

Conference Paper

Filariasis Disease Prevalence Survey in the Kolaka Regency, Southeast Sulawesi, Indonesia

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Abstract.

Clinical manifestations of the Filariasis disease are in the forms of recurrent fever, inflammation of the ducts and lymph nodes. This study used various data from the Indonesian Government Agencies. There were 11,914 chronic cases of Filariasis reported in 401 districts/cities from 2000 to 2009. Filariasis cases data were obtained in the Kendari City Health Office in the years of 2018-2020. The prevalence of Filariasis cases in the Kolaka Regency in 2020 were 38 cases and based on gender most cases were male. The distribution area is 12 sub-districts which include Toari, Iwoimenda, Samaturu and Watubangga.

Keywords: Filariasis, Kolaka Regency, Southeast Sulawesi, Indonesia

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1. INTRODUCTION

Filariasis (elephantiasis medical disease) is a chronic infectious disease caused by filarial worms and transmitted by the *Mansonia*, *Anopheles*, *Culex*, and *Armigeres* mosquitoes. The worms live in the ducts and lymph nodes with acute clinical manifestations in the form of recurrent fever, inflammation of the ducts and lymph nodes. At an advanced stage, it may cause permanent disability by enlargement of the legs, arms, breasts and genitals. The filariasis disease is estimated to be one fifth of the world's population or 1.1 billion people are at risk to be infected, especially in tropical and some subtropical countries. The disease may cause disability, social stigma, psychosocial barriers, and decreased work productivity of sufferers, families and communities and bring economic crisis. Thus, the sufferer becomes a burden for the family and the country. There were 11,914 chronic cases of filariasis were reported in 401 districts/cities from 2000 to 2009. 4. 24[1]

Filariasis disease may not cause death directly to the sufferers. The filariasis can cause chronic disability by decrease the quality and productivity of the patients. It not only harms the patient himself but also his/her family, society and country. Therefore, preventive strategy measures must be done to avoid wider spreads of infection in the community. Kolaka Regency, Sulawesi Province is located in the southeast of the island of Southeast Sulawesi. Based on data of Kolaka Regency Health Office, it was found

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that the prevalence of filariasis increased year by year. In the year 2017 was 27 cases, in year 2018 increased to 33 cases in 2019, namely 30 cases and increased to 38 cases in 2020. By the secondary data source shown that filariasis cases were need further prevention strategy since the prevalence that is still increasing every year.

2. METHOD

The land area of Kolaka Regency is 3,283.64 km² and the sea area is 15,000 km² with a coastline length of 293.45 km. Kolaka Regency consists of 12 sub-districts, 33 sub-districts and 102 villages. In addition, Kolaka Regency has several islands, both large and small. This study used various data from the Indonesian Government Agencies, The additional data was obtained in the Kolaka Regency Health Office from 2017-2020.

3. RESULT OF THE STUDY

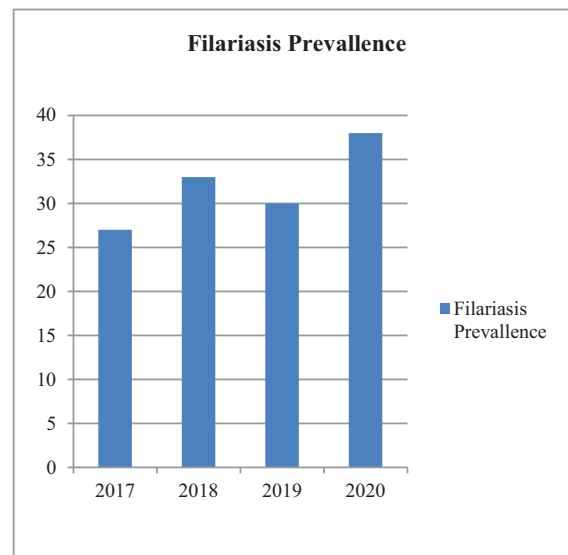


Figure 1: Prevalence data of filariasis cases on the year 2017-2020.

The results of the study showed that the prevalence of filariasis cases in Kolaka Regency fluctuated. It was increase during 2017-2018, decreased in the year 2019 and increased again in 2020.

The results of the study showed that male is infected mostly in the last 4 year. The highest were 23 cases for men in 2020 and 14 for women, the lowest was in 2017.

Result of study showed that in 2020 the prevalence of filariasis was increased in 4 sub-districts, namely Toari, Iwoimenda, Watubangga and Samaturu sub-districts. Filariasis cases always increase in these sub-districts year by year.

