Education and Stewardship to improve Knowledge, Attitudes and Practice towards Antimicrobial Resistance in Uganda (ESKAPE AMR)

Project Report

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LMIC Partner: Kiruddu National Referral Hospital, Kampala, Uganda

Countries: Uganda & Germany

1. Background of the project

The irrational use of antimicrobial agents propagates Antimicrobial Resistance [AMR] - a phenomenon where infections stop responding to antimicrobial treatment, resulting in the loss of life. However, the implementation of targeted antimicrobial stewardship (AMS) interventions that conserve antimicrobial agents could mitigate the threat of AMR.

2. The ESKAPE-AMR project

ESKAPE-AMR stands for Education & Stewardship Interventions to Improve Health Workers’ Knowledge, Attitude and Practices towards Antimicrobial Resistance. This collaboration between Kiruddu National Referral Hospital (KNRH, Uganda) and Leipzig University Hospital (UKL, Germany), aimed at assessing and improving the knowledge, attitudes and practices of healthcare workers (HCW) towards antimicrobial stewardship through educational interventions. The project was funded through GLOHRA and ran from October 2022 to December 2023.

3. Activities Implemented and Impact

   a) An online survey was shared to explore HCW’s knowledge, attitude and practices towards AMR/AMS. 124 HCWs participated in the baseline survey.

   b) Focus group discussions involving 16 HCWs were conducted to gain an in-depth understanding of barriers towards optimal antimicrobial stewardship practices.

   c) Purposively selected HCWs were mentored and trained to serve as local AMS champions at different hospital departments, to ensure continuity of AMS practices. Sixteen AMS focal persons were trained and mentored.
d) **Large group Training** of HCWs was conducted through five **continuous medical education sessions** (CMEs). A total of 692 HCWs attended the sessions, about half were female. Participants demonstrated an increase in knowledge levels evidenced by an increase in the median quiz scores.

e) **Empiric antibiotic treatment recommendations** for KNRH were developed through multidisciplinary engagements with infectious disease experts from UKL, KNRH and in collaboration with the hospital AMS and medicines committees.

f) **Presentation** of preliminary research results at **national & international conferences** (ECCMID2023, KIT2023, National One Health Platform Meeting 2023)

### 4. Lessons learned for the wider global health community

1. Education interventions such as large group training could play a role in improving AMS practices through increased knowledge and awareness.
2. Mentorships of AMS focal persons could be key to sustaining AMS practices at the hospital departmental level.
3. Multidisciplinary collaborations are key to implementing education interventions such as the development of institution-based treatment guidelines.

### 5. List of materials and publications produced

KNRH local Empirical treatment recommendations for antimicrobial therapy

### 6. Pictures
7. Contact

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