

CHAPTER I

INTRODUCTION

This chapter contains the background of the research, problem formulation, the objectives of the research, research scope, and the outline of the research.

1.1 Background

Occupational health and safety is one of the important issues in this globalization era. Work accidents directly or indirectly can cause losses to the company, such as late completion of work, decreased productivity, and healing costs for employees (Todingan, 2015). The losses incurred are not only material losses for the company but can also cause casualties and suffering for workers who have accidents (Caesario, 2015). Occupational health and safety programs cannot run alone without a good company management system. The implementation of a good and proper Occupational Health and Safety Management System (OHSMS) will minimize the number of work accidents and occupational diseases (Stone, 2007).

Based on data to the International Labor Organization (ILO) 2018, explained that the number of work accidents in the world is 2.78 million workers die every year in the world due to work accidents and work-related diseases, around 2.4 million (86.3 percent) of these deaths. This is due to occupational diseases, while 380,000 (13.7 percent) are due to work accidents that occur. Every year, there are nearly a thousand times more non-fatal work accidents than fatal accidents. Non-fatal accidents are estimated to be experienced by 374 million workers annually, and many of these accidents have very serious consequences for the earning capacity of workers. (ILO,2018)

The number of work accidents in Indonesia is among the highest in the ASEAN region. The Ministry of Manpower and Transmigration recorded that the number of work accidents in Indonesia increasing every year as seen in **Table 1.1**. That means the workplace has a high risk of developing an injury or illness while on the job. Keeping workers safe will improve employee morale and when employees are happy with their job, they will be more productive.

Table 1.1 Number of Work Accidents

Year	Number of Work Accident
2009	96.314
2010	98.712
2011	99.491
2012	103.074
2013	103.235
2014	105.383
2015	110.285
2016	101.367
2017	123.041
2018	173.105
2019	114.235
2020	177.161

Source: BPJS Ketenagakerjaan, 2020

Therefore to reduce the risk of work accidents and increase profits, the company or workplace can implement Occupational Health And Safety Management based on ISO 45001:2018. ISO 45001:2018 is an international standard in the world that establishes requirements or guidelines for an Occupational Health And Safety Management System (OHS-MS). ISO 45001:2018 can be said as a milestone. This standard provides a strong and effective framework for reducing the workplace and creating a safe and healthy workplace for workers. With its focus on strategic risk management and looking after the mental as well as physical health of workers, it is clear that ISO 45001 provides an excellent framework to support hospitals and organizations within the healthcare sector.

Hospital is one of the places that must implement an occupational health and safety management system (OHSMS). Occupational health and safety is an

effort to provide safety guarantees and improve the health status of workers by preventing accidents and occupational diseases through efforts to control hazards in the workplace, health promotion, treatment, and rehabilitation. It is important to implement an occupational health and safety management system, considering that hospital activities may have physical, chemical, biological, ergonomic, and psychosocial hazards that can endanger the health and safety of workers, patients, visitors, and the community in the hospital environment (Stanhope, 2016).

Hospitals have potential hazards caused by various factors, such as physical, chemical, biological, ergonomic, psychosocial, mechanical, electrical, and waste factors (PMK RI Number 66 of 2016). The potential hazards of the various factors mentioned above can result in explosions, fires, accidents related to radiation, hazardous chemicals, disease transmission, and so on. The potential hazard of workers in hospitals is greater than that of workers in general. The potential dangers that exist in hospitals not only threaten the lives of workers in the hospital but also threaten patients, visitors, and the environment around the hospital. There are several types of work accidents in the hospital that can be seen in **Table 1.2**.

Table 1.2 Type of Accidents at Hospital

No.	Type of Accidents at Hospital
1.	Fire and explosion hazards from flammable or explosive substances.
2.	Toxic, corrosive, and caustic materials.
3.	Radiation hazard.
4.	Burns.
5.	Shock due to electric current.
6.	Cuts from broken glassware and sharp objects.
7.	The danger of infection from germs, viruses, or parasites.

According to the World Health Organization (WHO) that of the 35 million health workers in the world, 3 million workers were exposed to blood pathogens (2

million were exposed to the HBV virus, 0.9 million were exposed to the HBC virus and 170,000 were exposed to the HIV/AIDS virus). AIDS). Every year in the USA it is reported that 5,000 health workers are infected with Hepatitis B, 47 HIV-positive health workers, and 600,000 – 1,000,000 health workers are exposed to needling (estimated more than 60% are not reported). Therefore, it is necessary to implement Occupational Health and Safety in hospitals to prevent these potential hazards (Ibrahim, 2017).

