

# Evaluation of the Implementation of Occupational Health and Safety Management System (OHSMS) XYZ Hospital in Indonesia

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Abstract— Hospitals are one of the health service industries that have various potential hazards and safety and health risks for hospital human resources, patients, patient companions and hospital visitors. Evaluation of the implementation of OSH programs in hospitals based on SNARS Edition 1 is needed to assess the quality and effectiveness of the system. Analysis is carried out on aspects of input (policy, budget, human resources, infrastructure), processes (risk management, hazard identification, risk assessment and control, safety, health and security programs, Dangerous and toxic materials management, disaster management, fire protection, medical equipment, systems support), output (implementation of occupational health and safety management system (OHSMS) according to SNARS Edition 1). Purpose: to provide an overview of the implementation of OHSMS through the results of evaluation and monitoring evaluating the implementation of OHSMS programs in XYZ Hospital according to SNARS Edition 1. Method: The research design uses descriptive qualitative research, which is a method of research that intends to provide descriptive information about an observed condition. Data collection in this study was carried out based on the results in the form of written or spoken words from the observed object, from this qualitative approach it can be collected through interviews, direct observation of the research object and documentation. The sample in this study was taken by purposive sampling using special considerations who know information about the K3RS program, namely the Hospital Leaders, OHS Committee and XYZ Hospital employees. Results: The implementation of OHSMS, occupational safety and health (K3) programs at XYZ Hospital received management support in the form of issuance of leadership policies related to the supporting K3 field, availability of technical guidelines and procedures/SOPs, K3 training and education for Hospital Human Resources, monitoring and evaluation of workplace environmental health, delivery of safety, health and security services, B3 management, disaster management, fire protection, management of medical equipment and management of support systems. Other obstacles and obstacles there are also obstacles in implementing the K3 program, namely that there are no functional Human Resources who carry out the OHS program full time and are still seen as part time jobs, lack of coordination between the fields in the OHS committee and not all employees have received OHS Hospital policy socialization. Conclusion: there are several implementations of occupational safety and health programs at XYZ Hospital including written policies and the vision and mission of the OSH program have not been seen and monitoring, evaluation and improvement of workers' health status have not been fully carried out, namely fitness checks and employee, the absence of special occupational safety and health personnel, lack of involvement of OHS Committee members in meetings and coordination.

Keywords— OHS Hospital Management System, Implementation of Hospital OHS Program.

#### I. INTRODUCTION

Recently, the development of hospitals as referral health care facilities in Indonesia has been very rapid, both in terms of the number and utilization of medical technology. Hospitals as health service facilities must prioritize improving the quality of service to the community without neglecting Occupational Health and Safety (OHS) efforts for all hospital workers (Ministry of Health of the Republic of Indonesia, 2012)

Hospital is a health service institution that organizes complete individual health services that provide inpatient, outpatient and emergency services. (President of the Republic of Indonesia, 2009). Apart from being required to be able to provide quality services and treatment, hospitals are also required to carry out and develop Occupational Health and Safety programs in hospitals (OHS hospital) as stated in the Hospital Service Standards book and contained in the hospital accreditation instrument. Hospitals as health service institutions for the community have their own characteristics which are influenced by developments in health science, technological advances, and the socio-economic life of the community. Hospitals must continue to be able to improve services that are of a higher quality and affordable by the community in order to realize the highest degree of health. Hospitals must guarantee the health and safety of both patients, service providers or workers and the surrounding community from various potential hazards in the Hospital. Therefore, hospitals are required to carry out Occupational Health and Safety (K3) efforts that are carried out in an integrated and comprehensive manner so that the risk of Occupational Diseases and Occupational Accidents in hospitals can be avoided.

Hospitals are a service industry that has a variety of complicated labor issues with various risks of occupational diseases and even work-related accidents according to the type of work, so managers are obliged to implement Hospital Occupational Safety and Health efforts. (Purba et al., 2018) The



hospital as a health service institution for the community is a workplace that has a high risk for the safety and health of the hospital's human resources, patients, patient companions, visitors, and the hospital environment. (Ministry of Health of the Republic of Indonesia, 2016, Law Number 36 of 2009 concerning Health states that workplace managers are required to carry out all forms of health efforts through prevention, improvement, treatment and recovery for workers. (Ministry of Health of the Republic of Indonesia, 2016)

In order to prevent/minimize the risk of Occupational Disease and Accidents from occurring, hospitals are required to carry out an integrated and comprehensive implementation of Occupational Health and Safety (K3). In the hospital, the patient's family, the visitors and the community in the hospital environment. In general, the potential hazards and risks that cause occupational diseases in hospitals are related to physical factors (noise, temperature, dust, electricity, vibration), chemical (disinfectants, solvents, cytotoxics, medical gases, preservatives), biology ( bacteria, viruses, insects, parasites), ergonomics (procedures when lifting patients, procedures for psychological (effective sitting), relationships and communication when working between superiors / supervisors and subordinates, between subordinates and colleagues between superiors and functions / sections also the procedures for working in operating room units, patient reception units, and emergency units as well as in nursing units).

The application of Hospital OHS is very important to prevent and reduce the risk of accidents or occupational diseases. For this reason, professional strategic services are needed for the creation of work safety guarantees through standard and fixed work procedures, don't just depend on binding regulations and the finances that will be provided, but there are many factors that must be involved, including the implementation of an organization. The organization is said to be successful as seen from how the results of achieving the goals of the organization. The implementation of OHS hospital is assessed from the effectiveness of the OHS organization. Workers are a valuable asset for the hospital so they must be looked after, given guidance, always in good health and free from things or negative influences due to hazards in the workplace. The hospital in its activities provides safe, wellfunctioning and supportive facilities for patients, for families, for staff, and also for visitors (Kusmawan, 2021). The application of OHS which is very important in hospitals is related to risks that might harm or harm the hospital in various ways. Starting from the safety of workers, patients, and visitors at the hospital. With the implementation can be planned and manage the risks and hazards that can occur in the hospital environment. Implementation of OHS properly and correctly can be an added value for the hospital because the existing facilities and infrastructure are in accordance with applicable standards, will be well maintained and can also be monitored according to and determined based on applicable laws and regulations.

