

Abstract

Analysis of eleven biochemical laboratory tests was done during an International External Quality Assessment Scheme (IEQAS) in which the clinical chemistry laboratory at Kenyatta National Hospital participated. Technicon SMA II continuous flow system was used in the biochemical analyses apart from glucose which was assayed manually by the glucose oxidase method. Using the standard deviation index (SDI), twenty six percent of the results were found to be outside the two standard deviation (2SD) limit. However, when variance index score (VIS) was used, 42% of the results were found to be outliers. Overall, our laboratory performed poorly compared to other laboratories in both the IEQAS and the United Kingdom External Quality Assurance Scheme (UKEQAS). This poor performance is attributed to the use of improper equipment which is not regularly maintained, lack of diagnostic reagents, lack of quality control (QC) materials and inadequate staff training in the field of quality control.