

## ABSTRAK

UNIVERSITAS ESA UNGGUL  
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### HUBUNGAN KECUKUPAN ENERGI DAN ZAT GIZI DENGAN KADAR HEMOGLOBIN DAN INDEKS ERITROSIT PADA IBU HAMIL DI RSAB HARAPAN KITA

**xvi, VI Bab, 107 Halaman, 15 Tabel, 2 Gambar, 9 Lampiran**

**Latar Belakang:** Asupan Zat Gizi yang berkaitan dengan produksi sel darah merah sedangkan Kadar hemoglobin adalah ukuran pigmen respiratorik dalam butiran-butiran darah merah. Pemeriksaan eritrosit pada ibu hamil menunjukkan informasi mengenai MCV (*Mean Corpuscular Volume*), MCH (*Mean Corpuscular Hemoglobin*) dan MCHC (*Mean Corpuscular Hemoglobin Concentration*).

**Tujuan:** Mengetahui hubungan kecukupan energi dan zat gizi dengan kadar hemoglobin dan indeks eritrosit pada ibu hamil di RSAB Harapan Kita.

**Metode:** Jenis penelitian ini menggunakan desain penelitian kuantitatif dengan desain penelitian *cross sectional*. Populasi dalam penelitian ini adalah seluruh pasien ibu hamil yang di rawat di ruang rawat inap kebidanan di RS Anak dan Bunda Harapan Kita dengan jumlah sampel sebanyak 30 responden. Analisa data pada penelitian ini menggunakan uji korelasi *Spearman* dan *pearson* untuk analisa bivariat.

**Hasil:** Hasil: Dari hasil uji statistik menunjukkan tidak ada hubungan kecukupan energi, protein, folat, vitamin B12, zat besi, tembaga dan vitamin B6 dengan kadar hemoglobin dan indeks eritrosit (MCV, MCH dan MCHC) ( $p>0,05$ ), namun ada hubungan yang signifikan antara kecukupan folat dengan indeks eritrosit MCV dan MCH, dan kecukupan vitamin B6 dengan indeks eritrosit MCV ( $p<0,05$ ). **Kesimpulan:** Hubungan kecukupan energi, protein, folat, vitamin B12, zat besi, tembaga dan vitamin B6 belum tentu mempengaruhi kadar hemoglobin dan indeks eritrosit nilai (MCV, MCH dan MCHC) karena memungkinkan terdapat beberapa faktor penghambat penyerapan zat gizi tersebut dan bioavailabilitas antar individu berbeda. Disarankan penelitian dengan faktor-faktor lainnya lebih lanjut.

**Kata kunci :** kecukupan energi, zat gizi, kadar hemoglobin, dan eritrosit

## ABSTRACT

**ESA UNGGUL UNIVERSITY  
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**THE RELATIONS OF ENERGY AND NUTRIENTS SUFFICIENCY WITH HEMOGLOBIN  
LEVELS AND ERYTHROCYTE INDEKS AMONG PREGNANT WOMAN IN RSAB HARAPAN  
KITA**

**xvi, VI Chapters, 107 Pages, 15Tables, 2 Figures, 9 Attachments**

**Background:** Hemoglobin levels are a measurement of the respiratory pigment in red blood cells, while nutritional intake is related to the synthesis of red blood cells. The measurements of MCV, MCH, and MCHC (Mean Corpuscular Hemoglobin Concentration) in the erythrocytes of pregnant women provide important information. **Objective :**Determine the correlation between adequate nutrient and energy intake and pregnant women's hemoglobin and erythrocyte counts at Harapan Kita Hospital. **Method:** A cross sectional quantitative research design is used in this kind of study. All pregnant patients at Children's and Mother Harapan Kita Hospital who were receiving care in the obstetric inpatient room comprised the population of this study, and a total of 30 responden made up the sample. The Spearman and pearson correlation test was employed in this study's data analysis for bivariate analysis. **Results:** The results of statistical tests showed that there was no relationship between adequacy of energy, protein, folate, vitamin B12, iron, copper and vitamin B6 with hemoglobin levels and erythrocyte indices (MCV, MCH and MCHC) ( $p>0.05$ ), However, there was a significant relationship between folate adequacy and the MCV and MCH erythrocyte indices, and vitamin B6 adequacy and the MCV erythrocyte index ( $p<0.05$ ). **Conclusion:** The relationship between an adequate intake of energy, protein, folate, vitamin B12, iron, copper, and vitamin B6 does not always affect hemoglobin levels and erythrocyte index values (MCV, MCH, and MCHC), as there may be a number of factors that prevent these nutrients from being absorbed or that affect how bioavailable they are to different people. suggested more investigation using different variables.

Keywords: *adequacy of energy, nutrients, hemoglobin levels, and erythrocytes*

References: 43 (1987-2021)