

CHAPTER 1

INTRODUCTION

1.1 Background

Globally, cardiovascular disease is the number one cause of death and is projected to remain so. Cardiovascular disease includes coronary heart disease, cerebrovascular disease, elevated blood pressure, peripheral artery disease, rheumatic heart disease, congenital heart disease, and heart failure. More than 80% of deaths from cardiovascular disease occur in low- to middle-income countries. Low economic status increases exposure to risk factors and susceptibility to cardiovascular disease (Efrida W & Nur, 2016)

Heart failure is a complex syndrome as a result of abnormalities heart structurally and functionally that interfere with ability the heart as a pump to support the physiological circulation. Syndrome from failure The heart is characterized by symptoms such as shortness of breath and fatigue, and signs such as fluid retention. (National Collaborating Centre for Chronic Conditions Chronic Heart Failure, 2010)

According to Sedyawan revealed, men are more at risk of heart attack than women. It is influenced by hormonal factor of a woman. Before menopausal women, a lot of hormone estrogen production. It's blood vessels flexible, in the study mentioned that women 10 years slower heart attack than men. However, after menopause, the risk of a woman having a heart attack is similar to that of a male (Kompas, 2013). The main causes of cardiovascular disease are smoking, poor physical activity, and an unhealthy diet. Smoking, an unhealthy diet, and less physical activity increase the risk of a heart attack (Efrida W & Nur 2016)

In the world, 17.5 million people (31%) of the 58 million deaths in the world are caused by heart disease (WHO, 2016). Of all the figures, the Asian continent occupied the highest place due to the death of heart disease with the number 712.1 thousand inhabitants. While in Southeast Asia, the Philippines was ranked first due to the death of heart disease with the number of people with 376.9 thousand inhabitants. Indonesia ranks second in Southeast Asia with 371.0 thousand inhabitants (WHO, 2014). Based on all data collected from WHO, by 2015 it is estimated that deaths from heart disease will increase to 20 million. It will continue to increase until 2030, an estimated 23.6 million people will die of heart disease (WHO, 2015).

According to (The National Institute of Health Research and Development, Ministry of Health, Republic of Indonesia, 2013, p. 127), the prevalence of heart failure in Indonesia which has been diagnosed by doctor is 0,13%, while for that with heart failure has been diagnosed by doctor plus that without the doctor's diagnosis but there are symptoms of heart failure detected, the prevalence is 0,3%.

In Kalimantan Selatan, the prevalence of heart failure which has been diagnosed by doctor is 0,06%, while for that with heart failure has been diagnosed plus that without the doctor's diagnosis but there are symptoms of heart failure detected, the prevalence is 0,3%. it is necessary to control heart disease and blood vessels on an ongoing basis. Heart failure is the final condition of heart disease and chronic blood vessels such as hypertension, diabetes mellitus, arrhythmia, myocardial infarction and others. (The National Institute of Health Research and Development, Ministry of Health, Republic of Indonesia, 2013)

Drug therapy for the condition of heart failure is focused on the final component of the syndrome, congestion and myocardial dysfunction (heart failure), with treatment strategies preferred for diuretic and cardiac glycosides

(Goodman & Gilman, 2011). In addition to the symptoms of heart failure, the underlying factors and precipitation factors also need to be treated (Aaronson & Ward, 2010).

Diuretics reduce the accumulation of fluids by increasing the excretion of salt and water from the kidneys, so that preload, pulmonary congestion, and systemic edema may be reduced (Aaronson & Ward, 2010). The use of diuretics quickly eliminates shortness of breath and increases the ability to perform physical activities (Setiawati, 2012).

Angiotensin-converting enzyme inhibitor (ACEI), recommended for all patients with systolic heart failure (LVEF) <40%), with mild, moderate or severe symptoms; unless there is contraindication (Guidelines for the prevention, detection and management of chronic heart failure in Australia, 2011). ACEI can extend life expectancy, and improve hemodynamic parameters. Angiotensin II Receptor Blocker (ARBs) is used as an alternative in patients who can not tolerate ACEI. β -blockers may be added in gradually increased doses. Digoxin can be used to support heart function and reduce symptoms (Aaronson & Ward, 2010)

According to (Hidajat, 2013), the prevalence of heart failure in Banjarmasin which has been diagnosed by doctor is 0,21%, while for that with heart failure has been diagnosed plus that without the doctor's diagnosis but there are symptoms of heart failure detected, the prevalence is 0,4%.

