

## ABSTRACT

*Risk Factors of Giardiasis in Schoolchildren in Mandangin Island, Sampang, East Java.*

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**Introduction:** Intestinal parasite infection is one of the big problems in Indonesia. Intestinal parasite infection caused by *Giardia lamblia* is called as giardiasis, is scattered in various regions in Indonesia. Prevalence of intestinal parasite infection in schoolchildren is higher than in adult that they are more susceptible to being malnutrition, anemia, and learning disorder that can impact to the quality of their life. Thus, this study aims to determine prevalence and associated risk factors of giardiasis in schoolchildren in Mandangin Island, East Java.

**Method:** This study was designed as a cross-sectional study. Forty-five stool specimens and questionnaire about demographic and family characteristics, personal hygiene, and sanitation were collected. Stool specimens were examined with direct smear method and observed by using bright field microscope. Those data were then analyzed statistically using chi-square test with SPSS program version 24.

**Result:** Samples consisted of male (51,1%) and female (48,9%). The overall prevalence of giardiasis was 31,1% and higher occurred in children 7-9 years old (78,6%). Prevalence of giardiasis in male was equal to female (50%). There were not significantly associated between giardiasis with gender ( $p=0,842$ ) and age ( $p=0,173$ ). The number of household ( $p=0,580$ ), washing hand before meal ( $p=0,586$ ), clipping fingernails ( $p=0,557$ ), washing hand with soap ( $p=0,918$ ), washing hand after defecation ( $p=0,315$ ), washing food before consumption ( $p=1,000$ ), and water source ( $p=0,586$ ) were not significantly associated with giardiasis. Screening the household, treatment of protozoal infections included symptomatic and asymptomatic giardiasis, promotion of health education programs included personal hygiene and sanitation, also health school program were necessary.

**Keywords:** *schoolchildren, intestinal parasite infection, giardiasis, Giardia lamblia, personal hygiene, Mandangin Island, East Java*