MINISTER OF HEALTH REGULATION No 66, 2016 CONCERN ON THE IMPLEMENTATION OF THE 8 PLANS OF OHS HOSPITAL

1. OHS Hospital Risk Management;

2. Safety and Security in Hospitals;

3. Occupational Health Services;

4. Management of Hazardous and Toxic Materials from Occupational Safety and Health Aspects;

5. Fire Prevention and Control;

6. Hospital infrastructure management from the aspect of Occupational Safety and Health;

7. Management of medical equipment from the aspect of occupational safety and health; and

8. Preparedness for emergencies or disasters

Regulation of the Minister of Health of the Republic of Indonesia Number 66 of 2016 concerning Hospital Occupational Safety and Health, a hospital is a workplace that has a high risk of the safety and health of hospital human resources, patients, patient companions, visitors, and the hospital environment. Safety at work is something that is very much needed by every human being, as for efforts that can be made to avoid accidents at work, namely by increasing protection for workers, one of which is the protection of occupational safety and health.

Occupational Health and Safety has the value of protecting workers from work accidents or occupational diseases. Good human resources or work force is something that is really needed in all activities because it can determine whether an activity can run well too. Labor is an important asset of an organization which is very important in the production process in addition to the elements of materials, machinery and the workplace environment. Therefore, the workforce must be protected, given guidance and developed in order to increase work productivity (Fitriana, 2015).

Protection of workers with regard to employees' rights to Occupational Safety and Health (OHS), there are several guarantees or insurance that can guarantee worker safety such as social guarantees for workers including old age guarantees, health protection guarantees, disaster guarantees, death guarantees, also conditions - other working conditions. This event is important for development to be carried out in a structured or gradual manner while looking at the effects that will be generated such as the economic impact on employees, as well as the alertness of related fields, conditions of employers, employment and workforce capabilities. Protection of the workforce requires a commitment to its implementation, namely through the application of OHSMS

OHS has previously been stipulated in laws and regulations that have been issued as one of the guidelines for implementing K3, while the law that regulates K3 is Law Number 1 of 1970 concerning Work Safety. OHS has also been established in Law Number 23/1992 concerning Health. In these laws and regulations there are also legal sanctions if there is a violation of the provisions that have been stipulated. In order to avoid accidents in carrying out work, it is important to apply an Occupational Health and Safety Management System or often referred to as OHSMS as a guideline for workers (Salawati, 2009).

Based on the Government Regulation of the Republic of Indonesia Number 50 of 2012 concerning the Implementation of the Occupational Safety and Health Management System (OHSMS) states that part of the company's management system



as a whole is in the context of controlling risks related to work activities in order to create a safe, efficient and productive workplace. OHSMS in an industry is a form of overall management method consisting of organizational systems, programs, persons in charge, implementation, procedures, and resources in the improvement, implementation, acquisition, review, and protection of OHS policies in order to minimize effects in the work process, matters This is useful for the formation of a safe, efficient and productive workplace (Pangkey, 2012).

In the context of managing and controlling risks related to Occupational Health and Safety in Hospitals in order to create Hospital conditions that are healthy, safe, secure and comfortable for Hospital human resources, patients, patient companions, visitors and the Hospital environment, then Hospitals need to implement Hospital OHSMS is part of the overall hospital management system. The scope of Hospital OHSMS includes:

a. Determination of OHS Hospital Policy;

- b. OHS Hospital planning;
- c. Implementation of the OHS Hospital Plan;
- d. OHS Hospital Performance Monitoring and Evaluation; And
- e. OHS Hospital performance review and improvement.

OHS Hospital planning is carried out according to the following:

- OHS Hospital planning is determined by the Head or Director of the Hospital.
- OHS Hospital planning as referred to in paragraph (1) is prepared based on the level of risk factors.
- OHS Hospital planning is made periodically every 1 (one) year and reviewed if there are changes in facilities and infrastructure and work processes at the Hospital. The implementation of the OHS Hospital plan is as follows:
- a. OHS Hospital Risk Management;
- b. Safety and Security in Hospitals;
- c. Occupational Health Service;

d. Management of Hazardous and Toxic Materials from Occupational Safety and Health Aspects;

e. Fire Prevention and Control;

f. Management of Hospital Infrastructure from Occupational Safety and Health Aspects;

g. Medical Equipment Management from Occupational Safety and Health Aspects; And

h. Preparedness for Emergencies or Disasters.

In implementing OHSMS in a hospital, there are several OHSMS criteria consisting of OSH Policy Determination, OSH Planning, OSH Plan Implementation, OSH Performance Monitoring and Evaluation, and OSH Performance Review and Improvement. Determination of OHS Policy must be carried out starting from hospital leadership, and commit to ensure that OHSMS can be implemented properly and in accordance with existing regulations. With regard to this problem, it is necessary to conduct research on the establishment of K3 policies in XYZ Hospital, with the aim of finding out how the OHS policies are determined in the hospital.

The OHS Hospital plan is prepared and determined by the leadership of the Hospital with reference to the K3RS implementation policy that has been determined and then

implemented in order to control potential OHS Hospital hazards and risks that have been identified and are related to Hospital operations. Hospitals must make effective planning in order to achieve the successful implementation of the OHS management system with clear and measurable targets. OHS planning in hospitals can refer to OHS Hospital management system standards including OHS Hospitaland OHSMS accreditation self-assessments.

#### Planning includes:

a. Identification of the source of hazard can be done by considering:

• Conditions and events that may create a potential hazard

• Types of accidents and occupational illness that may occur Risk factor assessment, namely the process of determining whether there is a risk by conducting an assessment of potential hazards that pose a risk to occupational health and safety. Risk factor control is carried out through four levels of risk control, namely eliminating hazards, replacing risk sources with other means/equipment with a lower/non-existent risk level (engineering/engineering), administration and personal protective equipment (PPE).

a. Make regulations, namely hospitals must make, establish and implement standard operating procedures (SOP) in accordance with applicable rules, laws and regulations regarding OSH. This SOP must be evaluated, updated and must be communicated and disseminated to employees and related parties.

b. Goals and objectives, namely the hospital must consider statutory regulations, potential hazards, and measurable OSH risks, measurement units/indicators, achievement targets and achievement timeframes (SMART)

c. Performance indicators must be measurable as a basis for assessing OHS performance which is at the same time information regarding the successful achievement of the hospital's OHSMS

d. Work program, namely the hospital must determine and implement the hospital's OHS program, to achieve the target there must be monitoring, evaluation and recorded and reported.

