors (shift work, relations with fellow employees/supervisors). Furthermore, other potential hazards that arise are microbiological, design/physical, fire, mechanical, chemical/gas/carcinogenic, radiation, legal/safety risks, and occupational diseases (PAK) that appear in hospitals. So that With this possibility, a hospital OHS management system is provided, which consists of preparing hospital OHS commitments and policies through various strategies, planning, organizing, and implementing steps for the strategies that have been prepared. As for this Ministerial Decree, several arrangements are accommodated, including the existence of occupational health and safety management guidelines in hospitals which are used as a reference for hospital managers and employees in carrying out occupational health and safety efforts. Furthermore, there is also guidance and supervision of the implementation of the guidelines by the Minister of Health, the Head of the Provincial/Regency/City Health Office, involving professional organizations and the community.

Various laws and regulations governing the implementation of OHS in health facilities show that currently, Indonesian law has provided OHS regulation and guarantees regulations for personnel in both ideal and emergency conditions such as the spread of the COVID-19 disease outbreak. This is a separate basis for hospitals and other health facilities to provide and provide all OHS needs needed by laws and regulations to optimize the handling of COVID-19. This is no exception to protecting medical personnel from contracting the disease outbreak. In addition, these laws and regulations provide accommodation for all parties, both the government and the community, to participate in facilitating and supervising the implementation of hospital OHS to provide security for medical personnel and patients. In order to apply infection prevention and control measures in healthcare institutions it is important to limit infections associated with the provision of healthcare services.17

2. The effectiveness of the implementation of OHS on medical personnel during the current COVID-19 pandemic in Indonesia

The existence of implementation of OHS for medical personnel during the COVID-19 pandemic in Indonesia continues to develop until now. This pattern has important implications for the coordination of responses to global infectious diseases considering that the World Health Organization’s policy guidance to governments is tailored to the local

---

progression of an infectious disease rather than potential herd behaviour.\textsuperscript{18} Various changes have occurred with the development of COVID-19 cases, which are still fluctuating from 2019-2021. The benchmarks for evaluating the effectiveness of the implementation of OHS are based on several hospital OHS standards that must be applied, including:

a. Hospital OHS Risk Management

Risk Management is a systematic and logical method for identifying, monitoring, determining solutions, and reporting risks in each activity or process.\textsuperscript{19} Risk management is an organized activity to direct and manage the organization to deal with risk. The existence of OHS risk management in this hospital aims to minimize the risks that may arise related to all aspects carried out at the hospital. Risk management does not only cover patients, medical personnel, and non-medical personnel. Regarding this, hospitals are certainly required to carry out all risk management for handling COVID-19 and other diseases by the hospital's standard operating procedures (SOP) and based on the results of the Australia-Indonesia Center (AIC) Rapid Research in 2020 at 11 hospitals in various parts of Indonesia, including North Sumatra, Central Java, East Java, and Bali, stated that there were significant gaps in the number and quality of facilities and services between hospital for COVID-19 treatment which results in an increased risk for medical personnel.\textsuperscript{20} This project aims to examine the implementation of OHS policies and systems among hospitals in Indonesia, and their OHS performance, focusing on East Java province.\textsuperscript{21}

Furthermore, this can be seen by the incomplete ownership of special isolation rooms and intensive care units equipped with negative air pressure needed to prevent the spread of the virus. Furthermore, some of these hospitals also do not have sufficient ventilators and do not have adequate facilities for testing patients infected with COVID-19. This is in the spotlight, especially at the beginning of the development of COVID-19 in the first year. The limited number of facilities to treat these patients causes the hospital to be unable to accurately test their condition and refer them to the appropriate treatment room. Another problem encountered at the beginning of the spread of COVID-19 was the limited personal protective equipment (PPE), which caused many medical personnel to be exposed to COVID-19. So, in general, in 2019-2020, there was an ineffective implementation of hospital OHS and the protection of medical personnel handling activities for COVID-19.

b. Hospital Safety, Security, and Health Services

The existence of safety, security, and health service standards at this hospital is directly related to efforts to minimize injuries and accidents that can occur to patients, visitors, patient companions, and the community around the hospital environment. The safety and security standards are based on several indicators, including the existence of hospital facilities and infrastructure, and medical equipment management, especially in terms of its important role in hospital OHS standards. As for the standard of application of safety, security, and


