

CHAPTER I

INTRODUCTION

In this chapter will be discussed the background of the research, problem formulation, the objectives of the research, research scope and the outline of the research.

1.1 Background

Human beings are social creatures that have every day activity especially work. In order to keep the activity running then the human must have perfect health. Health is a prosperous state of body, soul, and social that allows people to live socially, economically, and socially productive lives. According to the Constitution Law number 36 year 2009 about Health article 1 paragraph 1 mentioned that health is a healthy state, both physically, mentally, spritual and social which enable each person to live socially and economically productive lives and paragraph 2 mentioned that resources in the field of health are all forms of funds, energy, health supplies, pharmaceutical preparations and medical devices and health services and technology used to conduct health efforts Government, local governments, and/or communities.

Hospitals are an important part of the health system. The hospital provides complex curative services, emergency services, knowledge and technology centers and serves as a referral center. Hospitals should always improve the quality of service in accordance with customer's expectation to improve service user satisfaction. According to Law No. 44 year 2009 about hospitals, article 29 letter B said that the hospital is obliged to provide health services that are safe, quality, anti-discrimination and effective by prioritizing the interests of patients in accordance with the standards Hospital services, then in article 40 paragraph 1 mentioned that in the effort to improve the quality of hospital services must be done periodically at least three years. From the legislation above the hospital accreditation is important

to do with the reason that the quality and quality is integrated and cultivated into the service system in the hospital.

Rumah Sakit Ibu dan Anak (RSIA) Mutiara Bunda is one of the special hospitals in the North Padang area. At first RSIA Mutiara Bunda tangible from midwives private practice in 1986, with very limited facilities. But as time goes by and demands of facilities to the increasing number of patients, the year 2003 began to be developed into the maternity house located in a shop that is Jl. S. Parman No. 136 B. In the year 2007, Maternity house Mutiara Bunda again tries to develop himself and move to a location that further supports the needs and demands of community service is at Jl. S. Parman No. 142 (until now). Total types of medicines sold by the hospital is 247 types of medicines, with an expiration period of 2 until 4 years. The needed service also increasingly demands specialisation and customization continuously. This adjustment is not only to the dissemination and availability of health facilities, but also to the service that meets the integrity and quality standards of service is high, because these demands the idea of the establishment of Rumah Sakit Ibu dan Anak Mutiara Bunda in 2013 and now has developed into a mother and child hospital. Mutiara Bunda Hospital has always emphasized the principle of "hospitality" as well as the right skills, fast, accurate, reliable, and professional at an affordable price but still prioritize consumer satisfaction. Even to give the best to consumer satisfaction, RSIA Mutiara Bunda always pay attention to the performance as well as the system in the hospital. From hospital management, to medical and non medical feasibility checking of devices.

Health efforts are any activity to nurture and improve health, aiming to realize the optimal degree of health for the community. Health measures are organized with a maintenance approach, health enhancement (promotive), prevention of diseases (preventive), healing of the disease (curative) and recovery of Health (rehabilitative), which is carried out thoroughly, integrated and sustainable. The concept of the unity of health efforts is a guideline and handbook for all health facilities in Indonesia including hospitals (Depkes, 2004). Hospital Pharmacy (FRS) is one of the units in the hospital that organizes health efforts by

providing quality healthcare services. It is made clear in the Decree of the Minister of Health NO. 1197/MENKES/SK/X/2004 that is an integral part of the hospital health care system that is oriented to the patient's services, the provision of quality medicines, including clinical pharmacy services that are affordable for all walks of life (Depkes, 2004). Pharmaceutical services are supporting services as well as a major revenue center. That is to say that more than 90% of health care services in hospitals use pharmaceutical supplies (medicines, chemicals, radiology materials, medical equipment consumables, medical equipment and medicine gases), and 50% of all hospital income comes from the management of pharmaceutical supplies. For that, if the pharmaceutical supply problem is not managed carefully and responsibly then it can be predicted that the hospital's income will suffer decline (Suciati, 2006).

Basically, the medicine plays a very important role in health care. The handling and prevention of various diseases can not be removed from the therapeutic action with medicine or pharmacotherapy. Medicine management is how to manage the stages of the activities in order to run well and fill each other so that the objectives of effective and efficient medicine management so that the medicines needed by the doctor always Available at all times required in sufficient quantities and quality guaranteed to support quality services (Anief, 2003).

The storage phase is part of medicine management to be very important in maintaining the quality of medicine, avoiding irresponsible use, maintaining inventory continuity, facilitating search and supervision, optimizing supplies, providing information on future medicine needs, as well as reducing the risk of damage and loss (Aditama, 2003). Incorrect or inefficient storage makes an undetectable expired medicine can make a hospital loss. Therefore, in the selection of storage systems must be selected and adjusted to the existing conditions so that the medicine service can be implemented appropriately and the results. Portions of the pharmacist's workload and pharmacist assistants are used for medicine storage. In hospitals, pharmacists in the practice of medicine storage clinics have a portion of 55% (Aditama, 2003). Given the enormous impact of the management of medicine storage and not much specific research on the management of medicine

storage, it is encouraging us to conduct research to evaluate the management of medicine storage in installation Pharmacy of Mutiara Bunda Hospital.

According to an interview with the pharmacy installation staff in the hospital, there is no policy to manage the hospital needed inventory in this hospital. The number of bookings for subsequent bookings is only by using the estimate, if the remaining medicines are a little. The booking time is based on the assumption of installation staff, the absence of specific calculations related to it. Because of this the hospital is running out of many types of medicine stocks, so that the hospital can not fulfill the demands or needs of patients. The patients were unable to receive the medicine on that day, because the necessary medicines were depleted. So that it affects the period of obtaining the necessary medicines most of the medicine is delayed. The number of delayed patients to get the medicine increases each month as can be seen in **Picture 1.1**.

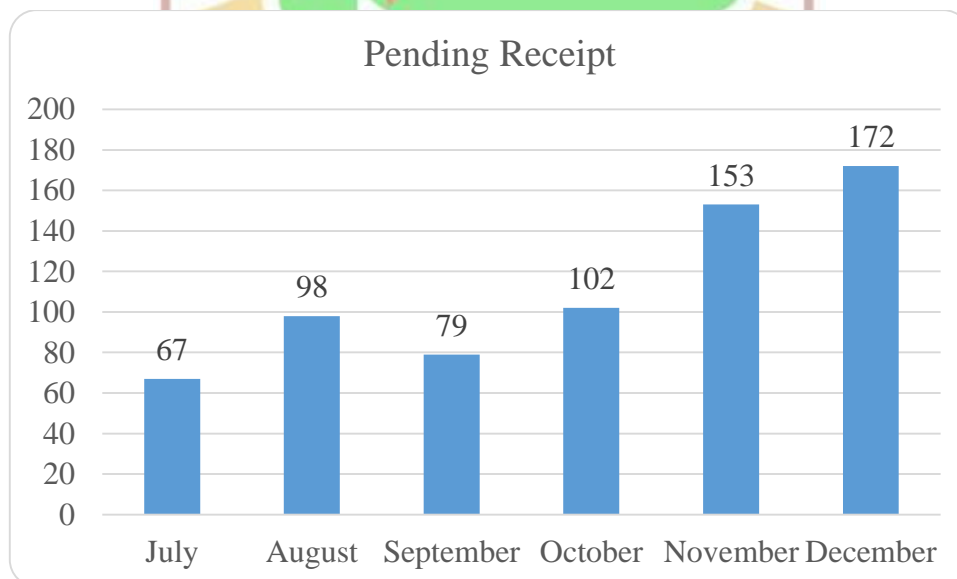


Figure 1.1 Pending Receipt

Based on **Figure 1.1** can be seen that the number of delayed patients get medicine from July until December is increasing, but only describes the overall amount of the medicine, not for the category of medicine needed by the patient. Pending occurs because the requested medicine is not available in stock or is not enough to be given to the patient and there is a delay in the delivery of the medicine

from the supplier, because inadequate supply management of the medicine is applied to the hospital. The risks will differ depending on the category of medicine interest required.

Hospitals should be able to reduce the number of receipt patient for the next month, but the hospital has not been able to do so. If the hospital has a good supply system management policy then, the number of patient receipt will not increase every month. It is also supported by the ordering data made by the hospital. There are an ordering amoxicillin and Asam Mefenamat medicine that can be seen in **Figure 1.2** and **Figure 1.3**.

