

CHAPTER I

INTRODUCTION

1.1. Background of the Research

Hypertension is a state of someone is blood pressure (BP) which is above the normal range or optimal, i.e. 140 mmHg for systolic and 90 mmHg for diastolic for recurring inspections (Indonesian Cardiovascular Specialist Association, 2015). The disease is categorized as the silent killer because its sufferers do not know that they were suffering from hypertension before they promptly got medical check. Hypertension occurs in a prolonged period and continuously triggers a stroke, heart attack, heart failure, and the leading cause of chronic kidney disease, so to achieve optimal clinical benefits, they have to reduce the blood pressure with the right therapy (AHA, 2014).

According to data from the World Health Organization (WHO) (2013), the data show 972 million people or 26.4% of people suffer from hypertension, the number of patients increases 29.2% in 2025. Most diseases in the elderly based on the Basic Health Research 2018 are hypertension, with a prevalence of 55.2% at the age of 55-64 years, 63.2% at the age of 65-74 years, and 69.5% at the age of ≥ 75 years (Ministry of Health 2018). According to the Basic Health Research data in East Java Province, the prevalence of hypertension reached 36%, and the prevalence of hypertension in the city of Madiun reached 11.71% (Ministry of Health, 2016).

Hospital X is the Islamic hospital to provide optimal health services because the hospital become a primary choice of community in Madiun and surrounding areas by providing health services focus on Islamic service and patient safety and quality. One of the diseases with the highest prevalence suffered by elderly patients in hospital X was the hypertension prevalence in 2017 which was 8.97%. In 2018, the prevalence of hypertension was 186 patients in the inpatient and outpatients was 78 patient so the elderly patients needed special treatment to get useful and safe therapy.

Hypertension in elderly has some specificity, usually accompanied by more severe risk factors because the pathological condition is weakened. It is often followed by another disease which affects the handling of hypertension such as drug dosages, drug selection, side effects or complication. Elderly treatment of advanced hypertension is not treated to the maximum (reaching a target of less than 150/90 mmHg) because of the fear that the treatment side effects will outweigh the benefits. Besides, some factors influence the response of elderly patients to antihypertensive therapies such as atherosclerosis, cardiovascular changes due to degenerative processes, and decreased baroreflex responses (Suhardjono, 2014).

:Allah said in surah As-Syu'ara ayat 80

وَإِذَا مَرَضْتُ فَهُوَ يَشْفِينِ

Which means: *“And when I get sick, He heals me.”*

We as Muslims should trust that healing comes from Allah while the presence of medical personnel is healing as an intermediary because Allah created everything. If Allah will not heal, the recovery will not happen. We always have to pray and strive to seek health because Allah created diseases unless He also created an antidote.

Treatment of hypertension generally uses groups of drugs such as diuretics, β -blocker, Angiotensin Converting Enzyme Inhibitors (ACEI), Angiotensin Receptor Inhibitors (ARBs), and Calcium Channel Blocker (CCB). There is an alternative agent used to increase the effect of blood pressure reduction in patients who receive first-line therapy to reduce the risk of cardiovascular complications (JNC VIII, 2014).

The study was conducted to find out antihypertensive treatment therapy in geriatric patients because they have a weak physiological condition and susceptible disease that can cause multipathology. Moreover, the use of the drug must be considered as it can cause undesirable effects in long run.

1.2. Formulation of the Problem

Based on the background, there are formulations of the problem as follows:

1. How is the accuracy of indication of oral antihypertensive drugs for hospitalized geriatric patients in the period of July to December 2018 according to the Eight Joint National Committee (JNC VIII) 2014?
2. How is drugs accuracy of oral antihypertensive drugs for hospitalized geriatric patients in the period of July to December 2018 according to the Eight Joint National Committee (JNC VIII) 2014?
3. How is the dose accuracy of oral antihypertensive drugs for hospitalized geriatric patients in the period of July to December 2018 according to the Eight Joint National Committee (JNC VIII) 2014?

1.3. Objective of the Research

The research objectives are as follows:

1. To know the accuracy of indication of oral antihypertensive drugs for hospitalized geriatric patients in the period of July to December 2018 according to the Eight Joint National Committee (JNC VIII) 2014.
2. To know drugs accuracy of oral antihypertensive drugs for hospitalized geriatric patients in the period of July to December 2018 according to the Eight Joint National Committee (JNC VIII) 2014.
3. To know dose accuracy of oral antihypertensive drugs for hospitalized geriatric patients in the period of July to December 2018 according to the Eight Joint National Committee (JNC VIII) 2014.

1.4. Benefits of the Research

1.4.1. Theoretical Benefits

The study was conducted to determine the therapeutic evaluation of using oral antihypertensive drugs in geriatric hospitalized patients of hospital X in the period July-December 2018, which were reviewed from the right indication, right drug, and the right dose.

1.4.2. Practical Benefits

The research was expected to be useful as a reference source for further research related to improving pharmaceutical care for geriatric hypertensive patients, so they get the right health services and improve the pharmacist's image in choosing the most effective drugs for patients, from the right indication, medication, and dosage.