PREVALENCE STUDY OF INTESTINAL WORM IN PRIMARY SCHOOL CHILDREN IN KURANJI COASTAL AREA, LOMBOK, WEST NUSA TENGGARA

NK Wilmayani¹, Eva Triani², IM Sudarmaja³, IK Swastika³, Ariwati³

¹Department of Public Health, Faculty of Medicine, Mataram University
²Department Parasitology, Faculty of Medicine, Mataram University
³Department Parasitology, Faculty of Medicine, Udayana University

ABSTRACT

Background: Intestinal worm infection among school children has become one of the major public health problems in Indonesia and worldwide. Intestinal worm infection has been widely known as associated with poor environmental sanitation, poor hygiene, lack of access to clean water, which lead to poor nutritional status, poor academic achievement, high morbidity and mortality rates. This study aimed to estimate the prevalence of intestinal worm among primary school children in Kuranji coastal area, Lombok, West Nusa Tenggara.

Subjects and Method: This was a descriptive cross-sectional study. The study was carried out in Kuranji coastal area, Lombok, West Nusa Tenggara, in May 2017. Stool specimens from 144 primary school children in Kuranji, Lombok, were collected as sample and examined. Intestinal worm examination was carried out by Kato Katz method. Prior to specimen collection, information about the purpose of the study was provided. Small stool containers with name label were distributed to the study subjects. In addition to microscopic examination, environmental examination was carried out. Albendazole 400 mg and Pirantel pamoat 125 mg were administered to primary school students who were identified as infected with intestinal worm.

Results: Out of 144 small stool containers distributed, 115 stools were collected and examined. Among 115 stools examined, 24 (20.87%) students had been infected by Trichuris trichiura, 5 (4.35%) students had been infected by Ascaris lumbricoides, and 7 (6.09%) students had been infected by Trichuris trichiura and Ascaris lumbricoides.

Conclusion: Approximately one out of three primary school children in Kuranji coastal area, Lombok, are infected by intestinal worm. There is a strong need for early detection, health education, and effective treatment to reduce infection, morbidity rate, and mortality rate due to intestinal worm.

Keywords: prevalence, intestinal worm, primary school, children

Correspondence: N.K. Wilmayani. Department of Public Health, Faculty of Medicine, Mataram University.