Perbandingan Korelasi Asupan Protein dan Zat Besi terhadap Kadar Hemoglobin Anak Kelompok Usia 6-23 Bulan dan 24-36 Bulan pada Pandemi COVID-19 di Jakarta Timur Tahun 2020 = Comparison of The Correlation of Protein and Iron Intake with Hemoglobin Levels in Children Age 6-23 and 24-36 Months During COVID-19 Pandemic in East Jakarta on 2020

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Abstrak

Latar belakang: Prevalensi anemia pada balita di Indonesia masih tinggi. Etiologi tersering adalah anemia defisiensi besi. Defisiensi zat besi dapat menyebabkan perkembangan saraf buruk dan gangguan respon imun. Selain malnutrisi zat besi, malnutrisi protein juga dapat menyebabkan anemia. Anemia lebih banyak ditemukan pada kelompok usia 6-23 bulan, disebabkan oleh kebutuhan meningkat. Hubungan zat besi dan protein dengan kadar hemoglobin masih menunjukkan hasil beragam serta belum ada penelitian yang membandingkan hubungan antar kelompok usia. Metode: Penelitian ini merupakan penelitian analitik observasional menggunakan data sekunder. Penelitian dilakukan dengan metode potong lintang dengan teknik pengambilan sampel total sampling. Data yang digunakan berasal dari kuesioner sosiodemografis, 24-hour food recall, dan Semi Quantitative Food Frequency Questionnaire (SQ-FFQ). Analisis data dilakukan menggunakan SPSS. Normalitas data didapatkan melalui Kolmogorov-Smirnov. Analisis bivariat dilakukan menggunakan Pearson (bila distribusi data normal) atau Spearman (bila distribusi data tidak normal). Signifikansi didapatkan bila p <0,05. Hasil: Terdapat 97 subjek untuk kelompok usia 6-23 bulan dan 82 untuk usia 24-36 bulan. Tidak ada perbedaan bermakna karakteristik demografi antara kelompok usia, kecuali untuk kekerapan sakit (p=0,003). Asupan protein dan zat besi lebih tinggi pada kelompok usia 24-36 bulan dibandingkan 6-23 bulan. Asupan protein berkorelasi positif secara signifikan dengan kadar hemoglobin pada kelompok usia 6-23 bulan (r=0,428) dan usia 24-36 bulan (r=0,262). Asupan zat besi berkorelasi positif secara signifikan dengan kadar hemoglobin pada kelompok usia 6-23 bulan (r=0,555) dan usia 24-36 bulan (r=0,253). Perbedaannya bermakna secara statistik. Kesimpulan: Koefisien korelasi antara asupan zat besi dan Hb serta asupan protein dan Hb pada kelompok usia 6-23 bulan lebih kuat dibandingkan kelompok usia 24-36 bulan. Dibutuhkan intervensi pemberian MPASI yang adekuat dan fokus pemenuhan nutrisi pada anak usia 6-36 bulan, terutama pada kelompok usia 6-23 bulan. <hr /> Introduction: Anemia prevalence among toddlers in Indonesia is still high. The most frequent etiology is iron deficiency anemia. Iron deficiency may cause restrictions in nerve development and immune problems. Other than iron deficiency, protein malnutrition may also cause anemia. The prevalence is higher in 6-23 months age group due to the increase need. However, the correlation between iron and protein intake with hemoglobin levels is still showing different results and the researches do not compare the correlation between different age groups. Methods: This is an analytic-observational research using secondary data. The research was conducted using cross-sectional method with total sampling technique. The data used were obtained from sociodemographic questionnaire, 24-hour food recall, and Semi Quantitative Food Frequency

Questionnaire (SQ-FFQ). The data was analyzed using SPSS. Normal distribution of data was assessed using Kolmogorov-Smirnov. Bivariate analysis was done using Pearson (if the data is distributed normally) or Spearman (data not distributed normally). Significance level is established at p<0,05. Results: A total of 97 subjects for 6-23 months age group and 82 subjects for 24-36 months age group was recruited. No significant statistical difference was found for the demographic criteria, except for sick frequency (p= 0,003). The protein and iron intake are higher in 24-36 months age group. Protein intake correlates positively with hemoglobin levels in 6-23 months age group (r=0,428) and 24-36 months age group (r=0,262) and the statistical difference is significant. Iron intake correlates positively with hemoglobin levels in 6-23 months age group (r=0,555) and 24-36 months age group (r=0,253) and the statistical difference is significant. Conclusion: Correlation coefficient between iron intake with hemoglobin levels and protein intake with hemoglobin levels is higher in the 6-23 months age group than 24-36 months age group. Adequate complementary feeding intervention is needed and nutrition fulfilment must be given in children age 6-36 months, especially 6-23 months age group.