

ABSTRACT

Stunting is a undernutrition chronic status in the period of growth and development since the beginning of life. The incidence of stunting is influenced by multifactorial. Some factors such as the adequacy of toddler nutrition during the growth period. Incidence of infectious diseases in infants that will interfere with the process absorption of nutrients and poor hygiene practices will increase the risk of infectious diseases. The purpose of this study was to analyze the level of adequacy of intake the protein, zinc, calcium, iron, vitamin A, infectious diseases, and hygiene practices for the incidence of stunting.

This research was observational with a case-control design. The case group was stunting toddlers aged 24-59 months, whereas the control group was normal toddlers (H/A) toddler age 24-59 months. Research was carried out in the working area of Bulak banteng Health Center Surabaya. Sample on this research was 28 for both stunting and non-stunting. Data was collected by measuring height, research questioner, hygiene practice questionnaires, and SQ-FFQ (Semi-Quantitative Food Frequency Questionnaire). The data were analyzed using logistic regression tests to determine the effect of variables on the incidence of *stunting*.

The result showed the consumption of *stunting* is lower than *non-stunting*. *Stunting* with 24-48 months, protein (18,95gram), zinc (2,73mg), calcium (618,65mg), iron(3,68mg), vitamin A(178,7mcg). For 48-59 months protein (22,05 gram), zinc (2,15mg), calcium (612,2 mg), iron(4,66 mg), vitamin A(242,1mcg). *Non-stunting* with 24-59 months protein (27,13 gram), zinc (2,9mg), calcium (625,86 mg), iron(4,35mg), vitamin A(247,61mcg). For 48-59 months protein (33,2 gram), zinc (3,2 mg), calcium (681,45 mg), iron(3,48 mg), vitamin A(326,3mcg). There were influences between the level of adequacy zinc ($p=0,000$) (OR=-2,625), calcium ($p=0,000$) (OR=-3,420), iron ($p=0,007$) (OR=1,669), vitamin A ($p=0,034$) (OR=-1,204), infectious diseases ($p=0,000$) (OR=-3,402), hygiene practice ($p=0,000$) (OR=-2,442) to stunting.

The conclusions in this study is a adequate of nutrient adequacy, good hygiene practice, minimum incidence of infectious diseases, will reduce the risk of *stunting*. furthermore, improve hygiene practice like mother wash their hands with water and soap when feeding.

Keywords: *stunting*, adequate nutrition, infectious diseases, hygiene practices

ABSTRAK

Stunting menggambarkan status gizi kurang yang bersifat kronik pada masa pertumbuhan dan perkembangan sejak awal kehidupan. Penyebab terjadinya *stunting* berasal dari multifaktor. Beberapa faktor tersebut adalah tingkat kecukupan zat gizi selama masa pertumbuhan, kejadian penyakit infeksi yang akan mengganggu proses penyerapan zat gizi, serta praktik higiene yang buruk akan meningkatkan risiko terjadinya penyakit infeksi. Tujuan penelitian ini adalah untuk menganalisis tingkat kecukupan protein, zink, kalsium, zat besi, vitamin A, penyakit infeksi, dan praktik higiene terhadap kejadian *stunting*.

Jenis penelitian ini adalah observational dengan desain *case-control*. Kelompok kasus adalah balita *stunting* dan kelompok kontrol adalah balita *non-stunting* usia 24-59 bulan, sedangkan kelompok kontrol adalah balita normal berdasarkan TB/U yang berusia 24-59 bulan. Penelitian dilakukan di wilayah kerja Puskesmas Bulak Banteng Surabaya. Sampel pada penelitian ini berjumlah 28 untuk setiap kelompok kasus dan kontrol. Pengumpulan data dilakukan dengan menggunakan pengukuran tinggi badan, kuesioner penelitian, kuesioner praktik higiene, dan SQ-FFQ (*Semi-Quantitatif Food Frequency Questionnaire*). Data dianalisis menggunakan uji regresi logistik untuk mengetahui pengaruh antar variabel terhadap kejadian *stunting*.

Hasil penelitian menunjukkan jumlah konsumsi balita *stunting* lebih rendah dibanding balita *non-stunting*. Pada balita *stunting* usia 24-48 bulan, protein (18,95gram), zink (2,73mg), kalsium (618,65mg), zat besi (3,68mg), vitamin A(178,7mcg). Untuk 48-59 bulan protein (22,05 gram), zink (2,15mg), kalsium (612,2 mg), zat besi (4,66 mg), vitamin A(242,1mcg). *Non-stunting* usia 24-59 bulan protein (27,13 gram), zink (2,9mg), kalsium (625,86 mg), zat besi (4,35mg), vitamin A(247,61mcg). Untuk usia 48-59 bulan protein (33,2 gram), zink (3,2 mg), kalsium (681,45 mg), zat besi (3,48 mg), vitamin A(326,3mcg). Terdapat pengaruh tingkat kecukupan zink ($p=0,000$) (OR=-2,625), kalsium ($p=0,000$) (OR=-3,420), zat besi ($p=0,007$) (OR=1,669), vitamin A ($p=0,034$) (OR=-1,204), penyakit infeksi ($p=0,000$) (OR=-3,402), dan praktik higiene ($p=0,000$) (OR=-2,442) terhadap *stunting*.

Kata Kunci: *stunting*, kecukupan zat gizi, penyakit infeksi, praktik higiene