Guideline for Conducting a Knowledge, Attitude and Practice (KAP) Study

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"KAP" study measures the Knowledge, Attitude and Practices of a community. It serves as an educational diagnosis of the community. The main purpose of this KAP study is to explore changes in Knowledge, Attitude and Practices of the community, paramedical personnel and medical practitioners on diabetes and diabetic retinopathy. This study will provide information for valuation of the diabetic retinopathy programme. It reveals increases in knowledge, changes in attitudes towards diabetes and diabetic retinopathy, as well as changes in the kinds of practices that are followed regarding management of diabetes and diabetic retinopathy.

Before beginning the process of creating awareness in any given community, it is first necessary to assess the environment in which awareness creation will take place. Conducting a KAP study can best do this? KAP Study tells us what people know about certain things, how they feel and also how they behave. The three topics that a KAP study measures are Knowledge, Attitude and Practice. The Knowledge possessed by a community refers to their understanding of any given topic-diabetes and diabetic retinopathy in this case. Attitude refers to their feelings towards this subject, as well as any preconceived ideas that they may have towards it. Practice refers to the ways in which they demonstrate their knowledge and attitude through their actions. Understanding the levels of Knowledge, Attitude and Practice will enable a more efficient process of awareness creation as it will allow the program to be tailored more appropriately to the needs of the community.

When assessing the KAP of a community, it is useful to divide that community into smaller sub-categories. In this case, these categories can be defined as the Medical Community and the General Community. The Medical Community consists of those who are responsible for the provision of medical care to the population. It includes the doctors, paramedics, pharmaceutical providers, and others. This category could be further split into Medical Practitioners and Paramedical Personnel in areas with a large enough population of these two groups. The General Community consists of those who receive medical care. There are many reasons to expect that the levels of KAP will vary in these two categories. This fact should be kept in mind when awareness creation programmes are evolved for these two categories to attain maximum efficiency.

Steps in Preparation of a KAP Questionnaire

1. Domain Identification

The domain, or subject, which the study will be conducted on, must be identified. For the purposes of a diabetic retinopathy project, the general domain area is diabetes and diabetic retinopathy. More specifically, the domain will be the Knowledge, Attitude and Practices of the population with regard to these two diseases.

2. Question Preparation

Question preparation must be conducted in stages. The first stage in preparing questions for a KAP study is to meet with diabetologists, Medical practitioners, eye-care service providers, and experts on diabetic retinopathy. This group of specialists should then identify the Endpoints or Goals of the awareness creation activities of the diabetic retinopathy project for Medical practitioners, Paramedical personnel, and

Community members. Questions should be prepared to test all three areas of the study, Knowledge, Attitude, and Practices.

Questions included in the Knowledge section should be designed to test the knowledge of respondents on diabetes and diabetic retinopathy. These should be open-ended questions, without multiple-choice answers provided as this can result in guessing and therefore give a false impression of the knowledge of the population. Questions should cover the following topics:

- Epidemiology of diabetes
- Progress of diabetes
- Symptoms of diabetes
- Diagnosis of diabetes
- Treatment options for diabetes
- Risk factors for diabetic retinopathy
- Treatment options for diabetic retinopathy

Questions included in the Attitude section should be designed to gauge the prevailing attitudes, beliefs and misconceptions in the population about these diseases. This could be most effectively done using a different strategy. Statements should be provided, and respondents should be asked to indicate the extent to which they agree with those statements, on a pre-determined scale (strongly disagree, moderately disagree, neutral, moderately agree, strongly agree). These questions should cover the following topics:

- Demography
- Follow-up procedure and importance
- Importance, significance, and severity of diabetes
- Importance of referral
- Health seeking behavior

Questions included in the Practice section should be designed to assess the practices of the population with regard to these two diseases. These should be open-ended questions like those asked in the Knowledge section, to prevent false information as a result of guessing. These questions should cover the following topics:

- Intervention
- Counselling services
- Referral practices
- Diabetic management
- Continuing Medical Education (CME)

3) Validation of questions

Once the questions for the study are prepared they must be validated. This validation should be aimed at assessing their ease of comprehension, relevance to their intended topics, effectiveness in providing useful information, and the degree to which the questions are interpreted and understood by different individuals.

Validation should be conducted by a pre-testing on a small group of representatives of the population. The questionnaire should be tested on approximately 10 members of each of the following groups: Medical Officers and General Practitioners, Paramedical Personnel, and Community Members, including both diabetes and non-diabetes.

Once this small group has completed the questionnaire the results should be analyzed. This analysis should validate the degree to which the questions were properly understood or misunderstood, the degree to which individuals within a group interpreted the questions differently, the effectiveness of the questions in soliciting the proper information, and any areas of information which were neglected by the proposed questionnaire.

Once analysis has been completed the questions should be modified if necessary to reflect the results of the pre-testing. This will result in the final version of the KAP questionnaire.

Conducting a KAP Study

The first step in conducting a KAP study is the selection of the sample to which the survey will be given. The sample should be sufficiently large so as to represent the population without being so large that the data collection and analysis is prohibitively difficult. In choosing a sample size be careful to take into account that some of those selected may be difficult or impossible to contact, or unwilling to participate in the study. A sample size of approximately 200 individuals from each group will suffice as long as care is taken to ensure that the response rate is reasonably high.

As mentioned previously, division of the population into smaller categories is typically desirable as differing groups in the community have different

educational, cultural, and socioeconomic backgrounds and therefore will likely have differing levels of KAP. In practice, this distinction can be made based on geographical characteristics of the group in either Rural or Urban settings. The characteristics of the overall population should be considered when selecting the proportion of individuals from these categories so as to ensure that the population sampled will reflect the population at large.

The survey should then be conducted and the data collected. A standard method for conducting the survey should be decided upon in advance, and should be consistent for each category surveyed so as to ensure that differences in the result are independent of the sampling method and depend solely on the characteristics of the population in question. Sampling methods include interviews, either in person or on the telephone, and distribution of the questionnaire by mail. Based on the experiences of the Lions-Aravind project, it is not advisable to attempt to conduct a survey through mailings, as the response rate has been found to be significantly lower following this method than it is using the interview method.

After collection, the data should be analyzed to determine the KAP level of the community. Questions in the Knowledge, which often have more than one component to a 'correct' answer, must be analyzed differently from those in the Attitude section, which must in turn be analyzed differently from those in the Practice section. For example, if asked in the Knowledge section to list the symptoms of diabetes, a respondent may know anywhere from zero to seven symptoms. It will likely be most useful to analyze data from this section in terms of the absolute number of correct responses to a question, so that it can be determined what percentage of the population knows all of the symptoms, what percentage knows 6, 5, and so on. The preparation of tables to illustrate both the percentage of those knowing each individual symptom and the percentage of people knowing multiple symptoms will provide a better understanding of the overall knowledge of the population, as there may be some highly knowledgeable members of each group and many others who entirely lack knowledge, a fact that would not be apparent without a more detailed breakup of the data. Analysis of the responses to the Practice section should be conducted in a similar fashion to those of the Knowledge section, and be tailored to the specific nature of each question.

In the Attitude section, a numerical value can be assigned to each choice in the range of responses, with the middle response given a score of zero and positive and negative scores assigned to those around it. In this way a score can be calculated for each individual in relation to the highest possible score.

Once the data has been collected and analyzed it should be presented in a report that can then be distributed to other interested parties.