

ABSTRAK

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AKURASI DAN PRESISI ALAT HB METER HEMOCUE HB 301 DAN ONEMED HB CHECK TERHADAP *HEMATOLOGY ANALYZER*

xv + 73 Halaman + 15 Tabel + 13 Lampiran

Metode *Point Of Care Testing* (POCT) merupakan salah satu metode pemeriksaan kadar hemoglobin menggunakan sampel darah kapiler dengan volume yang sedikit. Kelayakan metode POCT diketahui dengan cara menghitung nilai akurasi dan presisi. Akurasi adalah ketepatan hasil pemeriksaan dengan nilai referensi, sedangkan presisi merupakan ketelitian hasil pemeriksaan bila dilakukan berulang kali dengan sampel yang sama. Tujuan penelitian ini untuk mengetahui akurasi dan presisi alat Hb Meter HemoCue Hb 301 dan Onemed Hb Check terhadap *Hematology Analyzer*. Penelitian ini menggunakan studi analitik komparatif desain *cross-sectional*. Populasi penelitian ini adalah pasien rawat jalan Puskesmas Lembeyan selama bulan Januari – Februari 2025 yang kemudian dipilih menjadi sampel berdasarkan kriteria penelitian. Hasil penelitian diperoleh akurasi alat HemoCue Hb 301 didapatkan nilai bias (d%) sebesar 1,8% dengan *recovery* 101,2% sedangkan alat Onemed Hb Check memiliki nilai bias (d%) sebesar 8,3% dengan *recovery* sebesar 108,3%. Nilai tersebut menunjukkan bahwa kedua alat memiliki akurasi yang baik. Nilai presisi alat HemoCue Hb 301 memperoleh CV sebesar 1,95% sedangkan Onemed Hb Check memperoleh CV 2,96% artinya nilai presisi dari kedua alat adalah baik. Hasil analisis statistik berdasarkan uji *Paired T-test* menyatakan terdapat perbedaan yang signifikan antara alat HemoCue Hb 301 Onemed Hb Check, dan *Hematology Analyzer*.

Kata Kunci : Akurasi, Presisi, Hb Meter, Hemoglobin, *Hematology Analyzer*

Daftar Bacaan : 58 buku (2013-2025)

ABSTRACT

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ACCURACY AND PRECISION OF HEMOGLOBIN METERS HEMOCUE HB 301 AND ONEMED HB CHECK AGAINST HEMATOLOGY ANALYZER

xv + 73 Pages + 15 Tables + 13 Appendices

Point of Care Testing (POCT) is one of the methods used to measure hemoglobin levels using a small volume of capillary blood. The feasibility of the POCT method can be determined by evaluating its accuracy and precision. Accuracy refers to the closeness of the test results to the reference value, while precision refers to the consistency of test results when repeated on the same sample. This study aims to determine the accuracy and precision of the hemoglobin meters HemoCue Hb 301 and Onemed Hb Check compared to a Hematology Analyzer. This research is an analytical comparative study using a cross-sectional design. The study population consisted of outpatients at Puskesmas Lembeyan during January–February 2025, who were selected as samples based on specific inclusion criteria. The results showed that HemoCue Hb 301 had a bias (d%) of 1.8% with a recovery of 101.2%, while Onemed Hb Check had a bias (d%) of 8.3% with a recovery of 108.3%. These values indicate that both devices have good accuracy. In terms of precision, HemoCue Hb 301 had a coefficient of variation (CV) of 1.95%, and Onemed Hb Check had a CV of 2.96%, indicating good precision for both devices. Statistical analysis using the Paired T-test revealed a significant difference between the results of HemoCue Hb 301, Onemed Hb Check, and the Hematology Analyzer

*Keywords: Accuracy, Precision, Hb Meter, Hemoglobin, Hematology Analyzer
References : 58 books (2013-2025)*