

PERBEDAAN KADAR HEMOGLOBIN DAN VOLUME *PACKED RED CELL (PRC)* METODE SENTRIFUGASI DENGAN GRAVITASI DI UTD PMI KOTA YOGYAKARTA

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INTISARI

Latar Belakang : Pembuatan satu unit PRC menggunakan satu unit darah lengkap (*Whole Blood*) yang dipisahkan antara sel darah merah dengan komponen lain melalui pengeluaran plasma. Proses pemisahan sel darah merah pada pembuatan PRC dilakukan dengan metode sentrifugasi 1500 rpm dengan suhu 4°C selama 30 menit. Namun ada kalanya dilakukan dengan metode gravitasi dimana darah diletakkan di blood bank pada suhu 2±4°C selama 48 jam.

Tujuan Penelitian : Mengetahui perbedaan volume dan kadar hemoglobin *PRC* metode sentrifugasi dengan gravitasi.

Metode Penelitian: Penelitian ini adalah penelitian deskriprif kuantitatif. Pengambilan data menggunakan data primer dikumpulkan oleh peneliti secara langsung dari sumber utama, dengan melakukan pemeriksaan volume dan kadar Hb metode sentrifugasi dengan gravitasi.

Hasil : Rata-rata nilai kadar Hb yang lolos QC metode gravitasi adalah (87%) yang tidak lolos QC (13%). Metode sentrifugasi yang lolos QC adalah (94%) yang tidak lolos QC (6%). Rata-rata volume PRC metode gravitasi yang lolos QC adalah (80%), yang tidak lolos QC (20%). Metode sentrifugasi yang lolos QC adalah (70%) yang tidak lolos QC (30%).

Kesimpulan : Tidak terdapat perbedaan yang signifikan kadar Hb produk darah PRC antara metode gravitasi dan metode sentrifugasi $p = 0,407$ ($p>0,05$). Tidak terdapat perbedaan yang signifikan volume PRC produk darah PRC antara metode gravitasi dan metode sentrifugasi $p= 0,612$ ($p>0,05$).

Kata Kunci : *Hemoglobin, Volume PRC, Sentrifugasi dan Gravitasi*

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OVERVIEW OF DIFFERENCES IN HEMOGLOBIN LEVEL AND VOLUME PACKED RED CELL (PRC) CENTRIFUGATION WITH GRAVITY METHOD AT UNIT PMI YOGYAKARTA CITY

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ABSTRACT

Background : One unit of PRC uses one unit of whole blood (Whole Blood) which is separated between red blood cells and other components by removing plasma. The process of separating red blood cells in the manufacture of PRC was carried out by centrifugation method at 1500 rpm at 4°C for 30 minutes. However, sometimes it is done using the gravity method where the blood is placed in a blood bank at a temperature of 2±4°C for 48 hours.

Research Objectives : Knowing the difference in volume and hemoglobin content of PRC by centrifugation method by gravity.

Research Method : This research is a quantitative descriptive research. Data retrieval using primary data collected by researchers directly from the main source, by checking the volume and Hb levels by centrifugation method by gravity.

Results : The average value of Hb levels that passed the QC gravity method was (87%) who did not pass the QC (13%). The centrifugation method that passed QC was (94%) which did not pass QC (6%). The average volume of PRC gravity method that passed QC was (80%), which did not pass QC (20%). The centrifugation method that passed QC was (70%) which did not pass QC (30%).

Conclusion : There was no significant difference in Hb levels of PRC blood products between the gravity method and the centrifugation method $p = 0.407$ ($p>0.05$). There was no significant difference in the volume of PRC blood product PRC between the gravity method and the centrifugation method $p= 0.612$ ($p>0.05$).

Keywords: *Hemoglobin, Volume PRC, Sentrifugasi dan Gravitas*

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