\textsuperscript{22} Pair AustralianIndonesia, “Occupational Health and Safety (OHS) Risks among Indonesian Healthcare Workers during the COVID-19 Pandemic,” \textit{Pair Australian Indonesia Centre}.
hospital health services in the case of emergency and disaster situations, this emergency or disaster condition must have these standards. Furthermore, in its implementation, there are several problems, including the existence of a significant gap in the level of awareness and commitment of medical personnel to complying with health protocols, where one of the main sources of infection in medical personnel in hospitals is the use of various shared facilities for staff, such as changing rooms, dining rooms, prayer room, elevator, and bathroom.  

Furthermore, a survey by the Tsunami and Disaster Mitigation Research Center (TDMRC) Team of Syiah Kuala University (Unsyiah) stated that 51% of medical personnel felt that their workplace had not provided optimal protection for them to avoid COVID-19 with the affirmation of 96% of the medical personnel trying to improve self-protection through washing hands or using hand sanitizer. At the same time, the survey on personal protective equipment (PPE) stated that as many as 77.9% of health worker respondents still had problems obtaining PPE in carrying out their duties due to these limitations. The PPE most widely used by medical personnel in the Aceh region is surgical masks with a percentage of 80% and gloves with a percentage of 55.7%. Meanwhile, 90% of medical personnel admitted that they had received a rejection from residents for treating coronavirus patients. This limitation of PPE certainly has a major impact on the transmission of medical personnel in terms of supervision. Meanwhile, regarding the protection of medical personnel, 2% of medical personnel do not receive proper PPE, 75% of health facilities do not carry out routine swabs, and 59% do not carry out routine rapid test checks on health workers. Hal ini juga membantu jika dilengkapi dengan peralatan kesehatan yang canggih dan tenaga yang terlatih dalam penanganan pasien Covid-19.

This shows that there are still problems regarding creating effective implementation regarding safety, security, and hospital health services. Of course, this inadequacy is caused by various backgrounds, including the inability of hospitals to carry out OHS during very high COVID-19 conditions, especially in the first and second years of the spread of the COVID-19 pandemic, the lack of medical personnel on duty when compared to the number of COVID-19 patients in Indonesia, as well as the lack of application of health protocols and protocols for handling COVID-19, which tend not to run optimally. Therefore, it is important to apply infection prevention and control measures in healthcare institutions to limit infections associated with the provision of healthcare services. Mitigation efforts to protect health workers cannot stand alone because it cannot be separated from the number of cases that must be controlled. Care and public health systems in all countries must be prepared for emergencies or disasters.

Conclusion

The existence of the protection of medical personnel through the application of OHS is the main thing, especially in the emergency of the spread of COVID-19 in Indonesia. In

general, legal arrangements and guarantees regarding the implementation of OHS in Indonesia have been well accommodated in various laws and regulations to the latest regulations, namely through Law Number 6 of 2023 Concerning The Stipulation of Government Regulation Number 2 of 2022 concerning Cipta Kerja and various decisions of the Minister of Health specifically for workers. Medical certificate issued by the Indonesian government. However, in practice, the effectiveness of OHS on medical personnel in Indonesia, especially in the early years of COVID-19 spreading in Indonesia, the existence of a gap between the policy regulations that have been made and the application of the law as stated in the research discussion above is certainly something that needs to be optimized. such as optimizing the implementation of OHS and hospital risk management as well as accommodating all needs for hospital safety, hospital standards, and health services provided.

**Suggestion**

Researchers suggest the need for synergy between the government as a policy maker and supervisor of implementation, hospitals as implementers of OHS policies and providers of health service standards, and other parties who also support OHS compliance for all medical personnel dealing with COVID-19. Furthermore, it is necessary to increase cooperation between countries in order to accommodate the implementation of global policies and to deal with the potential spread of mutations of the new COVID-19 variant both in Indonesia and other countries.

**References**


Hale, Thomas, Noam Angrist, Rafael Goldszmidt, Beatriz Kira, Anna Petherick, Toby Phillips, Samuel Webster, et al. “A Global Panel Database of Pandemic Policies (Oxford COVID-


Tim Mitigasi IDI. “Statistik Kematian Nakes.” *LaporCovid19*.


---

*How to Cite:*