Some examples of OHS Hospital Program Planning can be explained as follows:

a. Development of the OHS Hospital Policy, the hospital has implemented it by issuing a decree regarding the formation of the OHS Hospital team.

b. Cultivating OHS Hospital Behavior, the hospital has implemented an OHS culture at the hospital, namely by conducting socialization about OHS Hospital to the HumanResources of the hospital and providing information to patients or to introduce patients and visitors to the hospital.

c. Human Resources development, the hospital has conducted training for hospital Human Resources and for follow-up training is carried out once every 3 (three) years.

d. Occupational Health Services, the hospital has implemented a pre-employment medical examination program, periodic medical examinations and special medical examinations.

e. Occupational Safety Services, the hospital has carried out supervision by inspecting safety facilities and equipment.



f. Monitoring the Health of the Work Environment, the hospital has carried out supervision of the work environment or work area that has a risk of danger.

g. Development of Emergency Response Management, the hospital has provided infrastructure and safety equipment, but the fire prevention system has not been maximized.

h. Development of Guidelines, Technical Instructions and SOPs, the hospital has provided safety equipment and SOPs for its use.

Development of Maintenance Program for Solid, Liquid and Gas Waste Management, the hospital has provided a temporary waste storage site and final medical waste treatment site.

i. Management of Services, Hazardous Toxic Materials and Dangerous Goods, the hospital has provided a special storage area for B3.

ii. OHS Hospital Data Collection, Processing and Reporting, the hospital has collaborated with the OHS Hospital team with the hospital PPI team.

iii. Annual Program Review, hospitals carry out accreditation in accordance with the Minister of Health of the Republic of Indonesia No. 34 of 2017 concerning hospital accreditation.

Hospitals in implementing K3 that must be considered are as follows:

1. Commitment.

This commitment must be confirmed first by the leadership or management of the hospital or top management. Commitment is not only expressed through speech, but must also be accompanied by concrete supportive actions so that it can be used as an example, to be studied, used as a guide, and realized properly by all workers and hospital staff.

2. Formation of the OHS Hospital implementing organization/unit

The OHS plan that will be prepared includes:

a) Hazard identification, review and prevention of measurable risks.

b) The OHS plan that is prepared must be guided by the applicable laws and regulations to form the goals and objectives to be achieved in implementing K3.

c) Arrange for the formation of supporting programs in the application of OHS, both general and special programs.

d) Determining employee performance indicators as a form of evaluating the implementation of OSH in hospitals (Aldin, 2018).

3. Create a working group for the implementation of OHS

Forming a working group is an effort that can be made so that the implementation of OHS runs optimally. Members of the working group should be arranged according to their respective abilities, represented by a representative from one work section, generally the work division executive

4. Determine the potential needed

Potential value is also very important, for example, human potential who has sufficient knowledge in the process of implementing OSH, facilities, time, and funds. Good human resources can prevent work accidents and work negligence which can be fatal. Apart from human resources, other resources are also very much needed in terms of facilitating the implementation of OSH in the hospital environment, for example, such as the financial resources needed to purchase the necessary equipment.

The development of the Solid, Liquid and Gas Waste Management Maintenance Program, the hospital has provided a temporary waste storage site and a medical waste final processing site.

a) Management of Services, Hazardous Toxic Materials and Dangerous Goods, the hospital has provided a special storage area for Hazardous Toxic Materials and Dangerous

b) OHS Hospital Data Collection, Processing and Reporting, the hospital has collaborated with the K3RS team with the hospital PPI team.

c) Annual Program Review, hospitals carry out accreditation in accordance with the Minister of Health of the Republic of Indonesia No. 34 of 2017 concerning hospital accreditation.

#### Implementation Stage

a. OHS counseling to all hospital employees

Implementation of counseling can be carried out in various ways, for example by notification of management commitment, through socialization, then it can also be stated by distributing circular letters, or it can be done by distributing books related to OHS. If counseling such as socialization is carried out, it should be done in stages, this is intended so that every employee/staff who attends counseling about OHS can understand well what is conveyed.

b. OHS training

OSH training for employees or staff must be tailored to the needs of each employee or staff and groups within the hospital organization. This K3 training aims to process employees so that they behave the same as what has been previously determined.

c. Planning a OHS Program Based on Applicable Regulations:

1) Employee health checks (crafts, periodic and special).

2) Procurement of self-protection equipment.

3) Assignment of work locations that are in accordance with the health conditions of the workforce.

4) Provide healing costs for employees who suffer from illness.

5) Establish a clean and orderly work area, through monitoring the work environment from existing hazards.

6) Carry out biological monitoring.

7) Collecting data on workers' health.

#### OHS Hospital performance monitoring and evaluation

Hospital is a health effort facility that organizes health service activities and can function as a place for education of health workers and research. The hospital is a place for people to get treatment and health care with various health facilities and equipment.

Hospital Occupational Health and Safety Management System (OHSMS). In the context of managing and controlling risks related to Occupational Safety and Health in Hospitals (K3RS) in order to create Hospital conditions that are healthy, safe, secure and comfortable for Hospital Human Resources, patients, patient companions, visitors and the Home environment Sick, the Hospital needs to implement OHS Hospital is part of the overall hospital management system.



The scope of Hospital OHSMS includes: Monitoring and evaluation of OHS Hospital performance is carried out through inspection, testing, measurement, and internal audit of Hospital OHSMS. In the event that the Hospital does not have human resources in the field of OHS Hospital to monitor and evaluate OHS Hospital performance, it can use the services of other parties.

The results of OHS Hospital performance monitoring and evaluation are used to carry out corrective actions.

Monitoring and Evaluation Stage

1. Inspection and audit of OHS program

2. Improvement and control of OHS based on findings from audits and inspections

3. Recommendations and follow-up on the results of the OHS program evaluation

## Monitoring and Evaluation Stages as follows:

a. Monitoring and evaluation include:

- 1. OHS Report and Records
- 2. Record of achievement of OHS activities
- 3. Reports and Records of Work-related Accidents

4. Reports and Records of the Number of Workers Affected

by Occupational Diseases

b. Inspection and Testing

OHS inspections and testing in hospitals are carried out regularly and in stages, this is done mainly by hospital K3 officers, as an effort to prevent Occupational Diseases (PAK) and Work-related Accidents

c. Conduct OHS Audit

The purpose of implementing a OHSaudit is as follows:

• To carry out an assessment of potential hazards, risks of disruption to health and safety.

