

ABSTRACT

Background: Malnutrition is one of major public health problems in Indonesia. Prevalence of malnutrition in Indonesia in 2005 is 23.8% and in the Province of Yogyakarta Special Territory in 2002 is 15%. District of Sleman has prevalence of malnutrition as much as 11.39% and Cangkringan as one of heavy IDD endemic areas at district level has 12.5% of malnutrition prevalence. Children at IDD endemic areas may likely have development disorder.

Objective: To identify relationship between nutrition status and mental and psychomotoric development of children aged 12 to 24 months at IDD endemic areas.

Method: The study was observational with cross sectional design carried out at Subdistrict of Cangkringan, District of Sleman. Subject of the study were 75 children aged 12 – 24 months chosen using consecutive sampling technique. Dependent variable of the study was mental and psychomotoric development, independent variable was nutrition status of children based on anthropometry with length/age indicator. Confounding variables were birth weight, mothers' iodine status, level of education, job and family economic status. Other independent variable affecting nutrition status of children was mothers' height. Data analysis used chi square, Fisher exact test and independent t-test.

Result: Prevalence of low nutrition status was 13.33%. Children with normal nutrition status had average mental development index (MDI) 2.49 points and psychomotoric development index (PDI) 5.37 points higher than those with low nutrition status. However, relationship between nutrition status and mental and psychomotoric development was statistically insignificant ($p > 0,05$).

Conclusion: Relationship between nutrition status and mental and psychomotoric development of children aged 12 – 24 months was statistically insignificant. Children with normal nutrition status tended to have higher MDI and PDI score than those with low nutrition status.

Keywords: nutrition status, mental development, psychomotoric development, iodine deficiency disorder