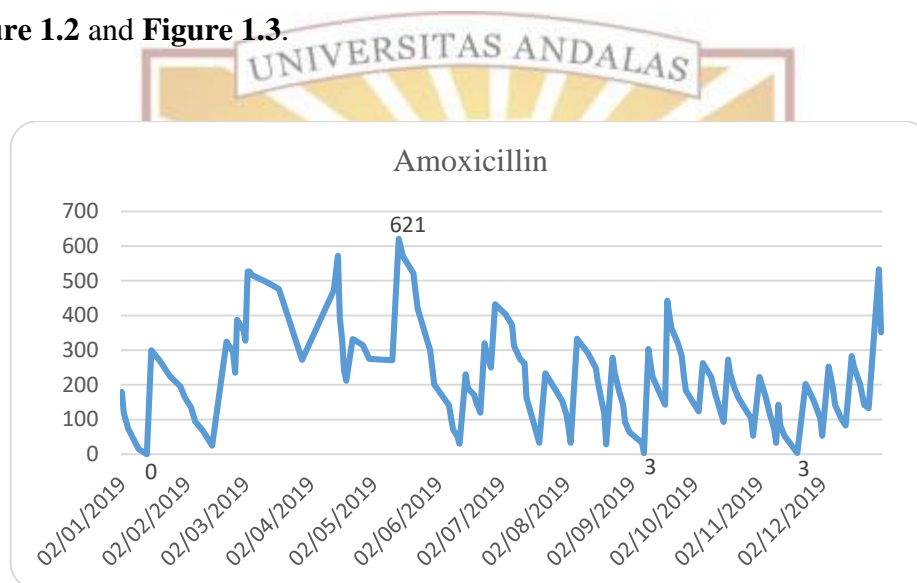


Figure 1.2 Ordering Amoxicillin

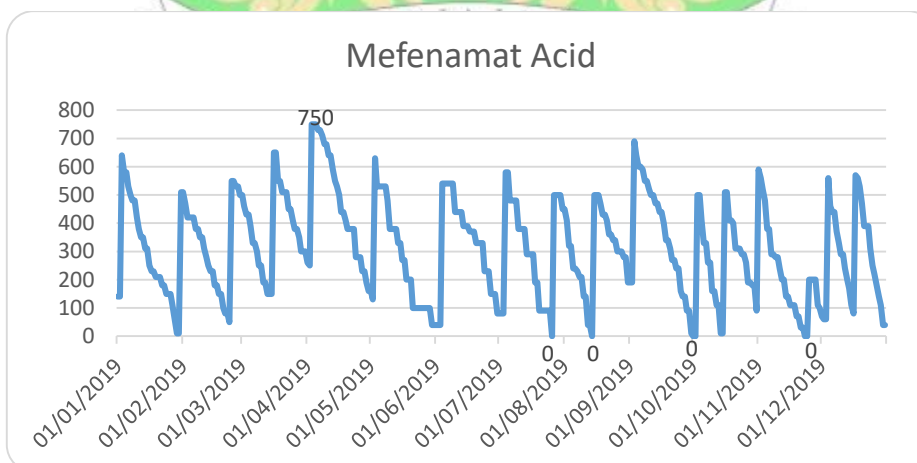


Figure 1.3 Ordering Mefenamat Acid

Based on the figure above, this is the inventory from January until December 2019. The most inventory reaches 621 units and the least is 0, and there are 24 orders per year made for **Figure 1.2**. Then the most inventory reaches 750 units and the least is 0, and there are 17 orders per year made for **Figure 1.3**. We can conclude that the medication ordered by the hospital did not have a good inventory of regulations, so there is a stock out on the medication needed. Based on an interview with the head of hospital pharmacy installation, when the remaining medicine is 20% of the amount ordered, a reorder will be made for the medicine. In the hospital uses lost order if there is a stock out when a patient wants to buy the medicine, so this will harm the hospital.

