

**POLITEKNIK KESEHATAN TANJUNGKARANG**  
**JURUSAN TEKNOLOGI LABORATORIUM MEDIS**  
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Fallesia Putri Widata

**Perbedaan Kadar Hemoglobin, Nilai Hematokrit, Jumlah Eritrosit Sebelum Dan Sesudah Menstruasi**

xv + 34 halaman, 3 tabel, dan 13 lampiran

**ABSTRAK**

Wanita Usia Subur (WUS) khususnya remaja putri lebih beresiko terkena anemia salah satunya disebabkan karena mengalami menstruasi sehingga kehilangan darah setiap bulannya. Adanya permasalahan kesehatan pada Wanita Usia Subur (WUS) dapat mempengaruhi produksi/kualitas sel darah merah dan menyebabkan turunnya kadar hemoglobin, nilai hematokrit dan jumlah sel eritrosit.

Profil eritrosit adalah pemeriksaan umum yang digunakan untuk menentukan anemia. Penelitian ini merupakan analitik observasional, yang bertujuan untuk mengetahui perbedaan kadar hemoglobin, nilai hematokrit, jumlah eritrosit sebelum dan sesudah menstruasi. Populasi dalam penelitian ini adalah mahasiswa tingkat 3 Jurusan TLM, dengan sampel sebanyak 30 responden yang dianggap dapat memenuhi kriteria inklusi. Hasil penelitian diperoleh sebelum menstruasi rerata (mean) kadar hemoglobin 12.6 g/dL, rerata (mean) nilai hematokrit 38.3% rerata (mean) jumlah eritrosit  $4.56 \times 10^6$  sel/ $\mu$ L. Sesudah menstruasi diperoleh rerata (mean) kadar hemoglobin 12.3 g/dL, rerata (mean) kadar hematokrit 37.9%, rerata (mean) jumlah eritrosit  $4.51 \times 10^6$  sel/ $\mu$ L. Analisa Bivariat menggunakan uji *Paired Sampel T Test*, pada kadar hemoglobin  $p\text{-value} \leq 0.05$  yaitu 0.014, hal ini menunjukkan ada perbedaan kadar hemoglobin sebelum dan sesudah menstruasi. Sedangkan pada nilai hematokrit dan jumlah eritrosit  $p\text{-value} \geq 0.05$  yaitu nilai hematokrit 0.195, dan jumlah eritrosit 0.106, hal ini menunjukkan tidak ada perbedaan yang bermakna nilai hematokrit dan jumlah eritrosit antara sebelum dan sesudah menstruasi.

Kata Kunci : Hemoglobin, Hematokrit, Jumlah Eritrosit, Menstruasi  
Daftar Bacaan : 44 (1997-2023)

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**Differences in hemoglobin levels, hematocrit values, number of erythrocytes before and after menstruation**

xv + 34 pages, 3 tables, and 13 appendices

**ABSTRACT**

Women of Childbearing Age (WUS), especially adolescent girls, are more at risk of developing anemia, one of which is due to menstruation so that they lose blood every month. The existence of health problems in Women of Childbearing Age (WUS) can affect the production/quality of red blood cells and cause a decrease in hemoglobin levels, hematocrit values and the number of erythrocyte cells.

Erythrocyte profile is a common test used to determine anemia. This study is an observational analysis, which aims to find out the difference in hemoglobin levels, hematocrit values, and the number of erythrocytes before and after menstruation. The population in this study is a level 3 student of the TLM Department, with a sample of 30 respondents who are considered to be able to meet the inclusion criteria. The results of the study were obtained before menstruation with an average hemoglobin level of 12.6 g/dL, an average hematocrit value of 38.3%, and an average (mean) number of erythrocytes of  $4.56 \times 10^6$  cells/ $\mu\text{L}$ . After menstruation, the average hemoglobin level was 12.3 g/dL, the average hematocrit level was 37.9%, and the average number of erythrocytes was  $4.51 \times 10^6$  cells/ $\mu\text{L}$ . Bivariate analysis using the Paired Sample T Test, at the hemoglobin level p-value  $\leq 0.05$  which is 0.014, this shows that there is a difference in hemoglobin levels before and after menstruation. Meanwhile, the hematocrit value and the number of erythrocytes p-value  $\geq 0.05$ , namely the hematocrit value of 0.195, and the number of erythrocytes 0.106, this shows that there is no significant differences in hematocrit values and erythrocyte counts between before and after menstruation.

Keywords : Hemoglobin, Hematocrit, Erythrocyte Count, Menstruation

Reading List : 44 (1997-2023)