ABSTRACT

Relationship Between Blastocystis Sp and Nutritional Status Among Children In Mandangin Island, Sampang Subdistrict, Sampang District, East Java

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Background: Blastocystis sp is one of the most common protozoa found in human intestinal tract with distribution throughout the world. Prevalence differs in each country, but in developing country the prevalence are 30%-50%, meanwhile in Indonesia prevalence reaches 60%. Blastocystis sp could be agent that emerges some symptoms in patients which are infected by Blastocystis sp and there is literature which reports there is a correlational between Blastocystis sp infection and nutritional status.

Objectives: to evaluate the relationship between *Blastocystis sp* infection and nutritional status among children in Mandangin Island, Sampang Subdistrict, Sampang District, East Java.

Methods: cross-sectional design analytics was used in this study, primary data used for stool analysis and height and weight measurement, which was carried out among children aged 6-12 years in Mandangin Island in July 2017. From purposive sampling method obtained 62 samples, which sorted out to 52 samples, then divided into 2 groups; groups that were infected with *Blastocystis sp* and groups that were not infected with *Blastocystis sp*. Then compared the nutritional status between the two groups using anthropometry indexes, which are weight for age, height for age, and body mass index for age, then analysed with z-score according to WHO references.

Results: statistical analysis revealed that the antropometric indexes for nutritional status (weight for age, height for age, and body mass index for age) did not differ significantly (p > 0.05) between the infected group and the control group.

Conclusions: according to this study there is not any correlation between *Blastocystis sp* infection and nutritional status in children at Mandangin Island.

Keywords: Blastocystis sp, nutritional status, children