## Abstract

Background: The East Africa Public Health Laboratory Networking (EAPHLN) Project which is being implemented in Kenya, Uganda, Tanzania, Burundi and Rwanda has several components which include Operational Research (OR). The OR component has two strategic objectives namely: — (i) to provide oversight and guidance in carrying out operational research activities under the regional project; and (ii) to facilitate local and regional capacity to carry out operational research and evaluation of medical diagnostics. Research Methodology and Scientific writing course sharpens the fundamental skills upon which the conceptual framework of scientific expertise is built. In order to facilitate the local and regional capacity to carry out operational research, there is need to build human capital at the study sites.

Methods: A qualitative study was carried out using a semi-structured questionnaire to determine the research training needs among clinical and laboratory personnel at the World Bank-funded EAPHLNP facilities in Kenya. Based on the findings, a short course in Research Methodology and Scientific Writing course was developed to support the implementation of operational research activities at the health facilities in Kenya and the region. A team of research experts from KEMRI and an external facilitator with vast knowledge on curriculum development was constituted to develop the course. The course content was delivered through lectures, self-directed learning, group discussions, individual and group assignments. The participants were instructed to develop concept proposals and were assigned mentors to guide them through the process of document development and approval.

<u>Findings:</u> The research training needs assessment study revealed that there was limited knowledge in research undertaking and scientific writing. The curriculum was developed and piloted in April 2012. A total of nineteen participants from Kenyan sites were trained in Mombasa for two weeks. Seven concept proposals were developed. The proposals are at different stages of scientific review process. After undergoing this course, two of the participants were motivated to pursue further studies and have enrolled for higher degrees (Masters and Doctoral). The training curriculum was reviewed in October 2012 by the KEMRI OR team and packaged into three manuals namely: – Facilitators, Participant and Exercise. The curriculum was adopted by the East, Central and Southern African Health Community (ECSA-HC) to train participants from the region.

<u>Recommendations:</u> Strengthen capacity building in operational research at the centres of excellence in order to adequately address public health related issues. Capacity build other facilities country wide and regionally by rolling out the training and develop structured mentorship programs.