In general, every hospital must be able to provide occupational health services, manage hazardous and toxic materials, prevent and control fires and disasters, manage hospital infrastructure, and manage hospital infrastructure and facilities (PMK RI Number 66 of 2016), Teaching Hospitals of Universitas Andalas has carried out these four main things to the fullest. The K3 team has carried out health checks and provided immunizations to workers. This hospital has treated liquid waste properly and has separated infectious and non-infectious solid waste. The K3RS team has procured fire extinguishers, evacuation routes, safe gathering points, and maps of evacuation routes and safe gathering points.



Figure 1.1 Teaching Hospital of Universitas Andalas

Teaching Hospital of Universitas Andalas is a University Education Hospital under the management of Andalas University. The hospital is located in

the Unand Limau Manis campus complex, Padang City, West Sumatra. This hospital was built with 200 beds and is facilitated with quite complete facilities and infrastructure. The facilities in this hospital are very complete, with superior programs on malignancy and gastrointestinal diseases. Services include outpatient services, inpatient services, operating room services, emergency room services, pharmacy installations, referral patient services, ICU services, ambulances, supporting services (radiology, laboratory, and nutrition), and equipped with very modern radiotherapy facilities.

The general objective of the Teaching Hospital of Universitas Andalas is to become a university hospital that is able to provide quality, professional and scientific services as well as to become a center for health education and research that is able to support the service system. On the other hand, the designation of the Teaching Hospital of Universitas Andalas as a teaching hospital creates a paradigm that the function of education interferes with hospital services. This can also be a factor that causes the potential for accidents to occur. Therefore, the implementation of a proper OHS management system is very much needed by this hospital.

According to the interview with the secretary of occupational health and safety at the Teaching Hospital of Universitas Andalas, several accidents occurred during this hospital is running. The example of an accident is a short circuit when a nurse plugged a water heater, which caused a burning fire in that area, and the other accident is when a nurse gets infected by the coronavirus because they are not cleaning properly. But these accidents are not well documented by the Teaching Hospital of Universitas Andalas.

As a relatively new hospital, the Teaching Hospital of Universitas Andalas does not yet have an OHS management system certification which is one of the efforts to create a safe and comfortable work environment for its workers and minimize work-related accident potential. The system or accreditation that has been implemented by this hospital is the National Hospital Accreditation Standard obtained from the Hospital Accreditation Committee as an independent

accreditation implementing agency from Indonesia. However, with the addition of the implementation of ISO 45001 Certification in this hospital, it will increase the competitiveness of the hospital and the hospital's OHS management system itself. Therefore, the Teaching Hospital of Universitas Andalas needs to prepare for the implementation of OHS-MS in accordance with the ISO 45001:2018 Accreditation standard as an effort to control accident risk in the work environment.

1.2 Problem Statement

Based on the background, it is necessary to evaluate the implementation of ISO 45001:2018 at the Teaching Hospital of Universitas Andalas and how the Occupational Health and Safety Management System at the Teaching Hospital of Universitas Andalas based on ISO 45001:2018 clauses?

1.3 Research Objectives

Based on the formulation of the problem, the objectives of this research are as follows:

1. To evaluate the implementation of the Occupational Safety and Health and Management System (OHS-SM) based on ISO 45001:2018 in the Teaching Hospital of Universitas Andalas.
2. To develop recommendations to improve the Occupational Safety and Health and Management System (OHS-SM) based on ISO 45001:2018 clauses as an effort to prevent work accidents at the Teaching Hospital of Universitas Andalas.

1.4 Research Scopes

The scope of this research is focusing on the Occupational Safety and Health and Management System (OHS-MS) at the Teaching Hospital of Universitas Andalas.

1.5 Outline of research

The outline of this final project consists of five chapters with the systematic as follows:

CHAPTER 1 INTRODUCTION

This chapter introduces the subject to be discussed that contains background problem formulation, objectives, scope, and outline of the research.

CHAPTER 2 LITERATURE REVIEW

This chapter contains provides an overview of all the theoretical basis related to the subject of the final project. This chapter defines the Occupational Safety and Health and Management System (OHS-SM) and ISO 45001:2018

CHAPTER 3 RESEARCH METHODOLOGY

This chapter discusses the research methodology that is used in this final project. Research methodology describes the systematic step to solve the problem of this research, from the beginning until the end of the study.

CHAPTER 4 RESULT AND DISCUSSION

Results and discussion will be presented and analyzed the data collected.

CHAPTER 5 CONCLUSION AND SUGGESTION

This chapter contains the conclusion of the research and the suggestion for further research.

