

CHAPTER I INTRODUCTION

1.1 Background

Leprosy is a chronic infectious disease caused by *Mycobacterium leprae* which can be transmitted through breathing, air, direct contact with patients. This disease usually affects the skin, mucous membranes and peripheral nervous system. If the disease not treated well, it may damage the skin, nerves, limbs and eyes, which leads to significant morbidity and neurological damage.

Leprosy is one of the most common diseases in the world, especially in developing countries. According to World Health Organization (WHO) the highest new leprosy cases is taken by South-East asia region with number of cases reaching 156,111 cases (WHO,2019). Indonesia is 3rd in new leprosy cases, after India and Brazil (Ministry of Health, 2019). In 2019, Indonesian ministry of health declared the new leprosy cases in Indonesia reached 15,910 or found 6.07 new cases of leprosy per 100,000 population. Even though based on Indonesian ministry of health is categorized as low burden because less than 10 per 100,000 population, there are still several provinces remaining that have not reached elimination rate.

Children are defined as the most vulnerable group to infection with *Mycobacterium leprae* because of their immature or undeveloped immunity and exposure to intrafamilial contacts (Narang,2019). Moreover, the continuation transmission in children represents a failure of the health system to diseases program. Indonesian ministry of health declared leprosy has become a national health problem. The number of new leprosy cases detected in children worldwide continues to be enormous. In 2017, children reached 8.1% of new cases worldwide are 16,979 children diagnosed and 238 children with grade 2 disabilities (WHO,2019). Based on data from

the Indonesian ministry of health in 2018, the new cases detection rate (NCDR) in children 0 to 14 years old per 100,000 population in period 2013 to 2017 reached more than 11%. This is quite high compared to Indonesian NCDR target about less than 5%.

Leprosy in children does not only affect children's health but also neurological damage because they may be stigmatized, bullied, and shunned (Narang, 2019). Thus, it is really important to increase awareness about leprosy and reduce leprosy NCDR. In areas where leprosy is still widespread, such as Indonesia, understanding the behavior of leprosy is quite necessary. It is needed to decide differential diagnoses not only among dermatologists but also all professionals who are in providing medical care to children. Based on Oliveira's journal in 2016, early diagnosis and treatment of children with leprosy are very essential, moreover, there is still a lack of effective vaccines to preventing of disabilities and deformities and reduce the physical and psychosocial burden.

Due to relatively few publications on children's leprosy, my research tries to describe and summarize all factors that may influences leprosy in children. The data collected medical records of new leprosy cases in children period 2014 to 2018 from Dr. Soetomo General Hospital.

1.2 Research Question

How is the profile of new leprosy children in Dr. Soetomo General Hospital from 2014 to 2018?

1.3 Research Objective

1.3.1 General objective

To know and describe the profile of new leprosy in children from 2014-2018

1.3.2 Specific objective

- 1) To classify new leprosy children patient based on age at Dermatology and Venereology outpatient clinic of Dr.Soetomo General Hospital Surabaya.
- 2) To classify new leprosy children patient based on gender at Dermatology and Venereology outpatient clinic of Dr.Soetomo General Hospital Surabaya.
- 3) To classify new leprosy children patient based on contact history at Dermatology and Venereology outpatient clinic of Dr.Soetomo General Hospital Surabaya.
- 4) To classify new leprosy children patient based on domicile at Dermatology and Venereology outpatient clinic of Dr.Soetomo General Hospital Surabaya.
- 5) To classify new leprosy children patient based on type of leprosy at Dermatology and Venereology outpatient clinic of Dr.Soetomo General Hospital Surabaya based on WHO and Ridley-Jopling classification.
- 6) To classify new leprosy children patient based on treatment at Dermatology and Venereology outpatient clinic of Dr.Soetomo General Hospital Surabaya.

1.4 Research Benefits

1.4.1 Theoretical benefits

To improve new knowledge and data about the profile of leprosy in children.

Thus, it will help future medical journals.

1.4.2 Practical benefits

- This study can provide information about the profile of new leprosy patients in children, then they can be used as medical input to provide medical care to children with leprosy.
- To add new information for others as references