PATH ANALYSIS ON THE SOSIOECONOMIC DETERMINANTS OF ANEMIA IN FEMALE HIGH SCHOOL STUDENTS IN KLATEN CENTRAL JAVA

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ABSTRACT

Background: Iron deficiency anemia affects a large number of women in developing countries, especially during reproductive age. Anemia negatively affects academic performance, productivity, and general wellbeing of adolescents. This study aimed to explore socioeconomic determinants of anemia in female high school students.

Subjects and Method: A cross sectional study was conducted in Klaten, Central Java, in February 2020. A sample of 200 female adolescents aged 15 to 19 years was selected by probability sampling. The dependent variable was anemia. The independent variables were knowledge, family income, menstrual pattern, iron intake. Hemoglobin level was measured by Hemoglobinometer. The other variables were measured by questionnaire. The data were analyzed by a multiple linier regression run on STATA 13.

Results: The risk of anemia in female adolescents increased with low knowledge (b= 2.72; 95% CI= 0.45 to 2.84; p= 0.007), low family income (b= 2.64; 95% CI= 0.41 to 2.82; p= 0.008), poor nutritional intake (b= 3.81; 95% CI= 1.20 to 3.74; p <0.001), irregular menstrual pattern (b= 3.30; 95% CI= 0.79 to 3.11; p <0.001), and did not consume iron tablet (b= 4.24; 95% CI= 1.73 to 4.70; p<0.001).

Conclusion: The risk of anemia in female adolescents increases with low knowledge, low family income, poor nutritional intake, irregular menstrual pattern, and did not consume iron tablet.

Keywords: anemia, female adolescent, path analysis

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