

The study titled: Adherence to Laboratory Quality Management Systems (LQMS) in Private Not For Profit (PNFP) laboratories in Kampala District, was conducted at the four (4) PNFP facilities of Nsambya, Kibuli, Lubaga and Mengo hospitals in Kampala.

The main objective: The study was set out to assess the level of adherence to LQMS practices in PNFP hospital labs in Kampala. Specifically to: Assess the process factors influencing adherence to practice of LQMS, assess the human resource factors influencing adherence to practice of LQMS, and assess the facility factors affecting adherence to the practice of LQMS.

Methodology: The study was a descriptive cross-sectional survey. Standard WHO-AFRO observational checklist and key informant (quantitative) questionnaire guide data collection tools were utilized. Four (4) lab managers and eight (8) quality officer or safety officers participated in the study. The study evidently achieved the objectives set forth.

Results: The study found out that, Lab 1 (Mengo) adhered at 79.07%, Lab 2 (Nsambya) adhered at 86.43%, Lab 3 (Lubaga) adhered at 58.53%, and Lab 4 (Kibuli) adhered at 59.69%. Specifically the study findings were that process factors were the major factor influencing the adherence to practice of LQMS as 3/4 labs scored below 50%, in management review 3/4 labs scored below 7/17 (41%). In internal audits all the PNFP labs scored below 4/10 (40%), in process control 2 of the labs scored below 19/33 (58%). Corrective action and occurrence management 2 of the labs scored below 4/12 (29%) respectively. The main human resource factors influencing the practice of LQMS were identified as lack of competency assessment, quality officers, training policies, procedures, plans and mentorship. The facility and safety indicated equipment validation and calibration was influencing the quality system and 2 of the labs scored poorly 26/43 (62%) each in infrastructure and safety installations. Human resource factors were 3/4 labs scored below 13/20 (65%), in facility and safety 2 of the labs scored 26/43 (65%) respectively. There was no significant difference in the

process factors (p-value <0.001). The ANOVA statistics indicates positive regression model at $p=0.042$. The process factors were found to be the most influential factor in the practice of LQMS.

Conclusion: The study established that process factors influenced the practice of LQMS more than the human resource, equipment and the facility and safety factors, evidenced by the process factors constituting 70% of the checklist questions and the poor performance in the process factors like internal audits.

Recommendations: Based on the study findings, the major recommendations included; initiation and regularize the conduct of lab audits as a means of gap identification and opportunity for continuous quality improvement. Conduct regular management reviews, the lab managers should participate in facility management and budget meetings where resource allocations decisions are made. Lab managers should ensure conduct of internal audits, process control, quality assurance and quality control, proficiency testing, external quality assessment, occurrence management and instituting corrective action.

Conduct staff competency assessment, identify training needs of the different cadres, and develop plans for trainings. The facility should develop clear lab organogram, with well-defined roles and responsibilities of each level to improve the chain of command within the lab. Labs should participate in equipment validation and calibration exercises to ensure precision and accuracy of aliquots.

In line with need for further inquiry, the study identified the following areas for further research; the influence of attitude on the practice of LQMS, the influence of training and mentorship on practice of LQMS and influence of cost of quality on practice of the LQMS.