Ulin General Hospital Banjarmasin is a Class A hospital designated as the highest referrals or as a central hospital, so coverage of Ulin General Hospital itself becomes quite extensive namely South Kalimantan. Ulin General Hospital Banjarmasin is also a referral hospital in South Kalimantan, Central Kalimantan, East Kalimantan because it has complete equipment and adequate

facilities. So that became a reference point one of them is a patient with cardiovascular problems.

According to (Education and Research Field of Ulin General Hospital, 2013-2015), in 2013, the number of heart failure cases in Alamanda (Cardiology) Ward is 350 (52,7%) of 664 existing cases; in 2014, there are 501 (42,5%) cases among 1180 existing cases; and in 2015. From year to years, heart failure has become the most common cases among others. The number of heart failure cases in Alamanda (Cardiology) Ward from January to May 2018 there are 205 patients who have been diagnosed with heart failure. This is obvious now that heart failure, especially in Kalimantan Selatan, has been a serious problem and so that needs a special treatment from various parties.

The author raised cases of heart failure is due to see from the prevalence of patients with heart failure is high enough. Heart failure is also needed by giving support and nursing care to patient of heart failure. Although heart failure is a continuation of other diseases but this disease often requires hospital re-treatment and often it becomes a cause of death. Nursing care and nursing actions performed should be precise, starting as simple as giving health education to patients with heart failure about healthy lifestyle. This is the reason why the author has chosen Ulin General Hospital, as the biggest hospital in Kalimantan Selatan to become the place of practice. The author chose client Mr. M as the object of nursing care.

1.2 Purpose

1.2.1 General Purpose

General purpose of this scientific writing is to make a comprehensive nursing care as well as the report toward the patient Mr. M with heart failure.

1.2.2 Specific Purpose

- 1.2.2.1 To assess the bio-psycho-socio-cultural and spiritual need of client with heart failure.
- 1.2.2.2 To formulate the nursing diagnoses according to the assessment.
- 1.2.2.3 To manage the nursing interventions toward the patient regarding nursing diagnoses.
- 1.2.2.4 To implement the nursing interventions regarding the client's need by directly observing the client's condition.
- 1.2.2.5 To regularly evaluate the outcome of the implementation.
- 1.2.2.6 To document all the nursing process as well as the theoretical background of heart failure.

1.3 Benefit

1.3.1 For Author

This scientific paper gives experience for the author in gaining knowledge about heart failure, giving comprehensive nursing care and making scientific paper as the report of the comprehensive nursing care.

1.3.2 For Client and Family

This scientific paper including the whole process of making it is expected to help the client and family in gaining better condition, changes behavior, and knowledge about disease as well as the treatment.

1.3.3 For Hospital

This scientific paper including the whole process of making it is expected to give some contribution for the hospital as reference in giving better service for the clients.

1.3.4 For Academic Institution

This scientific paper is expected to help the other students or anyone in the academic institution who need reference and/or comparison in their academic activity.

1.3.5 For Nursing Profession

For nursing profession, this scientific paper is expected to give contribution in enlivening, glorifying and enriching the culture of research and scientific writing. This scientific paper is also expected to give more reference of nursing care especially for the case of heart failure.

1.4 Writing Method

The method of this scientific writing is study case by using the approach of nursing process which is composed by assessment, nursing diagnosis, intervention, implementation, evaluation and documentation.

1.5 Writing Systematic

1.5.1 Chapter I Introduction consists of background, Purpose, writing method, writing systematic and benefit.

1.5.2 Chapter II Theoretical Background consists of anatomy and physiology, definition, etiology, pathophysiology, clinical manifestation, classification, diagnostic examination, management, prognosis, complication, basic of nursing care plan.

1.5.3 Chapter III Nursing Care consists of client's identity, identity of the person in charge, main complaint, history of current disease, history of previous disease, history of family disease, physical examination, physical, psychological, social, spiritual needs, diagnostic examinations, pharmacologic therapy, focused data, data analysis, nursing diagnosis, intervention, implementation, evaluation and progress note.

1.5.4 Chapter IV Closing consists of conclusion and suggestion.