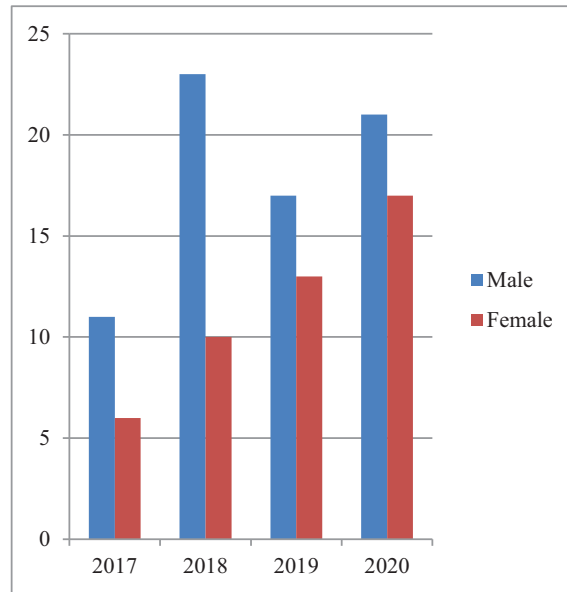


Figure 2: Prevalence data of filariasis cases by gender.

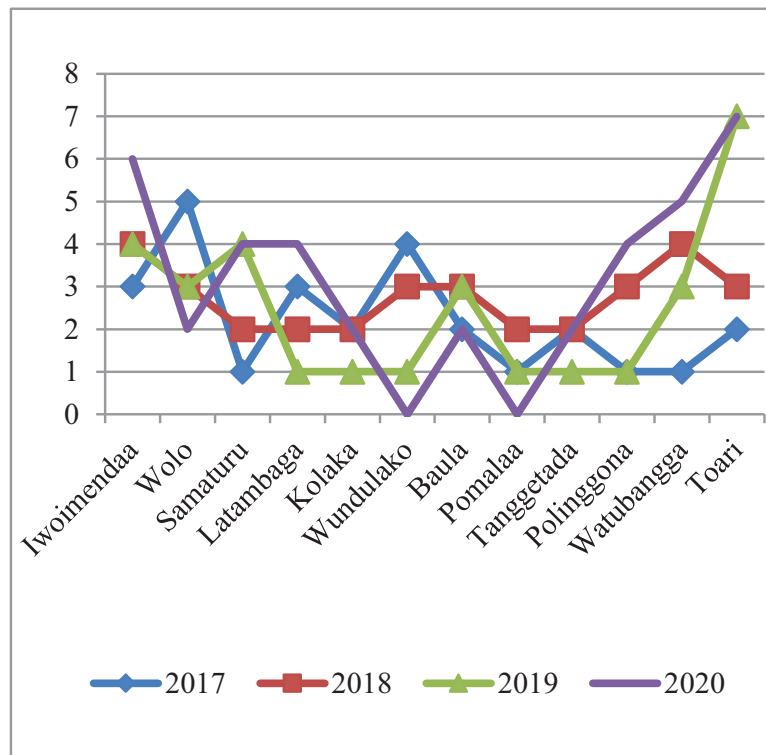


Figure 3: Filariasis cases spread data by sub-district/public health center in Kolaka regency.

4. DISCUSSION

Filariasis: In Indonesia, there have been 236 regencies/cities endemic for filariasis with a population of 99 million people. Elephantiasis medical disease (filariasis) is an infectious disease caused by filarial worms that attack the ducts and lymph nodes. The disease may damage the lymph system, swelling of the hands, feet, mammary glands, and

scrotum, cause lifelong disability and social stigma for sufferers and their families. The higher sufferer were male 67% and female 33% in the area of distribution of filarial cases (elephant medical disease) sub-districts, namely, Toari, Iwoimenda, Watubangga and Samaturu. There are still many sub-districts with inland environments. This environmental condition causes the prevalence of elephantiasis is continue to increase, poor knowledge of filariasis, and the limited range of health services such as poor health facilities and infrastructure.

5. CONCLUSION

The prevalence of filariasis cases in Kolaka Regency is fluctuating. The increased case happen in the year 2020 was 38 cases. The higher sufferer were male in the area of distribution of filarial cases (elephant medical disease) sub-districts, namely, Toari, Iwoimenda, Watubangga and Samaturu.

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