• To ensure evaluation of implementation management according to provisions, regulations, procedures

• Establish ways to manage hazard and potential risks and improve quality.

d. Indicators of success OHSMS

1. Implementation of the OHS Hospital program

2. Reducing the number of work-related accidents and work-related diseases

### Monitoring and Evaluation of Hospital OHS Performance

Monitoring and Evaluation of OHS Hospital Performance must;

1. Establish and implement the OHS Hospital program, then to achieve the goals, targets must be recorded, monitored and evaluated as well as reporting.

2. The preparation of the OHS Hospital program is focused on improving health, safety and prevention of health problems as well as prevention of work accidents which can result in personnel accidents and injuries, loss of production opportunities, asset damage, equipment damage and environmental damage/disturbances and is also directed to be able to ensure that all Emergency Team personnel are able to face and resolve emergencies.

3. The progress of the OHS Hospital program is monitored periodically so that it can be continuously improved according to the hazards and risks that have been identified and refers to previous data and the achievement of past OHS Hospital targets.

4. Implementation of workplace inspections with requirements, including:

a. Inspection of the workplace and work methods is carried out regularly and in a planned manner

b. The inspection is carried out jointly by the Team and representatives of the organization/unit responsible for OHS Hospital and Hospital HR representatives who have received orientation and/or workshops and/or training regarding identification of potential hazards, risks and their control.

c. Inspection seeks findings, input from officers who carry out tasks at the place being inspected, so that follow-up can be carried out for improvement on the results of the Inspection Team's recommendations.

d. A checklist at work has been compiled and prepared to be used as a measuring tool when carrying out inspections.

e. Inspection reports are submitted to the organization/unit responsible for OHS Hospital as needed.

f. Corrective actions are monitored and evaluated to determine their effectiveness and follow-up.

g. The leadership of the hospital or the organization/unit responsible for OHS Hospital determines the person in charge for implementing corrective actions based on the results of recommendations from field findings for preparing reports on inspection/inspection results.

## Monitoring and Evaluation of OHSMS in Hospitals includes:

1. Examination, Testing, Measurement and Internal Audit of OHSMS. Inspection, Testing and Measurement procedures must be established and maintained in accordance with the goals and objectives of OHS and the frequency adjusted to the object refers to the regulations and standards applicable by Management.

2. Based on the results of monitoring and evaluation that have been carried out every month, such as Inspections and Audits both internal and external.

OHS Hospital can be used as a reference in preparing the next program planning, to improve OHS Hospital performance.

The monitoring and evaluation of OHS in the Hospital includes:

1. OHS recording and reporting integrated into the hospital reporting system (SPRS);

a. Recording of all OHS activities

b. Recording and reporting of occupational accident

- c. occupational illness recording and reporting
- 2. Inspection and testing

K3 inspection is an activity to assess the general condition of OHS and not too deep. OHS inspections in hospitals are carried out regularly, especially by hospital OHSofficers so that the incidence of occupational accident and occupational illness can be prevented as early as possible. Other activities are testing both the environment and examination of at-risk workers such as biological monitoring.

3. Carry out OHS audits

a. K3 audit includes philosophy and objectives, administration and management, employees and management, facilities and equipment, policies and procedures, employee development and educational programs, evaluation and control.



OHS audit objectives: To assess potential hazards, health and safety problems

b. Ensuring and assessing the management of OHS has been carried out according to the provisions.

c. Determine steps to control potential hazards and quality improvement.

d. Hygiene facilities that monitor the effect of the work environment on workers include lighting, noise, working temperature/climate.

e. Occupational safety facilities which include securing work equipment, use of personal protective equipment (PPE) and safety signs/signs and fire extinguishers, Personal Protective Equipment and Hydrant.

f. Occupational health facilities which include initial, periodic and special inspections, occupational nutrition, personal and environmental hygiene.

g. Ergonomics, namely the health between work tools and labor

h. Work Environment Monitoring: work environment monitoring is carried out:

1) Sanitation of the hospital environment is carried out every quarter in stages

2) Monitoring of indoor air quality at least 2 times a year

3) Monitoring of food ingredients is carried out at least 1 time per month and samples are taken for laboratory confirmation

4) Workers have their health checked once a year

5) Inspection of drinking water and clean water is carried out 2 times a year

6) Repair of tangki (equipped with anti-slip rubber), ram, doors and emergency stairs

7) Improvement of waste treatment

8) Installation of smoke detectors. Installation of communication devices

9) Repair and improvement of ventilation and lighting

Potential hazards in the hospital, apart from infectious diseases, there are also other potential hazards that affect the situation and conditions in the hospital, namely accidents (explosion, fire, accidents related to electrical installations, and other sources of injury), radiation, hazardous chemicals, anesthetic gases, psychosocial disorders, and ergonomics. All of these potential hazards are clearly life threatening to the lives of employees at the hospital, patients and visitors in the hospital environment. Hospitals have special characteristics that can increase the chance of an accident.

Corrections and prevention based on the findings of the audit, identification, risk assessment are recommended to top management. Review and improvement by management on an ongoing basis to ensure suitability and effectiveness in achieving OHS policies and objectives. Information is collected from the results of monitoring the workplace and work environment of the hospital, especially those related to potential sources of danger, both from dangerous conditions and dangerous actions, as well as data from the OHS section in the form of OHS implementation reports and their analysis.

Results Audit data and information are discussed in OSH to find causes of problems and formulate corrective and preventive actions. The results of the formulation are submitted in the form of recommendations to the director or top management of the hospital. Recommendations contain input or suggestions that must be followed up from the OSH implementing organization/unit in the hospital as well as alternative choices for improvement.

