



ALUPE UNIVERSITY COLLEGE

... *Bastion of Knowledge* ...

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VACANCY

Position: Research Assistant, Augmented Infant Resuscitation (AIR study): 2 posts

Location: Busia, Kenya

Term: 1 year (June 2022 – May 2023)

Overview

Access to mobile phones, including smart phones and devices, has become nearly ubiquitous in low/middle-income countries (LMICs), allowing for the introduction of e-learning, which increases the availability, scalability, flexibility, and efficiency of training efforts, while decreasing marginal costs. In recognition of this, Alupe University College in collaboration with several international partners is evaluating the use of an Augmented Infant Resuscitation (AIR) equipment to be used by skilled health workers in a digitized neonatal resuscitation project. The AIR instrument is attached to the Ambu Bag during resuscitation. The AIR instrument measures Correct rate (30-60 breaths per minute); Absence of significant leak (compliance $>4.0\text{mL/cm H}_2\text{O}$); and Absence of a significant airway blockage (defined as compliance $<0.10\text{ mL/cm H}_2\text{O}$ or resistance $>90\text{ cmH}_2\text{O/L/s}$). The participants will be randomly assigned Arm A, Arm B and Arm C depending on when during the study period they will be allowed to get feedback on their performance from the AIR instrument. These measurements are determined by sensors in the AIR device for all arms of the study. Their accuracy for manikin use has been determined to be 100% but needs to be used in the newborn during resuscitation. It therefore helps the skilled health worker assess his/her own techniques during resuscitation especially on use of the correct ambu bag.

This study will use skilled health workers as the study participants and these workers will use Manikins for purposes of this study but not live Newborns. The AIR instrument is an innovation being tested to establish whether its use will enhance the skills of skilled health workers in neonatal resuscitation.

This research is being conducted in select health facilities in Western Kenya. These will be Busia CRH, Bungoma CRH, Kocholya SCH, Khunyangu SCH, Matungu SCH, Alupe SCH, Lukolis HC, Nasewa HC and Madende HC.

This project is funded by Grand Challenges Canada, USAID, NORAD and others and will be conducted in Kenya (Alupe University College) and India (Belgavi).

The objective is to assess whether receiving feedback on once performance during resuscitation from the AIR instrument at the start of the study is better than receiving feedback at 3 months and 6 months after the start of the study.

Two Research Assistants are being hired to provide support for activities towards achieving the research goals of an initiative which combines cutting-edge technical innovation with implementation science. A highly skilled candidate with knowledge and experience in both domains is being sought.

Major Duties and Responsibilities

The Research Assistant will:

- Keep an inventory of the project equipment and be the custodian of these equipment for the duration of the study.
- Assist the Project Coordinator, as a Facilitator, to conduct a series of in-person *Helping Babies Breathe* trainings across Western Kenya.
- Perform baseline evaluations/needs assessments of participating health facilities, using the study forms and tools provided,
- Enroll study participants.
- Undergo human ethics training on informed consenting processes.
- Perform data collection duties in regards to educational outcomes for neonatal resuscitation skills and competencies among project/study participants (e.g., health care providers at health facilities in Western Kenya) including
 - Periodic in-person evaluation of study participants as they perform neonatal resuscitation drills with a simulation manikin, during which time, the relevant study checklists will be completed. These checklists and competency evaluations may be paper-based, programmed into the mHBS app, or in RedCap, as may be directed by the PI/Project Coordinator.
- Perform clinical observations of deliveries and collect data regarding observed knowledge, skills, and competencies of the study participants who perform labor/delivery duties at participating health care facilities. Delivery Observation Checklists may be paper-based programmed into the mHBS app or in RedCap as directed by the PI/Project Coordinator.
- Work with the site PI and coordinator to provide on-site software technical support and provide advisory assistance where necessary for successful HBB/AIR evaluation research.
- The research assistant will keep tracking logs and contact information of recruited participants and act as the first line of technical support. He/she will provide weekly update to the Project Coordinator.
- He/she will provide general administrative support as maybe required to achieve research goals as delegated by the PI/Project Coordinator.

Working Relationships

Selected candidate will report to the Project Coordinator and work closely with the Principal Investigator at Alupe University College; The research assistant will occasionally interface with international technical team members from Mbarara University in Uganda, Indiana University USA and Harvard University USA..

Desired Knowledge, Skills and Abilities

- Relevant degree/Diploma in health sciences (nurse, clinical officer) plus at least 2 years of relevant health sector work experience
- Familiarity with current practices and guidelines for evidence-based labor and delivery care, particularly in regards to immediate care of the newborn and neonatal resuscitation, is vital for success on this role.
- Ability to work independently and collaboratively in a team atmosphere and capable of working with minimal supervision.
- Ability to coordinate closely with other team members (Research Assistants; Project Coordinator) to ensure that training and data collection activities and targets (e.g., number of educational assessments or clinical observations per week) are delivered consistently and on-time.
- Practical knowledge of HBB implementation, preferably at high volume health facility (e.g., general or teaching hospitals), will be an added advantage.
- The candidate must be comfortable with emerging trends and technology in health. Prior ICT and digital health exposure and experience will be an added advantage.
- The candidate must be good at note taking, presentation and analytical skills. Data collection, documentation, and reporting will be core activities of this project.
- Experience working with virtual and international teams. Experience using online collaboration tools (Skype, Gotomeeting, Zoom, Google drive, Blue jeans, Dropbox, Basecamp etc).
- Self-starter with the ability to take on multiple activities simultaneously while adhering to tight deadlines in a dynamic, fast-paced environment.

Method of Application:

An updated CV, an application letter describing relevant education, experience, and interest in the position plus copies of certificates and testimonials should be sent to:

Prof. Fabian Esamai,
Principal Investigator,
AIR project
Alupe University College,
P.O Box 845 50400
BUSIA, KENYA,
E MAIL fesamai2007@gmail.com
Tel: 0724400189

Please note that only shortlisted candidates will be contacted.

Closing date is 10th May 2022