

ABSTRAK

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ANALISIS HASIL QUALITY CONTROL *SIX SIGMA* PADA PEMERIKSAAN
GLUKOSA DAN KOLESTEROL

xiii + 85 Halaman + 19 Tabel + 10 Lampiran

Analisis *Quality Control Six Sigma* merupakan proses evaluasi pengujian mutu laboratorium yang bertujuan untuk menjamin mutu laboratorium presisi dan akurasi dan mengurangi kesalahan hasil laboratorium. *Quality Control* harian pada Fasilitas Kesehatan biasanya dilakukan menggunakan grafik *Levey-Jennings* dengan aturan *Westgard*. Metode *Quality Control* di atas *Levey-Jennings* dengan aturan *Westgard* menggunakan metode *Six Sigma*. *Quality Control Six Sigma* masih jarang dilaksanakan karena untuk mendapat hasil *Six Sigma* yang baik perlu hasil presisi dan akurasi yang tinggi. Tujuan penelitian ini untuk mengetahui nilai analisis hasil presisi, akurasi dan *Sigma* pada pemeriksaan glukosa dan kolesterol di masing-masing laboratorium Fasilitas Kesehatan.

Metode penelitian digunakan deskriptif kuantitatif dengan pendekatan *cross sectional*. Evaluasi kontrol *Westgard* dengan grafik *Levey-Jennings* pada pengujian glukosa ditemukan satu kali penyimpangan 1-2s pada Fasilitas Kesehatan A di bulan November dan satu kali penyimpangan 1-2s pada Fasilitas Kesehatan B bulan Oktober. Hasil kontrol pengujian kolesterol di fasilitas kesehatan A dan B dalam batas kontrol tidak ditemukan penyimpangan. Keseluruhan dianggap stabil, tidak terjadi kesalahan acak maupun sistematis. Evaluasi hasil kontrol *Sigma* pengujian glukosa di Fasilitas Kesehatan A ± 4.0 (cukup hingga baik), Fasilitas Kesehatan B ± 2.7 (kurang hingga cukup). Hasil kontrol *Sigma* kolesterol laboratorium Fasilitas Kesehatan A ± 3.1 (cukup), dan laboratorium Fasilitas Kesehatan B ± 6.0 (baik hingga sangat baik).

Perbedaan hasil *Sigma* dipengaruhi oleh alat, reagen, dan metode yang digunakan. Secara umum Laboratorium Fasilitas Kesehatan A unggul dalam pemeriksaan glukosa, sedangkan Laboratorium Fasilitas Kesehatan B lebih unggul dalam pemeriksaan kolesterol.

Kata Kunci : Kontrol Kualitas (QC), *Westgard* grafik *Levey-Jennings* , *Six Sigma*.

Daftar bacaan: 25 buku (2014-2024).

ABSTRACT

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ANALYSIS OF SIX SIGMA QUALITY CONTROL RESULTS ON GLUCOSE AND CHOLESTEROL

xiii + 85 Page + 19 Table + 10 Appendices

Six Sigma Quality Control analysis is an evaluation process of laboratory quality testing that aims to ensure laboratory quality precision and accuracy and reduce errors in laboratory results. Daily Quality Control at health facilities is usually done using Levey-Jennings charts with Westgard's rule. Quality Control method above Levey-Jennings with Westgard rule using Six Sigma method. Six Sigma Quality Control is still rarely implemented because to get good Six Sigma results need high precision and accuracy results. The purpose of this study was to determine the value of the analysis of the results of precision, accuracy and Sigma on glucose and cholesterol examination in each Laboratory of Health Facilities.

The research method used descriptive quantitative approach cross sectional. Evaluation of Westgard control with Levey-Jennings graph on glucose testing found one deviation of 1-2s in Health Facility A in November and one deviation of 1-2s in Health Facility B in October. The results of control cholesterol testing in health facilities A and B within the control limits were not found deviations. The whole is considered stable, no random or systematic errors occur. Evaluation of the results of Sigma control glucose testing in health facilities A 4.0 (sufficient to good), health facilities B 2.7 (less to sufficient). The results of Sigma cholesterol control of Health Facility laboratory A were 3.1 (sufficient), and B were 6.0 (good to very good).

Differences in Sigma results are influenced by the tools, reagents, and methods used. In general, the Laboratory of Health Facility A is superior in glucose examination, while the Laboratory of Health Facility B is superior in cholesterol examination.

Keywords: Quality Control (QC), Westgard graph Levey-Jennings, Six Sigma.

References: 25 books (2014-2024).