At the hospital there are several checking or examination programs, namely:

1. Monitoring Standard

a. Fire Protection Inspection

The standards used are regulations and procedures for monitoring the feasibility of fire management facilities such as Light Fire Extinguishers, Smoke and Heat Detectors, Fire Alarms, Hydrants of the NPFA 10 standard used.

b. Medical Check UP

In addition to checking the equipment, the workers at the hospital also had their health checked by the hospital. The health check is carried out in stages, namely: Pre-employment, Medical Check-Up which is carried out before work, usually carried out when new employees enter. When working, Medical Check Up is carried out when already working and carried out according to schedule. Post-employment Medical Check-Up is carried out after the workers have finished working, usually when the workers' contracts have expired.

c. Water Quality Measurement

Measurement of water quality in the hospital is carried out regularly. WWTP water inspection is carried out every day.

Some examples of programs in the Hospital that must be followed up (action) after monitoring and evaluation are carried out, namely:

a. Maintenance

Commitment of Leaders or Management as the highest leadership in the Hospital is committed after audits and examinations, the results will be used as material for continuous improvement (continuous improvement)

b. Review and Evaluation

Review as material for the issuance of a new policy from the Leader or Main Director.

c. Procedures and rules

Procedures and rules or SOPs for Occupational Safety and Health in Hospitals must be obeyed and obeyed

d. Implementation

The implementation of the Occupational Safety and Health Management System in the Hospital is a system that exists in the Hospital, including the following:

1) Purchasing: Purchasing is a system that exists in the Hospital 2) Safety at work based on OHSMS: Work safety implemented in the Hospital is the use of PPE, installing alarms and emergency codes, sorting waste, and others.

3) Standard Monitoring: must be carried out properly and regularly. The standards used must comply with existing regulations.

4) Reporting and Correction of deficiencies: Reporting is carried out in accordance with the reporting system that has been made by the Hospital.

5) Material management and its movement: Material management is implemented with MSDS documents in the Hospital. The materials used are grouped and placed in a closed room and the optimal temperature is maintained.



6) OHSMS Audit: Audits must be carried out both internally and externally at the Hospital in accordance with Government Regulation no. 50 of 2012 because in practice it can be carried out once a year by internal and external auditors.

Basically monitoring and evaluating OSH in a hospital is one of the hospital's OSH management functions in the form of a step taken to identify and assess the extent to which the hospital's OSH activities are running effectively in accordance with the goals and objectives set by the organization.

Monitoring and Evaluation of the Health of the Work Environment Implementation of guidance and supervision of the work environment is carried out by the hospital. This implementation includes checking all work areas that have risks of physical, chemical or biological hazards and other hazards. Supervision is also carried out in each risky work area such as signs or symbols or safe signs placed in areas at risk of incidents.

### Research purposes

Based on the background previously described, the problems to be studied in this study are as follows:

1. Has the implementation of OHSMS in the hospital environment been implemented in accordance with Government Regulation of the Republic of Indonesia No. 50, 2012 concerning the Implementation of Occupational Health and Safety Management Systems?; 2. What factors influence the implementation of OHSMS in Hospitals; .3. What are the obstacles and constraints in implementing OHSMS in Hospitals

## II. LITERATURE REVIEWS

as labor-intensive, skilled, Hospitals capital and technology-intensive industries have potential hazards and risk complexities that can increase work accidents or occupational diseases. To overcome this, hospitals must implement occupational safety and health that are integrated into the hospital management system. Occupational Health and Safety is an effort to protect workers and other people who enter the workplace from the danger of accidents. The goal of OSH is to prevent, reduce, even eliminate the risk of occupational disease and accidents and improve worker health so that work productivity increases. In the Law of the Republic of Indonesia Number 36 of 2009 concerning health, occupational health efforts are aimed at protecting workers so that they live healthy lives and are free from health problems and bad influences caused by workers. (Mitrison, 2010). In the context of managing and controlling risks related to Occupational Health and Safety in Hospitals in order to create Hospital conditions that are healthy, safe, secure and comfortable for Hospital human resources patients, patient companions, visitors and the Hospital environment, the Hospital Hospitals need to implement an Occupational Health and Safety Management System in Hospitals (OHSMS). The current globalization of trade has an impact on very tight competition in all aspects, especially employment, one of which requires protection of occupational safety and health. To increase the effectiveness of occupational safety and health protection, it is inseparable from the implementation of planned, measurable, structured and integrated occupational safety and health through the OHSMS

to ensure the creation of an occupational safety and health system in the workplace by involving elements of management, workers/labourers, and/or trade unions/labor unions in the context of preventing and reducing work accidents and workrelated diseases as well as creating comfortable, efficient and productive workplaces. The application of occupational safety and health through OHSMS Hospital has developed in various countries both through guidelines and standards. In order to provide uniformity for each company in implementing OHSMS Hospital so that protection of occupational safety and health for workers, increased efficiency and company productivity can be realized, it is necessary to stipulate a Government Regulation that regulates the implementation of OHSMS Hospital (President of the Republic of Indonesia, 2012) OHSMS Hospital is part of the overall hospital management system in order to control risks related to work activities in order to create a safe, efficient and productive workplace. OHSMS Hospital is applied for risk control related to work activities. (Ministry of Health of the Republic of Indonesia, 2012)

OHSMS Hospital such as OSH policies, planning, implementation, monitoring and evaluation of OSH, as well as management reviews according to the rules in PP. 50 of 2012. (President of the Republic of Indonesia, 2012) OHSMS Hospital which is integrated with services aims to achieve patient and hospital safety. (Nasution and Mahyuni, 2020) Furthermore, OHSMS Audit is a systematic and independent examination of the fulfillment of criteria, which has been set to measure the results of an activity that has been planned and implemented in the implementation of OHSMS Hospital. (President of the Republic of Indonesia, 2012)

To prevent accidents and work-related illnesses, it is necessary to carry out OHS management through the application of SMK3RS. (Purnomo et al., 2018) From one of the studies on the implementation of the OHSMS Hospital, it was found that, among other things, the OHS Committee had not been formed because it did not yet have a general K3 expert, in terms of K3 policies and commitments even though it was only verbal, the process of implementing the OHSMS Hospital was already running even though it had not maximum, supporting factors and inhibiting factors, efforts made to reduce obstacles in the OHSMS Hospital implementation process, the impact of OHSMS Hospital implementation, and the desired expectations in implementing OHSMS Hospital From one of the studies, it was concluded that the OSH program has been running well according to laws and regulations, although OSH has not yet become a work culture that will create zero accidents in the work environment, especially in hospitals. (Purnomo et al., 2018)

