

EXECUTIVE SUMMARY

Background: The laboratory service is an essential component of the Sri Lankan health system and a network of laboratories is already in place to meet the needs. DGH Trincomalee is the highest-level apex referral hospital in the Trincomalee district. Therefore, all the healthcare institutions in the district ultimately rely on the laboratory of DGH Trincomalee for routine and special investigations. These reports play an integral part in the decision-making process of diagnosis and management. Hence, the quality of the laboratory service provision must be ensured.

Objectives: This study assessed the quality of laboratory service provision in DGH Trincomalee in relation to timeliness, accuracy and internal customer satisfaction as perceived by clinical and laboratory staff.

Methods: This was a descriptive cross-sectional study carried out among clinical (n=441) and laboratory personnel (n=25) using separate self-administered Likert-scale questionnaires and key informant interviews. The clinical personnel included all consultants, medical officers, intern house officers, nursing officers and hospital midwives attached to clinical units. Laboratory personnel included all consultants, medical officers, nursing officers and MLTs attached to the laboratory. Several quantitative methods were used for data analysis.

Results: In relation to timeliness, the level of perceived quality of laboratory service provision by clinical and laboratory personnel was 66.83% and 72.83% respectively, and there was a significant difference between them. Similarly, in relation to internal customer satisfaction, the score by clinical and laboratory personnel was 71.33% and 77.17% respectively and there was also a significant difference. However, in relation to accuracy, the level of perceived quality of

laboratory service provision by clinical personnel was 70.17% and laboratory personnel was 69.33%, which revealed no significant difference in perception. For the total study population, the levels of perceived quality of laboratory service provision in relation to timeliness, accuracy and internal customer satisfaction were 67.17% 70.17% and 71.66% respectively. And the level of overall quality of laboratory service provision as perceived by the total population was 69.83%. For this overall perception of the total population, timeliness (0.855) revealed a high positive correlation. Accuracy (0.915) and internal customer satisfaction (0.903) revealed a very high positive correlation.

Conclusion: The perception scores of this study were slightly greater than the international studies from developing countries similar to Sri Lanka. This implies that the quality of laboratory services at DGH Trincomalee was up to the levels of provision in other developing countries and slightly better than theirs. Still, there were several perception gaps observed and a few recommendations were suggested to bridge these gaps and improve the quality of laboratory services even further.

Recommendations: As this research is focused on the perceived quality of internal customers, it is recommended to capture external customer perception in further research. To bridge the perception gap between the clinical personnel and laboratory personnel, it is recommended that standard turnaround times (TAT) should be defined and made available to all staff, conduct regular laboratory monthly review meetings, and the introduction of an electronic laboratory information system (LIS).

Keywords: Healthcare quality, Laboratory service provision, Internal customer satisfaction, Timeliness of laboratory services, Accuracy of laboratory reports