

A MIXED-METHOD STUDY PROTOCOL TO UNDERSTAND TRANSMISSION PATHWAYS AND INTEGRATED DIGITAL SURVEILLANCE POTENTIAL OF ANTIMICROBIAL RESISTANCE IN ETHIOPIA IN A ONE HEALTH APPROACH

Interview Guide for Key Informants (Qualitative component)

“Use of DHIS2 for strengthening local AMR surveillance in Jimma, Ethiopia”

Background

The aim of this interview guide is to facilitate a rich and guided conversation where the participants will be encouraged to discuss the topics related to the research objectives. The following approach is going to be adopted.

Whatever the interview mode, face to face or online, the interviewer greets that participant and introduce himself (e.g. Muhammad Asaduzzaman, PhD Research fellow at the Centre for Global Health, Department of Community Medicine and Global Health, University of Oslo, Norway). The interviewer will emphasize that the key informant participation is voluntary. The interviewer will then invite the key informant to read together the information sheet/ informed consent of the project and that the key informant is welcome to ask questions. The interviewer will point out to the key informant that he is interested to record the interview in order to preserve authenticity and to limit the problems of paraphrasing and using his own words. If the key informant agrees to that, a recorder device will be set up to record the interview. Once all questions addressed by the interviewee have been answered, the interviewer will ask the key informant to sign the consent form to participate.

After asking for demographic data such as age, gender, occupation, no of years of experience, the interviewer will start with a question such as “could you please describe to me your job” to make the participant feel comfortable and then he will follow with the other below described questions. There is no right or wrong answer so the key informant should feel free to share his/her opinions. In general, the interviewer will allow flexibility for the dialogue and won't interrupt the key informants during their talk, he would rather make a note and comeback to questions later after they finish their deliberation. If the key informant provides answers to a question that will be asked by the interviewer later, he won't stop the key informant, instead the interviewer writes a note and will avoid repeating the question later.

By the end of the interview, the followings must be checked:

- ✓ The below mentioned questions were asked.
- ✓ The recorder device was functioning well.
- ✓ If the taken notes have gaps that need to be filled before leaving the interview.

Topics and questions that are involved in the interview

The current status of the antimicrobial resistance (AMR) surveillance in One Health approach (OH) (both human and animal) in Jimma will be discussed. The interview is expected to help achieve the following overall and specific objectives:

Overall Objective

This research project will explore the feasibility of a One Health surveillance platform (DHIS2) for AMR in the public health and veterinary health domain in Jimma, Ethiopia.

Specific objectives

- 1- To conduct a policy analysis related to AMR surveillance in One Health approach at Jimma, Ethiopia through qualitative approach.
- 2- To evaluate the success of a One Health surveillance platform like DHIS2 through identification of barriers, challenges and opportunities for it based on the key informants' interviews in relevant stakeholder institutions in Jimma, Ethiopia

Themes under this topic will be discussed to achieve the project's objectives, and there are questions that have been developed around these themes to be asked to the key informant during the interview. The key informant participants will be asked about the topics that are related to their experience. The themes that will be discussed under each topic are as below:

General themes about the participants' background

- Participant's demographic and professional background
- Background about participant's nature of work
- General knowledge and attitude of the key informant towards AMR and One Health (OH) approach
- Education and training about AMR research and/or surveillance and OH

Themes related to AMR surveillance

1. Common bacterial diseases in the locality and the country
2. Level of importance of AMR surveillance in the institutions and the country.
3. Existence of a priority list of AMR bacteria.
4. Extent to which the priority list of AMR bacteria reflects a OH approach.
5. Existence of a surveillance system for AMR in key informant's institution.
6. The mode of AMR surveillance system; paper based or digital
7. The data management and surveillance governance and leadership
8. Data flow and dissemination mechanism
9. Logistics and resources for current and future AMR surveillance
10. Knowledge about national AMR surveillance action plan
11. Benefits of existing AMR surveillance system (if any)
12. Challenges of existing AMR surveillance system (if any)
13. Connecting public health and veterinary health system with relation to AMR.
14. Perceived importance of a OH AMR surveillance system
15. Experience of multidisciplinary work related to prevention or control of AMR.
16. Collaboration with other OH relevant stakeholders including the community, environmental agency to combat AMR.
17. Opportunities of digital surveillance platform to combat AMR based on the key informants' experience.

18. Barriers to adopt digital AMR surveillance platform based on the key informant's experience.
19. Any prior knowledge about DHIS2 platform
20. Ideas not covered by the themes and need to be shared by key informants about the AMR surveillance