The application of occupational safety and health through OHSMS has developed in various countries both through guidelines and standards. (Ministry of Health of the Republic of Indonesia, 2012) Facilities and Safety Management, also known as MFK, is one of the Hospital Management Standards (Ismail, 2018). In the MFK there are 24 standards and 104 assessments which can be grouped into six areas, namely: 1. Safety and Security 2. Hazardous and toxic materials (B3) and their waste 3. Disaster Management 4. Fire Protection Systems 5. Medical Equipment 6. Systems Support. Hospitals are



required to manage these six areas in an effort to prevent accidents and harm to patients, visitors and hospital staff. For the implementation of this MFK, hospitals are required to form K3 committees or K3 installations in accordance with Permenkes 66 of 2016 concerning occupational health and safety standards in hospitals, which also mentions the five principles of OHS Management System) including: 1) establishment of policies OHS; 2) OHS planning; 3) implementation of OHS plan; 4) monitoring and evaluation of OHS performance; and 5) review and improvement of OHSMS performance. (Ministry of Health of the Republic of Indonesia, 2012) The implementation of OSH in a hospital must start with a commitment from the top management or director of the hospital as outlined in the form of an OSH policy. This is also stated in concerning Leadership and Planning. Without a strong commitment from the hospital director, good implementation of OHS will be difficult to realize. There are the following steps that can be taken in implementing OSH in a hospital, this step is important because OSH in a hospital can be said to be something new and is still considered not very important, namely:

1. Get commitment from the Hospital Director. The first step in implementing OHS in a hospital is to get a commitment from the hospital director, meaning that the hospital director seriously supports and is involved in the K3 programs that will be implemented.

2. Form a K3 committee. After obtaining a commitment from the hospital director, and one of the forms of this commitment, the director forms a hospital K3 Committee where the chairman of the committee is the director or one level below him. The hospital'sOHScommittee is tasked with making hospital K3 policies and other K3 programs. The establishment of the K3 Committee of the Hospital is accompanied by a director's Decree, there are two types of SK that need to be issued by the director, namely: 1) Decree on the Formation of the K3 Committee Organization, and 2) Decree the on appointment/assignment of all members of the OHS Committee.

3. After the OHS committee is formed, a kick off meeting is held to discuss the draft Hospital OHS Policy which will later be signed by the hospital director. The hospital's OHS policy reflects the OHS commitment of the hospital director to comply with applicable OHS-related laws, commitment to plan and implement OHS to prevent Occupational Accidents and Occupational Diseases for all hospital staff/employees, both permanent and permanent contract, outsourcing or vendor/contractor. The policy is made in written form and signed by the Director.

4. The next step is to disseminate OSH policies to all hospital employees to gain support and involvement from all employees. This socialization involves all management including directors. This is important to do to show the seriousness of all management in implementing OSH in hospitals. Failure to socialize OSH policies to all employees will result in failure in implementing subsequent OSH programs. Socialization can be done in the form of direct communication by the director to all hospital employees, or tiered through the hospital management to the lowest employee level. The socialization did not only read out policy points but also detailed explanations of these points so that all employees could understand them.

5. After the policy socialization has been carried out well, then proceed with planning K3 programs. This step begins with Hazard Identification in the workplace. Because the K3 program is a hazard and risk control program in the workplace, it must start by seeing and identifying (identifying) the hazards and risks in each workplace, because the potential hazards and risks in each place can be different. Hazard identification can be carried out using various techniques or methods, for example by inspection techniques, job safety analysis (JSA) or qualitative risk assessment (HIRA). From the results of the identification of food hazards, control programs for the hazards and risks found are made. In developing an OSH program, targets to be achieved, benchmarks for success (KPI), person in charge, time target and required budget must be determined.

6. The next step is to apply or run the program that has been made. Program implementation is the responsibility of all hospital installations, depending on the type of program that is run in each installation. The K3 Committee is responsible for overseeing, evaluating and providing input on the ongoing K3 program.

7. To ensure consistency in the implementation of the OHS program so that it stays on the set track, it is necessary to carry out periodic monitoring and evaluation (Monev). There are three ways to conduct monitoring and evaluation, namely: 1) Periodic OHS inspection, at least 1 time in 1 month. 2) OHS audit at least 1 time in 1 year 3) OHS committee meeting to discuss ongoing programs or OHS inspection results, at least 1 time in 1 month.

8. The last step and also the key to the success of the OHS program is in following up or continuously improving the findings of the monitoring and evaluation carried out. Findings that are gaps or deficiencies in the implementation of the OHS program must be corrected and followed up on. There are three groups of findings from Monev activities, namely: 1) Potential hazards and risks that have been well controlled must be maintained. 2) Potential hazards and risks that are partially controlled, this must be repaired and completed with controls. 3) Potential hazards and risks that have not been controlled, a control program must be made.

Occupational Health is an effort to maintain the condition of workers physically and mentally and well-being in various jobs through efforts to prevent unhealthy conditions, control risks at work and make adjustments in work for workers, and vice versa workers for each job (International Labor Organization, World Health Organization), in (Soedarto, 2013). The main focus of occupational health is to improve the health condition of every worker so that they are able to work well, create a safe work environment so that at work they are always in healthy conditions and create work organization and work culture (personnel arrangements, managerial systems, training organizing regulations, and the principle of participation) in terms of occupational safety and health so as to create a positive social climate in work and create a pleasant atmosphere which in turn will increase work productivity. Safety is a need for every human being as well as an instinct for all living things, in which several series of efforts are made in creating safe working



conditions or conditions and peaceful conditions for workers, as well as protecting them so they can avoid work-related injuries. (Ramli, 2010). By having OSH, workers are guaranteed protection and security from potential accidents as well as other hazards, both physically, mentally and emotionally for workers, the community, the company and the environment. So that workers get a sense of security at work so that there is an increase in work productivity and work results.

# III. METHODOLOGY

This research is a field research with a descriptive research type that uses a qualitative approach. Descriptive research is a method of research that intends to obtain a description of a condition being observed. Qualitative research is a method that is often used by some people to express a situation and understand the phenomenon of what is being studied, from this approach the results are obtained in the form of written or spoken words from the observed object, from this qualitative approach can be collected through interviews, observation and documentation (Suwarnida, 2016).The method of taking research informants was carried out by purposive sampling, with the research sample being related or related parties and having knowledge of the Application of OHSMS at XYZ Hospital., Informants include: Top Management, Middle management, Low Management, and frontliners (Nurses).

