

ABSTRACT

Adolescence was one of the vulnerable groups to stunting because adolescents were at risk of food intake deficiency both macronutrient or micronutrients. Calcium and zinc intake deficiency which is the micronutrients are vital for the growth factor was the risk of stunting. Stunting in adolescence and adulthood would reduce the work capacity and productivity and could increase the risk of maternal death in childbirth. This research aims to analyze the correlation between calcium intake, zinc intake and stunting prevalence in the students.

This quantitative research was conducted using cross sectional design at SMP Unggulan Bina Insani Surabaya, with a large sample of 68 people taken randomly simple. The variables in this study were intake of calcium and zinc (independent variable), stunting prevalence (dependet variables) and protein intake (confounding variable). Data analysis uses descriptive analysis techniques and the correlation test of Kendall's-Tau and ANCOVA analysis to analyse simultaneous variable correlation.

The results showed the proportion of respondents who experienced a stunting of 22% and a normal of 78%, with an average Z-score of -3.59 to 0.61. The consumption rate of respondents with a calcium intake was sufficient at 3% and insufficient of 97%, with an average intake of 336.7 ± 326.2 mg/day. The consumption rate of respondents with a zinc intake was sufficient at 3% and insufficient of 97%, with an average intake of 5.7 ± 3.0 mg/day. There is no relationship between the calcium intake ($r=0.072;p=0.385$), zinc intake ($r=0.124;p=0.138$), calcium and zinc intake ($p=0,478$) with the stunting prevalence.

According to the results of the study, it can be concluded that the intake of calcium and zinc intake is not associated with the prevalence of stunting on SMP Unggulan Bina Insani Surabaya students. It is recommended to achieve appropriate growth and development, students can regularly monitor their nutritional status and behave in a clean and healthy life.

Keywords: Adolescence, Stunting, Calcium Intake, Zinc Intake

ABSTRAK

Remaja merupakan salah satu kelompok rawan terhadap *stunting* karena remaja beresiko mengalami defisiensi asupan makanan baik makronutrien maupun mikronutrien. Defisiensi asupan kalsium dan zink yang merupakan mikronutrien penting bagi pertumbuhan adalah faktor resiko *stunting*. *Stunting* pada masa remaja dan dewasa ini akan menurunkan kapasitas dan produktivitas kerja serta dapat meningkatkan resiko kematian ibu pada saat melahirkan. Penelitian ini bertujuan untuk menganalisis hubungan asupan kalsium dan asupan zink dengan kejadian *stunting* pada siswi.

Penelitian kuantitatif dengan menggunakan desain *cross sectional* ini dilakukan di SMP Unggulan Bina Insani Surabaya, dengan besar sampel 68 orang yang diambil secara acak sederhana. Variabel dalam penelitian ini yaitu asupan kalsium dan zink (variabel bebas), kejadian *stunting* (variabel terikat) dan asupan protein (variabel perancu). Analisis data menggunakan teknik analisis deskriptif dan uji korelasi *Kendall's-Tau* serta analisis ANCOVA untuk Menganalisis hubungan variabel secara simultan.

Hasil penelitian menunjukkan responden yang mengalami *stunting* sebesar 22.1% dan yang normal sebesar 77.9%, dengan rata-rata nilai Z-score $1,13 \pm 0,94$. Tingkat konsumsi asupan kalsium cukup sebesar 7.4% responden dan 92.6% responden asupannya kurang, dengan rata-rata asupan sebesar $336,7 \pm 326,2$ mg/hari. Tingkat konsumsi asupan zink cukup sebesar 5.9% responden dan 94.1% responden asupannya kurang, dengan rata-rata asupan sebesar $5,7 \pm 3,0$ mg/hari. Tidak ada hubungan antara asupan kalsium ($r=0.072;p=0.385$), asupan zink ($r=0.124;p=0.138$), asupan kalsium dan zink ($p=0,478$) dengan kejadian *stunting*.

Dari hasil penelitian tersebut dapat disimpulkan bahwa asupan kalsium dan zink tidak berhubungan dengan kejadian *stunting* pada siswi SMP Unggulan Bina Insani Surabaya. Disarankan agar dapat mencapai pertumbuhan dan perkembangan yang sesuai, siswi dapat melakukan pemantauan status gizinya secara rutin serta berperilaku hidup bersih dan sehat.

Kata kunci: Remaja, *Stunting*, Asupan Kalsium, Asupan Zink