Based on current conditions, we can conclude that Mutiara Bunda hospital does not have a proper inventory management system and has many adverse effects for patients and hospitals. Then there is no analysis and evaluation of the inventory management system because it does not yet have a policy. Inventory management at pharmaceutical installations at Mutiara Bunda Hospital has complex situations related to patient safety, service quality and financial aspects and needs to be resolved immediately so that they can achieve their goals. To resolve the important issues that were issued, it is important to review inventory management and propose inventory policies to deal with this problem and make calculations to solve this problem.

1.2 Problem Formulation

Based on the background above, the problem is Mutiara Bunda Hospital did not have an appropriate ordering system in their pharmacy installation system that cause out of stock condition in hospital needs. This condition can affect to the performance of Mutiara Bunda Hospital itself both in financial aspect and customer satisfaction. This problem could be solved by proposing policy of medication inventory system in pharmacy inventory management.

The problem formulation in this research is how to design a propose medication inventory control policy that can be applied in the hospital to reduce the stockout condition. This research will be focus on the months in 2019 because in that time Mutiara Bunda Hospital has the largest quantity of receipt pending.

1.3 Research Objective

The objective of this research is to propose medicine inventory control policy that can be applied in the hospital to control the inventory level, so it can minimize the stockout medicine and maintain the quality of service level in Mutiara Bunda Hospital.

1.4 Research Scope and Assumption

In this sub chapter will describes about scope and assumption of research.

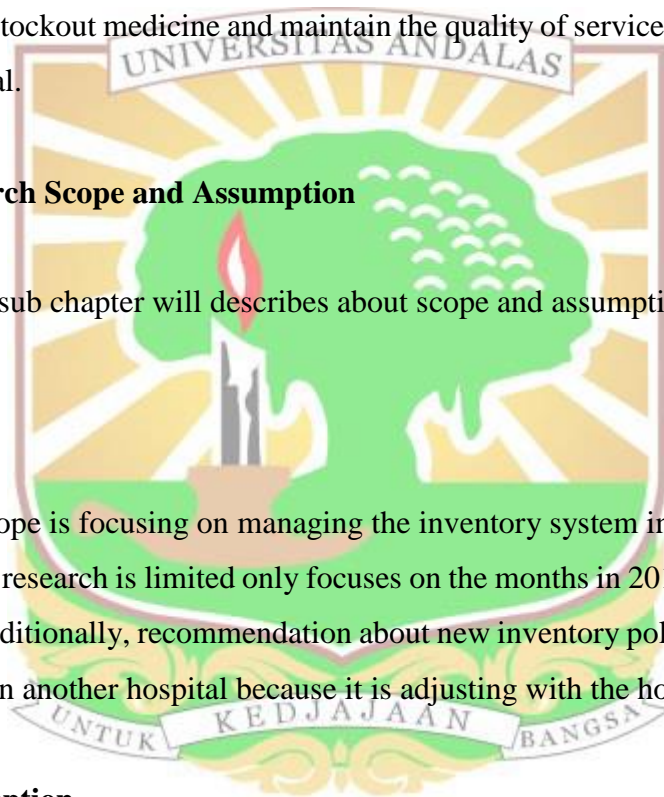
1.4.1 Scope

The scope is focusing on managing the inventory system in Mutiara Bunda Hospital. This research is limited only focuses on the months in 2019, January until December. Additionally, recommendation about new inventory policy might not be implemented in another hospital because it is adjusting with the hospital itself.

1.4.2 Assumption

There are 3 assumptions in this final project:

1. Daily demand is independent
2. Standard deviation of daily demand is constant
3. Daily demand is normally distributed



1.5 Outline of Research

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

CHAPTER I INTRODUCTION

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

CHAPTER II LITERATURE REVIEW

Literature review provides an overview of all the theoretical basis that related to the subject of final project. This chapter defines the inventory such as definition, types and function, inventory control and economic order quantity

CHAPTER III RESEARCH METHODOLOGY

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

CHAPTER IV RESULT AND DISCUSSION

This chapter consists of result and discussion. Result explains about collecting the data and determine the solution. Discussions explain the analysis of the result.

CHAPTER V CONCLUSION AND RECOMMENDATION

This chapter consist of two sub-chapter. There are the conclusion of the research and the recommendation for the next research