## IV. RESULTS AND DISCUSSION

Results: The implementation of the occupational safety and health program at XYZ Hospital received management support in the form of supportive policies, technical guidelines and SOPs, OHS training and education for hospital human resources, monitoring of workplace environmental health, holding of safety and security services, management, disaster management, fire protection, management of medical equipment and management of support systems. There are also obstacles in implementing the OHS program, namely that there are no functional human resources who carry out the OHS program in full and are still seen as part time jobs, lack of coordination between fields in the OHS committee, and not all employees have received OHS Hospital policy socialization. Conclusion: The implementation of the occupational safety and health program at XYZ Hospital has several deficiencies including written policies and the vision and mission of the OHS program have not been seen at XYZ Hospital, monitoring and improvement of the health status of workers have not been carried out, namely fitness examiners and Posbindu employees, staff there is no occupational safety and health specifically, lack of involvement of OHS Committee members in meetings and coordination.

#### 1. In the aspect of occupational safety and health,

The results of the study that XYZ Hospital, Indonesia already has a work program that is still being updated and adapted to several changes in both management and technical administration with the hospital renovation system. The OHS field work program is prepared by the K3RS core team appointed by top management with a decree appointing the K3RS TEAM, as well as reporting work program plans reported monthly to the top management of XYZ Hospital.

All work programs are focused on improvement, prevention and improvement in order to achieve expectations that are in accordance with the basis of applicable laws and regulations, in this case referring to the regulations of the Minister of Health of the Republic of Indonesia and other relevant regulations related to the OHS Sector.

In the study there were findings of Fire Protection Active (Fire Extinguisher), the height from the bottom of the floor was 15 cm, based on NFPA 10 and Minister of Public Works Kno. 10 and 11 KPTS/M/2000 concerning technical provisions for safeguarding against fire hazards in buildings and the environment, namely the height from the floor is 125 cm. and other protection systems such as Fire Detector will be equipped soon.

#### 2. OHS Policy

The OHS policy is prepared after going through a meeting process with each installation head in the Hospital and consultation with hospital authorities. The process of consulting with authorized officials is by sending policies that have been prepared and work programs that have been planned to authorized officials to request input and suggestions for later corrections and revisions. It's just a shame that the policies that have been prepared have not been communicated to all the workforce in the hospital environment, both internal and external workers, and have been well documented and are also being reviewed gradually in stages to support the applicable regulations.

The policy should be disseminated through OSH training, simulations, demonstrations. There are several special policies such as the use and management of Hazardous and Toxic Materials (B3), Fire Prevention and Control, Hospital Safety and Security and others Hazardous and Toxic (B3), Fire Prevention and Control, Hospital Safety and Security and so on.

## 3. Workforce engagement and consultation

Workforce involvement and consultation in implementing OHS Hospital in hospitals. XYZ Hospital, has been running optimally and in accordance with the Standards of the National Accreditation Committee, but has not yet formed a OHS Advisory Committee and has not been documented for the special OHS hospital unit. As for the things that have been running on the point of involvement and labor consultations include the following;

- a) Consultations regarding changes are always open to every unit at the XYZ Hospital
- b) Meetings have been held but not yet scheduled for all team members to carry out routine agendas
- c) Routinely the Secretary of the PIC OHS Team of the Hospital reports every month and every three months
- d) There is already a group of workers in the sense of health and non-health units, all workers must be responsible for themselves

## 4. Preparedness for emergencies/disasters

In dealing with emergency and disaster response, XYZ Hospital already has an Emergency Procedure which is outlined



in each of its policies and regulations although there needs to be a revision and a plan for updating it. There is a record keeping, action after an emergency occurs, re-checking and updating again periodically. This confirms that XYZ Hospital has implemented one of the clauses in SMK3RS. Researchers also found other findings related to things that had not been implemented by XYZ Hospital regarding the fulfillment of clauses in OHSMS Hospital, among others;

- a) There is no SOP / program procedure for handling emergencies
- b) ERP and special training for ERP organization team members have not yet been formed
- c) An emergency situation simulation with scenarios has not been carried out

# 5. Fire prevention and control

- a) The Fire Extinguisher has been inspected and every month, to check the detector test, it needs to be renewed
- b) Socialization related to the use of Fire Extinguisher as a light fire extinguisher which is Early Warning in nature

This confirms that XYZ Hospital has implemented some of the clauses in OHSMS. Of course, this activity must be carried out in a programmed manner that focuses on strengthening employee knowledge and understanding of how to use fire extinguishers.

### 6. Management of medical equipment from the OHS aspect

Specifically related to the management of medical activities on the KOHSaspect, that the Jakarta XYZ Hospital has carried out equipment calibration every year, Tested by institutions from the Health Facilities Testing Center and/or authorized health facility testing institutions, carried out by experts, each each the unit, Training is carried out by the education and training department, electromedical department and vendors, The results of inspection, testing and maintenance have been documented and this confirms that several clauses have been implemented in OHSMS Hospital. And as for there are some findings that have not been implemented as follows;

1. The program for maintenance of medical devices and nonmedical devices needs to be renewed

Not yet thorough regarding SOP tools need revision / renewal
Not comprehensive regarding preventive maintenance schedules and manual document data to prevent failures, namely by replacing parts, lubricating, cleaning

The need for clear SOPs related to the use of medical facilities and infrastructure. Of course, the OHS aspect of supervising the use of this medical device must be accompanied by training and socialization on the use of the infrastructure.

#### 7. Management of hospital infrastructure

Specifically related to the management of hospital facilities and infrastructure, namely monthly monitoring and evaluation of care for further improvement. There is a Quality Improvement and Patient Safety Unit for data. This illustrates that there is a good management system for hospital facilities and infrastructure. The other findings are as follows;

- a. Additional infrastructure is needed after the renovation of rooms and work units
- b. The implementation system is not fully optimal

- c. The policy needs to be renewed to complete documents in the form of policies, guidelines and guidelines for hospital maintenance, revising the SOP (Standard Operating Procedure) again
- d. There have been changes in infrastructure facilities, both renovations, repairs and additions

Related to the findings above, of course the Top Level Management must prioritize the infrastructure management program with supporting policies related to the procurement of these facilities and infrastructure. This is one of the principles of implementing the OHSMS Hospital which is the guideline for OSH-based hospital management.

