ABSTRACT

Background: Globally, there is emerging scarcity of resources, this is even worse in sub-Saharan Africa, with the health sector one of these areas highly affected by the shortage of resources. It is significant to note that financial management is an important constituent for the success of clinical laboratory management. In Uganda, health managers at all levels are unacquainted with the real costs of the services produced and provided. It is important for them to understand the real costs incurred in providing health services in order to evaluate efficiency and effectiveness of health services. An efficient laboratory service offering HIV confirmatory diagnosis and monitoring tests of HIV and AIDS is a fundamental component of a well-designed ART health facility. The concept of cost behaviour must therefore be understood to create a successful and efficient clinical laboratory financial management.

Objective: The general objective of this study was to analyse costs of HIV Laboratory test services at the Kampala Regional laboratory of AIDS Information Centre. The specific objectives were to determine the (1) total costs (direct and indirect costs), (2) the unit, and estimate (3) the break-even point and (4) cost recovery for each laboratory test parameter.

Methodology: A retrospective descriptive cost analysis study for the financial year 2012/2013. The study looked at HIV laboratory tests done at AIC Kampala Regional laboratory with the laboratory as the final cost center. Three levels of sampling were used and Shepard's step-down costing method was used to determine the total cost and unit costs. Quantitative data was extracted using spreadsheets from laboratory reagents and supplies, laboratory tests and equipment. Qualitative data was extracted from the face-to-face interviews, and record reviews,

from the key interviewed AIC Kampala Regional staff members. The collected data were entered into Microsoft Excel Program and analysed using both SPSS version 16 and Microsoft excel.

Results: Total cost of AIC Kampala regional laboratory for the FY 2012/2013 was UGX 582,495,782. TDC was 76.2% (UGX 443,645,058) while the TIC was at 23.8% (UGX 138,850,724). The proportion of TDC was 15.1: 60.0: 24.9 for LC, MC, and CC respectively. The TIC was UGX 138,850,724. ILC constituted UGX 34.6%, while IRC 8.3% and TFC at 57.1% of the TIC. The average unit cost was UGX 2,213. The lowest unit cost was UGX 55 while the highest unit cost was UGX 3,740 for with HIV Determine and TB respectively. The average breakeven point for all the test parameters was 993 volumes of tests needed to break even. The average Cost recovery was 2.04, indicating that the revenues covered the total cost of operating the HIV laboratory test parameters.

Conclusions and Recommendations: This research has shown the recovery and benefit of laboratory and confirms that the Kampala Regional laboratory is a good RPCC and the results will improve the overall quality and proper planning for improved cost recovery. Costing from this study will be used as a tool for policy making in the planning, cost projections, developing and justifying laboratory budgets, and where necessary determining the level of reallocation of resources within the laboratory program. To improve laboratory efficiency, additional laboratory technicians should be hired and improve on the salary package and other advanced laboratory equipment to perform and provide chemistry and haematology tests should be introduced. This will not only boost on the cost recoveries of the laboratory but will enhance the image of AIC Kampala Regional branch, as a one-stop comprehensive ART testing centre.