

ABSTRACT

Adolescent's health status reflect quality during pre-conception thorough giving birth. One of the most problem in adolescent women is anemia, especially iron deficiency. Anemia (hb <12gr/dL) mostly caused by reducing iron absorption due to bioavailability in meals. Consumption factors defined as enhancer and inhibitor interaction contain in foods. Enhancing effect present in protein, vitamin C, and other vitamins. Tannin and calcium are able to have inhibiting effect. The objective of study is determine the correlation between iron enhancers and inhibitors consumption in adolescent women.

Design of research was cross sectional-analytic observational. Respondents were 4th Semester of Midwifery Students in Airlangga University. Hemoglobinmeter (hemoglobin concentration) used for anemic status, 24 hours-recall of iron enhancers and FFQ for inhibitors of consumption. Collecting data by total sampling of 42 late adolescent women selected based on inclusion and exclusion criteria. Analyzed using chi square and logistic regression with $\alpha = 0.05$.

Results have shown 20 from 42 respondents were anemia. Despite Fe, vitamin A, B2, and B6, the most adequate protein (69.2%) and vitamin C (85.7%) consumption as iron enhancers had passed anemic status, whereas the rest of deficit consumption remained in anemia. The analysis results was given protein ($p=0.008$) and vitamin C ($p=0.004$) < 0.05. There was correlation between iron enhancer consumption and anemic status of late adolescent women. However, iron inhibitors were obtained tea, coffee and milk consumption had no significant correlation. Adolescent women remained anemic status should get more attention to have adequate enhancer consumption.

Keywords: Enhancer, inhibitor, iron, anemic status