#### 8. Hazardous and toxic materials management

Waste management activities that have not been managed properly based on waste management according to the Regulation of the Minister of Environment and Forestry Number 6 of 2021 concerning Procedures and Requirements for the Management of Hazardous and Toxic Material Waste, The findings in the field are as follows;

1) The identification of hazardous and toxic materials (B3) has not yet been carried out, which needs to be completed and updated

2) There are several types of infectious domestic and medical waste whose storage places have not been adjusted, black domestic plastic and yellow plastic medical waste and B3 TPS also separate medical and non-medical B3 waste, even though it has been well documented and has manifestations.

3) There is already an MSDS (Material Safety Data Sheet), although it is not yet centralized and well documented

4) There is already a training program for office boys as medical and domestic waste managers scheduled by the education and training department and carried out with the hospital PPI team, infection control prevention

#### 9. Occupational health services

XYZ Hospital health service activities, researchers found various findings. The findings in the field are as follows;

1) There are no periodic health checks for employees, and employees optimize BPJS insurance provided by the company 2) It has been well implemented, the promotional activities provided include providing additional food for night guard workers and working outside of working days. Provision of vitamanin for nurses in certain units, regular gymnastics once a week every Friday morning.

3) There are preventive measures related to occupational diseases, namely by administering vaccines to employees in vulnerable unit areas such as Influenza, hepatitis and typoid vaccines, especially during the Covid period, all workers are given the covid vaccine.

4) Health Checks are carried out during the recruitment procedure, however Health checks have not been carried out periodically and specifically for all employees.

5) Survey activities for the hospital work environment are carried out by the Kesling Team and the OHS Team. The survey was carried out in special rooms such as the central surgery room, radiology room, ICU, kitchen area, inpatient room, laboratory, WWTP waste disposal. The results of the survey were analyzed and followed up in a work program.



6) Carry out monitoring of the health of personnel in the radiology room by routinely checking exposure levels

7) Efforts have been made for employees who experience illness and injury to immediately receive health services and treatment, but periodic inspections have not been carried out so that analysis of the impact of work on employee health and enforcement of diagnoses cannot be carried out

8) Handling of employees who have accidents while working are immediately given services such as employees who slip, fall, or get injured in the kitchen area.

9) Rehabilitative efforts are contained in the OHS work program, but until now there have been no employees who have had work accidents that need follow-up rehabilitative services 10. The application/implementation of OHSMS at XYZ Hospital can be summarized as follows:

1. Potential OHS hazards in hospitals are exposure to biological and chemical hazards, hazardous and toxic materials, spills of hazardous and toxic chemicals for cleaning services, or reagents from expired and domestic laboratories, physical hazards of equipment such as elevators, generators, antidotes lightning, electricity, building leaks, psychosocial hazards due to workload, ergonomic hazards, namely the worker's seat is not equipped with a shoulder rest and neck angle, noise hazard in the generator engine / equipment area, lighting, visible enough but has never been done thoroughly with evidence of data for measurements using a lux meter, the risk of near miss. The head hit the table against the wall when washing hands and when walking, there were cables scattered that were not neatly crossed when mobilizing in the room, so that some employees tripped over the cables.

2. Control is carried out by the company against sources of hazard and risk in the work area, in accordance with the risk control hierarchy including elimination, substitution, engineering engineering, administrative control and use of personal protective equipment (PPE) / Availability of PPE here is complete and according to standards

3. OHS Hospital planning work program

a) Still being updated with several changes in both management and technical administration with the hospital renovation system in order to achieve success.

b) Implementation of K3RS with clear and measurable targets, by the K3RS core team and reported to top management / Hospital Leaders

4. XYZ Hospital periodic operational monitoring and measurement procedures can have an important impact on OHS and the environment, standard procedures for K3 equipment and the Environment: Inspection procedures (SOPs are available for inspection, test and maintenance inspections and tests are carried out at least once a year), inspection, maintenance / Maintenance and calibration. SOPs are available. 5. Review of the implementation of OHSMS

1) A review has been carried out on the implementation of OHSMS at XYZ Hospital which includes policies, planning, implementation, monitoring and evaluation has been carried out, and has been recorded and documented, carried out according to the time line management. 2) Review the OHSMS assessment on a regular basis to get an increase in the implementation of the SMK3 in the hospital to get better by monitoring / evaluating each program.

6. Emergency or Disaster Procedures / SOPs:

a) Need to be revised and re-documented

Programs and SOPs to prevent and minimize the impact of emergencies / disasters have not been updated or revised, there is no SOP / program procedure for handling emergencies, The ERP Organization team has not been formed, there is no special training for OKD team members, Not yet carried out an emergency simulation with scenarios

7. Medical and non-medical equipment has met service standards, quality requirements, security and safety

a) It is suitable for use and has been routinely calibrated annually and tested by an institution from the Health Facility Testing Center and/or an authorized health facility testing institution

b) Each medical device in the general team coordinates with the medical manager or medical support manager for administrative completeness of AKL, AKD, medical device serial number.

c) Calibration and function tests are carried out continuously, in accordance with the useful life and based on the manufacturer's instructions

d) The results of inspection, testing and maintenance have been documented.

8. Promotive activities which are health improvement and physical abilities and mental (spiritual) conditions of Hospital HR, Medical Check Up (MCU) periodically for workers who are at risk, antigen swabs, vaccine administration, All workers have been vaccinated against the flu, and vaccines certain units at risk include hepatitis vaccine, Occupational health monitoring is carried out including radiology units with radiation hazards

9. Health Services:

1) Promotive efforts provided include providing additional food for night guard workers and work outside of workdays. Provision of vitamanin for nurses in certain units, regular gymnastics once a week every Friday morning.

2) In the era of covid all workers are given the covid vaccine, according to government policy. Another preventive effort is by administering vaccines to employees in vulnerable unit areas such as influenza, hepatitis and typhoid vaccines.

3) Health checks are carried out during the recruitment procedure, health checks have not been carried out periodically, especially for all employees

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