

2nd International Conference on Health Informatics and Technology

July 27-29, 2015 Valencia, Spain

Telemonitoring - ECG through the use of mobile based technology

Amit Agarwal

Postgraduate Institute of Medical Education and Research, India

Telemonitoring is a medical practice that involves remotely monitoring patients who are not at the same location as the health care provider. Purpose of the study to use tele-ECG and using blue tooth enabled mobile technology developed by BARC. m-Health technology involves use of mobile phone for providing health care services to population residing in remote rural areas where doctor to patient ratio is low. Tele- ECG is a Blue tooth enabled device which can record and transmit data to a mobile phone. The ECG is a non-invasive test that is used to reflect underlying heart conditions by measuring the electrical activity of the heart. By positioning leads (electrical sensing devices) on the body in standardized locations, information about many heart conditions can be recorded. We have done ECG on 400 normal individuals at remote locations and transmitted it to doctors. The recording was made by health workers trained to perform these procedures. Informed consent was taken from all the participants before enrollment. We found good correlation between the traditional machine and hand held machine for ECG recording. Mobile application development based on the application framework was demonstrated successfully. The platform applies a document-based approach providing a versatile and reliable way of sharing and collaboratively complementing of health information including standard information model documents and integration with health information systems and personal storages. The implemented mobile tele-ECG case demonstrates the overall function of the platform. The platform can be used as a basis for developing new applications for specific purposes.

agarwal.amit1982@gmail.com

Effectiveness of the credit-line approach in supporting the functioning of CD4 equipment in Northern Uganda

Vincent M Kiberu

International Health Sciences University, Uganda

Improving laboratory service delivery requires a functioning logistics and supply system. Ministry of Health uses the credit line approach to provide laboratory supplies including commodities for the functioning of CD4 equipment. However, the role of this approach in supporting the functionality of CD4 equipment has not been explored. We assessed the effectiveness of the credit line approach in improving laboratory services delivery using the functionality of CD4 equipment as a proxy indicator. A cross-sectional survey was conducted in 15 districts of mid northern Uganda between July and August 2014. Thirty five self and interviewer administered questionnaires were used to establish the functionality (i.e. ability of a CD4 equipment to carry out CD4 tests) and non-functionality of CD4 equipment, including reasons for non-functionality, at HC IIIs (7), HC IVs (18) and Hospitals (10) in Lango (17 facilities) and Acholi sub-regions (18 facilities). A total of 38 CD4 equipment were assessed at these facilities. SPSS version 17.0 was used for data entry and analysis. 26 out of 38 (68%) CD4 equipment was functional. Functionality of CD4 equipment was higher in hospitals (85%) followed by HC IVs (67%) but least in HC IIIs (43%). Functionality was also higher in Lango sub region (72%) which has more districts but less CD4 equipment compared to Acholi sub region (65%). Non- functionality of CD4 equipment was mainly due to lack of reagents and cartridges as well as low staffing levels of laboratory cadres with the skills necessary to operate the equipment. The credit line approach was effective in improving the functionality of CD4 equipment in the surveyed facilities. However, there is need to address issues of staffing and availability of reagents to enhance the functionality of CD4 equipment and improve patient care, especially at HC IIIs.

vmicheal@yahoo.co

Notes: