Advocacy, communication and social mobilization for TB control

A GUIDE TO DEVELOPING KNOWLEDGE, ATTITUDE AND PRACTICE SURVEYS



Stop B Partnership

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TABLE OF CONTENTS

Abbreviations and acronyms	2	Step 5: Analyse the data	37
Acknowledgments	3	A. Enter and clean the data	37
About this guide	4	B. Implement a data analysis plan	37
		C. Interpret the findings	38
Executive summary	5		
		Step 6: Use the data	39
Introduction	6	A. Translate findings into action	39
A. What is a KAP survey?	6	B. Write the survey report	39
B. Why conduct a KAP survey?	6	C. Disseminate findings	40
C. When conduct a KAP survey?	7	D. Use ACSM KAP survey data in	
D. Who conducts a KAP survey?	7	programming	41
Background on ACSM in TB control	8	Supplementary research activities	43
A. What is ACSM?	8	Conclusion	46
B. How does ACSM benefit TB control?	9	Bibliography	47
		Further reading	48
Step 1: Define the survey objectives	11	Annex A: Cough to Cure Pathway	49
A. Review existing information	11	Annex B: Sample KAP survey workplan	50
B. Determine the purpose of the survey	12	Annex C: Sample ACSM KAP survey	-
C. Identify the areas of enquiry	14	questionnaire	51
D. Identify the survey population	16	Annex D: Menu of sample ACSM	-
E. Create a sampling plan	17	KAP survey questions	58
Step 2: Develop the survey protocol	19		

Step 2: Do

Α.	Organize the contents of the survey				
protocol					
Β.	Define the key research questions				
C.	Determine whether the survey needs				
ethical review					
D.	Create a workplan				

23 E. Develop a budget 23

Step 3: Design the survey questionnaire

- A. Develop the survey questionnaire 25 29
- B. Make a data analysis plan
- C. Pre-test and finalize the questionnaire 29

Step 4: Conduct the KAP survey

- A. Choose survey dates and timeline 33 B. Recruit survey supervisors and interviewers 33 C. Train supervisors and interviewers 34
- D. Ensure the quality of data collected

19 20

22

25

33

35

ABBREVIATIONS AND ACRONYMS

- ACSM advocacy, communication and social mobilization
- AIDS acquired immunodeficiency syndrome
- **DHS** demographic and health survey
- **DOTS** the internationally recommended strategy for TB control
- **HIV** human immunodeficiency virus
- **KAP** knowledge, attitudes and practices
- **NTP** national TB control programme
- **TB** tuberculosis
- WHO World Health Organization

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ABOUT THIS GUIDE

Who should use this guide?

This guide is designed for tuberculosis (TB) programme managers and staff who intend to conduct advocacy, communication and social mobilization (ACSM) activities as part of their broader TB control strategy. The guide may also be a helpful tool for consultants hired to assist country programmes in conducting ACSM work. The guide was developed as a tool to help systematize countries' approaches to collecting and using data on knowledge, attitudes and practices (KAP) as an evidence base for planning, refining and evaluating ACSM work. This resource is intended to serve not as a definitive work, but as a practical toolkit that offers a theoretical framework, practical suggestions, and a menu of useful resources and tools.

Countries may use the guide in various ways, depending on whether they are adding ACSM questions into a national prevalence survey, or designing a full KAP survey specifically to gather data for ACSM planning. The guide focuses on aspects of KAP survey research that are different or unique for TB and ACSM, as compared to other types of surveys. It is designed for TB programme managers, programme staff and consultants who are familiar with basic research methods, have good data collection skills and may already have conducted TB prevalence surveys. The guide does not provide in-depth coverage of research methodology, on topics such as sampling, interviewing, supervision, training, data entry or data analysis. Country programmes that do not have this expertise may consult the numerous resources that exist on these topics, or contract outside experts or groups to manage the survey implementation.

How to use this guide

TB programme staff and consultants are encouraged to use the tools included in this guide as practical suggestions, rather than scripts or rules. The guide is organized in six major steps that range from conceptualization of the purpose of the KAP survey to analysis and use of the data collected. A list of further reading is provided to guide readers to documents that complement the topics covered in this guide. TB programme staff and consultants may adapt and extract ideas from the Sample KAP survey questionnaire and Menu of sample ACSM KAP survey questions that are provided as Annexes.

EXECUTIVE SUMMARY

To bring about sustainable social and behavioural change, ACSM interventions need to be evidence-based. Evidence-based programming underlines the importance of collecting baseline and follow-up data to design and evaluate ACSM activities aimed at populations or specific subgroups. A well-designed and rigorously conducted KAP survey produces data that are informative, insightful and broadly useful in the planning of ACSM activities for TB control.

Selecting the most appropriate ACSM activities depends, in part, on the data from KAP surveys that include questions related to ACSM. In addition, KAP survey design and subsequent ACSM activities can be informed by complementary research methods such as focus groups, indepth interviews and observation. Use of these methods is discussed in the section entitled Supplementary research activities.

To guide survey design and data collection, TB programme managers need practical tools and guidelines. This guide presents practical guidance for conducting a KAP survey for TB programmes by following a six-step process:

Step 1: Define the survey objectives contains information about how to access existing information, determine the purpose of the survey and main areas of enquiry, and identify the survey population and sampling plan.

Step 2: Develop the survey protocol outlines elements to include in the survey protocol and suggestions to help identify the key research questions. Determining whether the survey needs ethical review is critical to this step, as well as creating a workplan and budget.

Step 3: Design the survey questionnaire proposes important steps for developing, pre-testing and finalizing the questionnaire, and for making a data analysis plan.

Step 4: Implement the KAP survey includes considerations for choosing survey dates, recruiting and training survey supervisors and interviewers, and managing survey implementation.

Step 5: Analyse the data consists of entering and checking the quality of the survey data, and implementing the data analysis plan created in Step 3.

Step 6: Use the data highlights ideas on how to translate the survey findings into action, elements to include in the study report, and how to disseminate the survey findings.

Comprehensive data analysis can provide TB programme managers with the evidence that they need to select appropriate and effective ACSM interventions; the data gathered can also be useful for advocacy and policy development. Effectively-designed ACSM activities contribute to achievement of global TB control objectives by increasing case detection, improving treatment adherence, combating stigma and discrimination, empowering people affected by TB, and mobilizing political commitment (1).

An increasingly important and common role for KAP surveys is to provide essential data for demonstrating the impact of ACSM programme activities. Through use of KAP surveys, complementary research, and monitoring and evaluation, national TB control programmes and projects have the opportunity to build the evidence needed to demonstrate the contributions of ACSM to TB control. The burgeoning evidence base supporting ACSM ultimately results in the more efficient use of limited resources to produce desired behavioural change and increased use of health services.

INTRODUCTION

A. What is a KAP survey?

A KAP survey is a representative study of a specific population to collect information on what is known, believed and done in relation to a particular topic — in this case, TB. In most KAP surveys, data are collected orally by an interviewer using a structured, standardized questionnaire. These data then can be analysed quantitatively or qualitatively depending on the objectives and design of the study. A KAP survey can be designed specifically to gather information about TB-related topics, but it may also include questions about general health practices and beliefs.

B. Why conduct a KAP survey?

KAP survey data are essential to help plan, implement and evaluate ACSM work. A KAP survey gathers information about what respondents know about TB, what they think about people with TB or about the health system response to TB, and what they actually do with regard to seeking care or taking other action related to TB. KAP surveys can identify knowledge gaps, cultural beliefs, or behavioural patterns that may facilitate understanding and action, as well as pose problems or create barriers for TB control efforts. They can identify information that is commonly known and attitudes that are commonly held. To some extent, they can identify factors influencing behaviour that are not known to most people, reasons for their attitudes, and how and why people practise certain health behaviours. KAP surveys can also assess communication processes and sources that are key to defining effective activities and messages in TB prevention and control. KAP surveys may be used to identify needs, problems and barriers in programme delivery, as well as solutions for improving quality and accessibility of services. A survey could also be designed to explore ways to involve all health providers in TB control including outpatient government services, hospitals, and NGOs.

The data collected enable programme managers to set TB programme priorities (e.g. to address the most common problems or to identify specific subgroups whose needs may differ from other groups), to estimate resources required for various activities, to select the most effective communication channels and messages, to establish baseline levels and measure change that results from interventions, and for advocacy (e.g. to show the magnitude of a challenge, which in turn, may inform resource needs). KAP data provide national TB programme managers and their staff with the fundamental information needed to make strategic decisions.

C. When conduct a KAP survey?

A KAP survey can be conducted at any point during TB control activities, but is most helpful for ACSM activities if conducted in the early phases of a project, after the overall programmatic objectives have been determined (such as the implementation of new approaches or interventions to address specific challenges like TB/HIV or MDR-TB) and before extensive project planning has been completed. In this scenario, data from the KAP survey can be used to orient resource allocation and project design, and to establish a baseline for comparison with subsequent, post-intervention KAP surveys.

D. Who conducts a KAP survey?

A KAP survey will probably require internal human resources as well as external experts with specialized skills. Tasks such as planning, budgeting and writing the survey protocol can be accomplished by project staff who have experience in ACSM, who know the project goals and resource limitations, or who are familiar with survey methodology. However, national TB programme staffs are often too busy to undertake many aspects of a KAP survey and therefore can benefit greatly from hiring consultants at the inception of the survey or at key points in the process. It may be necessary to hire individuals or agencies to lead tasks such as determining the number of people to be surveyed (sample size), designing the survey questionnaires, conducting the survey interviews in the local languages, entering data from the survey into a computer, or analysing data. If a consultant's scope of work is expected to be most beneficial at a later phase, such as data analysis, it is important to involve the consultant from the initial design phase. This ensures that consultants are aware of the survey's purpose, design and implementation plan, and can contribute in valuable ways when their skills are needed.



BACKGROUND ON ACSM IN TB CONTROL

A. What is ACSM?

Advocacy, communication and social mobilization are three distinct sets of activities, all of which have the shared goal of bringing about behavioural change. One of the major distinctions is their audiences: advocacy primarily works with public leaders or decision-makers; communication generally targets individuals or subpopulations in the public; and social mobilization aims to secure support from the broad public and specific communities. The lines between the three categories are often blurred, and interventions under one area may influence beneficially or facilitate processes in the other areas (2,3). Broad descriptions of the three terms are provided here to help define and distinguish between categories of ACSM activities for TB control.

- **Advocacy** aims to secure needed financial resources and change policies, guidelines or procedures by influencing stakeholders such as politicians, decision-makers and journalists.
- **Communication** seeks to increase awareness, influence social norms, create behavioural change among selected individuals or subpopulations in the public, and improve interpersonal communication and counselling between people with TB disease, their families and providers.
- Social mobilization aims to change norms, improve services, expand community support and solve social problems, often by bringing groups together to act at a community level.

In many instances, "communication" may be referred to as an overarching theme that encompasses or overlaps with advocacy and social mobilization activities. Regardless of how behavioural change objectives are organized, ACSM cuts across all aspects of TB control and should be integral to national TB control strategies (2).



B. How does ACSM benefit TB control?

ACSM activities are a means to an end, not an end in themselves. They address key barriers to accessing TB care and completing treatment, and thus support the achievement of national TB programme goals and objectives. ACSM is increasingly being acknowledged as an essential strategic component of TB control. There is an urgent need for ACSM planning as TB programme managers realize that the ambitious goals of the TB control community will not be met without prioritization of communication activities (1). The new Global plan to stop TB 2006–2015 and the Stop TB Strategy launched by WHO in 2006 position ACSM as an important component of the TB Control programmes that must be promoted for wider use. It also outlines fundamental activities that will be led by the ACSM Working Group over the next 10 years to ensure wider strategic application of ACSM (4).

ACSM activities create greater social commitment and support behavioural change in order to ensure access to treatment and care for all, particularly poor, vulnerable and hard-toreach populations. For example, **advocacy** activities that contribute to TB control objectives might include educating religious leaders and political representatives, reforming legislation or policies, or influencing mass media through dissemination of media packages and training of journalists, with the goal of stimulating allocation of additional resources focused on TB control.

Communication activities might include disseminating accurate information and dispelling myths about TB, or educating and encouraging people with TB and their family members to be more actively involved in care and to support community approaches to facilitating treatment completion. Organizing **social mobilization** events and community participation can raise TB awareness, promote health-seeking behaviour, inspire dialogue, and heighten community concern and action for TB control.

Any ACSM strategy has to focus on individual and social change to meet four important TBcontrol challenges: 1) mobilizing political commitment and resources for TB, 2) improving case detection and treatment adherence, 3) combating stigma, and 4) empowering people affected by TB and their communities.

STEP 1: DEFINE THE SURVEY OBJECTIVES

A. Review existing information

Before you develop survey tools, seek out existing health services statistics to avoid duplicating efforts or collecting data unnecessarily. A thorough literature review can tell you what is already known and suggest areas that need further exploration. Begin by reviewing the National Demographic and Health Survey (DHS) and available TB surveillance data to understand the context of TB in the country. Next, search for any previously conducted quantitative surveys or qualitative research studies that may have included topics related to the issues you want to study. Search on-line for examples of research conducted among the population (s) you are interested in studying. Ask your colleagues working in other organizations and local stakeholders such as Ministry of Health personnel if they have information, materials or experience to share with you. Partnerships are vital to successful formative research, and any KAP survey should begin by leveraging existing institutional resources to gather strategic information. Possible data sources include (5):

- national TB programme data
- publications and documents from partner organizations
- peer-review journals
- local newspapers
- masters or doctoral dissertations
- websites on the internet
- surveys (local, national, international)
- local experts, such as community leaders, media agents or health workers.

Depending on the data that already exist, you may be able to identify gaps that can be filled with a KAP survey. For example, the DHS in many countries includes data about exposure to different mass media, proportion of residents in rural areas that have access to various health facilities, and rates of TB and human immunodeficiency virus (HIV) co-infection. However, DHS data are unlikely to describe the reasons why people postpone seeking medical care when they have symptoms, what sources of health information are most trusted, how TB patients feel they have been treated at facilities, or whether stigma is associated with TB.



B. Determine the purpose of the survey

When you have reviewed existing information, determine the primary objective of your survey, and how you will use the results. This will help you decide who and what should be studied. What do you hope to accomplish by conducting the KAP survey?

- **Exploration:** The purpose of an exploratory survey is to gather information about a specific population or a littleknown topic. In this type of survey, you may select a broad range of questions and may be less concerned about statistical certainty.
- Test a hypothesis or approach: You may use a KAP survey to test the acceptability of messages or a hypothesis about a proposed intervention strategy.
- **Establish a baseline:** A baseline represents data collected at a point in time

before any intervention is carried out. Repeating the same data collection exercise later allows a programme to compare, measure and assess changes. If you are trying to establish a project baseline or evaluate the outcome of your ACSM work, you will need to pay more attention to sample size. You also will need to ensure that your questions are directly relevant to the activities you are likely to implement.

Often you may have several objectives in mind, such as collecting information to guide the shaping of communication messages and strategies while at the same time establishing baseline levels of knowledge and behaviour. This may be efficient, but it can also make your survey longer and more complex. If your KAP survey has multiple purposes (e.g. formative and baseline), decide which purposes are your highest priority and make compromises in



Example from the Field: Exploring delays in seeking TB treatment in Cambodia

In 2005, the national TB control programme in Cambodia conducted a survey to examine the knowledge, attitudes and practices of TB patients seeking care and to identify the factors influencing delay in seeking treatment. A total of 1004 new smear-positive pulmonary TB patients over age 15 were enrolled in the study and data were collected at DOTS service facilities in eight provinces.

The study included a literature review that identified distance, sociocultural issues and economic cost as key factors contributing to delay in health-seeking behaviour. The study team used a special calendar based on local religious and political events to collect chronological information, such as the date of onset of TB symptoms and the date of visits to health-care providers before diagnosis. The study team also conducted a rapid asset assessment to indicate respondents' socioeconomic status.

Results: The study defined five different kinds of delay in TB care and treatment: total delay, patients' delay, system delay, and two components of system delay; providers' delay and services' delay. The delay for each phase (taken as the median number of days) is listed.



The KAP survey identified the following factors that were associated with a longer delay in seeking TB care and treatment:

- residence located at further distances from health facility
- lack of awareness or knowledge of TB
- older age group
- lower socioeconomic status
- cost of transportation and service fee.

Conclusions and recommendations:

The research team recommended that the NTP explore innovative approaches to improve financial and geographic access to free treatment, and to promote health education through outreach activities and TB awareness campaigns. To improve accessibility to TB services, the NTP embarked on a rapid DOTS expansion programme to health centres. Additional health education activities are planned targeting TB patients and the public. accordance with those priorities. If you are trying to compare your work to others, use similar definitions and be clear about how your population is similar to or different from other populations that have been evaluated.

Write out the objective of your KAP survey in one or two sentences. To be effective, KAP survey objectives need to be realistic, focused and relevant. Surveys that include numerous purposes, target groups or areas of questioning are not realistic and become too unwieldy to manage in one survey. Survey objectives should reflect a clear focus on the main goal and target audience of the research. The following are illustrative examples of objectives for different surveys:

- to gather baseline information on the knowledge, attitudes and practices of recently-diagnosed TB patients and to identify barriers to seeking care;
- to explore attitudes and experiences of stigma and discrimination related to HIV and TB among the general public; to determine the individual, social and environmental barriers and enabling factors that contribute to low TB case detection and poor completion of TB treatment;
- to assess TB-related knowledge and attitudes among prison staff and currently incarcerated persons;
- to measure changes in TB-related knowledge and attitudes following an awareness campaign among university students.

C. Identify the areas of enquiry

What do you want to find out?

The information you need to gather is directly related to the purpose of the survey, the overall goals and objectives of your TB programme, and the ways that your programme intends to use the data. Write out a list of the main topics the KAP survey will investigate, and prioritize the two or three most important ones.

KAP surveys can gather a wide range of information on individuals' TB-related values and belief systems, and on how these affect their health-seeking practices. The survey is an effective way of identifying factors that influence your audience's TB-related health practices and opinions. Surveys also can identify barriers to health-seeking behaviour and obstacles to initiating or completing TB treatment. Surveys can help determine behavioural goals, segment and define your target audience(s), identify stakeholders or discover media habits of your audience. Some of the principal areas of enquiry of your KAP survey may include:

- common beliefs about TB and knowledge of TB symptoms
- individual, group (social) and structural (system) barriers to TB care
- issues of stigma associated with TB and HIV
- trusted and popular sources of health information.

Based on the above examples, your survey may explore your target audience's knowledge about what causes TB and how it is transmitted, perceptions of contagiousness and how individuals feel towards people with TB. If stigma is a key area of questioning, then the focus will be exploring discriminatory behaviour or socially-stigmatizing attitudes regarding people with TB (as some may regard TB as an incurable disease or may associate it with HIV), how those attitudes may differ towards family members, friends, coworkers and society at large, and how HIV-related stigma is related to TB. If your KAP survey aims to gather data on trusted sources of health information, you will want to find out about exposure to various mass media channels, peak listenership or viewership times, appeal of different types of messages, credibility of social influencers (friends, family, doctors, traditional healers) and preferred communication channels through which to receive TB information.

Choose an intervention framework: To define the information that you need to gather through the survey, it may be helpful to choose an overarching model or framework for ACSM activities in TB control. A brief overview of five relevant models is given in the ACSM document: *A 10-year framework for action (1)*. These include Johns Hopkins University's P-Process, WHO's Communication-for-Behavioural-Impact model, Johns Hopkins University's Outcome Map, the Communication for Social Change approach, and the Cough to Cure Pathway developed by the Academy for Educational Development for the Stop TB Partnership (*6*).

For example, the Cough to Cure Pathway outlines the steps of a TB patient's experience from beginning to end; from first symptoms to final treatment (see Annex A). It maps the interrelationship between individual behaviour, DOTS services, and other societal structures and resulting treatment-seeking behaviour and adherence. It also identifies the individual, group and system barriers or facilitating factors that may hinder or help a patient's ability to complete each of the steps. Each of the steps to treatment and the related barriers or facilitating factors constitutes valuable areas of enquiry for any TB KAP survey. **Examine barriers:** You may find it useful to probe the individual, social and system-related factors that constitute the greatest barriers to health. *What influences a person with TB to diverge from the Cough to Cure Pathway? Are these barriers related to the individual's knowledge, attitudes, practices, or a combination of these? Are the obstacles personal, societal or system-wide?* Due to any number of barriers, the person with TB may diverge from the pathway at three crucial points that can lead to death from TB.

- **Point 1:** The person with TB has symptoms of TB but does not seek any care (diagnosis or treatment).
- **Point 2:** The person with TB is diagnosed with TB disease but does not begin treatment.
- **Point 3:** The person diagnosed with TB does not consistently follow or does not complete the treatment regimen.

In many cases, the KAP survey will indicate what percentage of people in the overall population have particular knowledge, attitudes or practices that encourage or inhibit their ability to adopt health-seeking behaviour regarding TB. If epidemiological data that have determined which point of divergence is most common are available in-country, then the KAP survey can probe the issue further to generate data that can be used to design appropriate interventions.



D. Identify the survey population

ACSM activities target different audiences, and your survey may as well. The key question is: *From whom do you need to collect data?* The audience for your survey may be pre-defined by the larger programme goals, or in other cases, a review of existing literature may highlight population groups that have not been studied but that are in need of ACSM interventions. Define your survey population specifically in terms of:

- demographic characteristics, such as age, sex, religion, urban/rural residence, income level, social class, education, employment status, and ethnic or language group;
- **job or social category,** such as policymakers, doctors, nurses, factory workers, religious leaders or university students;
- other relevant characteristics: Some individuals or groups may be disproportionately affected by TB, such as persons living with HIV/AIDS, imprisoned people, homeless populations, drug users, or family members of people with TB;
- secondary audiences: Your secondary audiences may include allies who can influence or provide access to your primary audience, such as community leaders or health authorities.

Knowledge, attitudes and health-seeking practices may vary substantially among population groups, and according to social, cultural or economic characteristics. This is important if your survey intends to establish differences at baseline, so as to allocate resources or tailor ACSM interventions for different segments of the population. Segmenting the survey population is important if your ACSM interventions intend to reach specific audiences. Which characteristics make up the distinct population from which your survey needs to collect information? Sample population characteristics may be related to where people live, their religious, language or ethnic grouping, age or their socioeconomic class, or how likely they are to seek care and treatment. Examples of distinct populations that you may want to survey are:

- subset of women or men in the general public
- subset of youth, adults or elderly in the general public
- individuals who inject intravenous drugs
- current or recently released prisoners
- TB patients
- family members, neighbours or friends of TB patients
- TB physicians or nurses
- health-care workers
- unemployed, low-income and/or homeless people.

Defining which population you want to study is an important consideration, as it will affect your sample size calculations, the time needed for data collection, the type of interviewers you choose, and even the number of questionnaires to develop. You will likely need to design slightly different questionnaires for audiences such as health workers, TB patients and the general public, depending on the specific information you wish to collect from each population. Some segmented audiences can be regrouped. For example, the same questionnaire could be used for the general public to survey men and women at worksites, unemployed men and women, couples, youth and family members. Similarly, a single questionnaire may be used for counsellors, physicians and social workers. The data for each category can then be separated out by audience category during analysis if necessary.

E. Create a sampling plan

The survey sample is the set of respondents who are selected from a larger population for the purpose of participating in the survey. They are studied to gain information about the population as a whole. Sampling plans address generalizability, certainty and precision of results by defining who is included in the survey and how many people are needed. How respondents are selected (i.e. randomly, in a directed or purposeful way, or by convenience) affects the extent to which potential bias is minimized and generalizations can be made to a larger population. Several of the main categories of sampling include:

- random sampling: each subject is chosen randomly and by chance, with a known probability of being selected from a larger population;
- purposeful sampling: participants are selected in a directed way based on a criterion or rationale. For example, you want to survey TB nurses in urban medical facilities;
- **convenience sampling:** the sample is selected because they are convenient. This method is practical because it produces an estimate without the cost or time required to select a random sample.

Decide the extent to which you want the survey findings to be representative of a larger population. KAP surveys that have a statistically representative sample of respondents allow you to say what percentage of people in the overall population of interest have particular knowledge, attitudes, or self-reported behaviours, with a specified level of certainty. If possible, seek the assistance of a statistician to calculate the precision and certainty of the sample required for the survey. Weigh the need for precision and certainty against the level of effort to conduct more survey interviews. A larger sample will produce more accurate data, but will be more costly and time-consuming than a smaller sample. If your analysis plan includes comparing different subsets of the population, then your sample size should be calculated accordingly. Try to determine which comparisons you will need before you develop the questionnaire or the sampling plan, and include that information in the data analysis plan.

A statistician can provide guidance about how to use random or systematic sampling processes to prevent selection bias. Bias is an over- or under-estimation in measurement due to problems concerning the selection method of the survey sample population. The survey protocol should specify which method will be used to guarantee random selection of respondents and whether cluster sampling, simple random sampling, or stratified sampling is used. A concise overview of these methods and a decisionmaking tool to choose the appropriate method are included in the *KPC 2000+ Field Guide* listed in the resource section (7).

Key points to consider: Defining the survey objectives

- Start with information already available. To avoid collecting duplicative information, consult existing data sources, such as DHS, local qualitative studies and health service statistics.
- Ask yourself: *What do you hope to accomplish by conducting the KAP survey*? Write out the purpose of your KAP survey in one or two sentences.
- Write out a list of the main issues that the KAP survey will investigate, and prioritize the two or three most important ones.
- Select your survey population with your overall programme objectives in mind. Be specific when you define the characteristics of your survey audience.
- Your sample size depends on the purpose of the survey. If you are testing a hypothesis or making comparisons over time, a larger sample is recommended. If the main purpose is to provide descriptive data for programme decisions, a smaller sample size is adequate. Consult a statistician to calculate the sample size required for your survey.
- Sampling strategies should minimize bias. Consult a statistician to determine the method that best fits your goals and available resources.

STEP 2: Develop the survey protocol

Once you have defined your survey objectives, write a KAP survey protocol to guide implementation and record the goals, objectives, participants and methods that will be selected. The survey protocol serves as a master plan, a "blueprint" that provides the steps involved in the survey, including who and what will be researched, and how, when and where the survey will take place. Your protocol should clearly and concisely explain the purpose of your survey, and whether it is exploratory, formative, tests a hypothesis, or evaluates the outcome of ACSM work. The protocol is an essential tool that provides structure and organization to the KAP survey. It is primarily an internal, working document, but may also be needed for submission to a local institutional ethics review board.

A.Organize the contents of the survey protocol

At a minimum, the protocol should include a description of the following elements:

- title of the survey
- problem statement or background
- survey goal and key research questions
- survey population and sampling plan
- survey area (geographic)
- data collection and management methods
- data analysis plan
- plan for ethics review
- plan for protecting confidentiality and observing informed consent
- risks and benefits for participants
- budget
- timeline (workplan)
- plan for utilization and dissemination of findings.

The survey questionnaire(s) and a copy of the informed consent forms should also be included in the annexes of the protocol.



Example from the Field: Assessing gender perspectives in TB-related knowledge, attitudes and practices in Sindh Province, Pakistan

Pakistan has the sixth highest TB burden globally. For prevention and control efforts to be successful, the government and implementing partners felt that the programme needed to address the differences in how men and women access health services. The national TB programme led a KAP survey designed to study gender differences in knowledge and attitudes towards TB in urban and rural communities in Sindh Province, and to compare male and female TB health-seeking behaviour. The KAP survey team administered semi-structured questionnaires to 754 women and men from 200 households. Four focus group discussions were also held to complement the KAP data and explore gender perceptions using qualitative questions.

Results: Knowledge of TB was generally poor, especially among rural women, and rural women were not allowed to freely visit health facilities unaccompanied. Stigma was found to be high. Social isolation and rejection, as well as misconceptions about TB transmission, contribute to the idea that TB is a disease to be feared. A married woman with TB was expected to sleep away from her husband and children and to keep her clothing and utensils separate. TB was generally considered a "death penalty" by most females, whereas men considered it dangerous but curable. Respondents felt that TB would have a negative impact on a young girl's marriage prospects. In the case of married women, especially in rural areas, women expected that they would be treated badly by in-laws and kicked out of the house. More female than male respondents feared social isolation and rejection by friends and colleagues.

Conclusions and recommendations: The study concluded that programmes to raise awareness and fight stigma are urgently needed. The survey team concluded that a concentrated effort is required by the media, doctors and health workers to address misconceptions about TB and reduce stigma. Policy-makers and government workers, while planning the DOTS strategy, should keep in mind the constraint expressed by most females about visiting health facilities for supervised drug administration to prevent treatment nonadherence. Alternative strategies, such as involving female community workers, should be considered.

B. Define the key research questions

When the topics of your protocol are organized, the next step is to identify the key questions that you want to answer through the KAP survey. Refer back to your survey objectives and the primary areas of enquiry as a guide. Your key survey questions should evolve directly from these areas of enquiry. Based on the areas of enquiry that you identified in Step 1, form lists of questions that you want answered. For each area of questioning, consider the questions needed in the KAP survey to find out:

- What is the knowledge to be assessed?
- What attitudes need to be assessed?
- What practices need to be assessed?

For example, if one area of enquiry of your survey is *issues of stigma associated with TB and HIV*, possible questions may be (8):

- How do respondents perceive the relationship between TB and HIV?
- Do respondents have any fear of casual contact with people who have TB disease? How about HIV?
- How comfortable are respondents living or working with TB patients? How about HIV?
- How comfortable would respondents be taking care of a family member with TB? How about HIV?
- Do respondents feel blame or judgement towards people with TB? How about HIV?
- Have respondents who are/were TB patients experienced any discrimination during their illness?

To explore obstacles to health-care seeking and treatment among those who have been sick with TB, it may be useful to include a series of questions that probes the possible individual, social or system-level barriers that prevent people from taking action. For example, consider a person who has been diagnosed with TB but does not begin treatment. What are the possible individual determinants influencing his or her decision? Are these factors due to deficiencies in knowledge, attitudes or practices? Are they personal, social or system-related? The person with TB may not know that TB treatment is free, may not believe that TB can be cured or may think of TB as a shameful disease. He or she may think that TB treatment takes too long, may not have received sufficient information from a health-care provider about where, when and how to begin treatment, or may simply live too far from the clinic to afford transport or may be afraid to lose their job. To identify these determinants of behaviour, you will need to develop survey questions that probe the respondent's knowledge, attitudes and practices. A useful resource for integrating data collection on barriers is Barrier analysis facilitator's quide published by Food for the Hungry (9).



C. Determine whether the survey needs ethical review

You will need to consider whether your KAP survey constitutes research on human subjects and whether it needs to be approved by an ethical review board.1 Ethical review committees review research protocols to ensure that study procedures adequately protect the study participants. The boundaries of what constitutes "research" in the field of public health are still emerging. KAP surveys entail the collection of personal information from people with the goal of using results to inform programmes, services or interventions for a broad population. Because they include a systematic investigation that will contribute to "generalizable knowledge", they are usually considered research and thus require ethical review (10,11).

The sponsoring organization and the individual investigators for your KAP survey should submit the survey protocol to the relevant ethical review board in the country where the survey will take place. The health authorities of the host country, as well as the national or local ethical committee or board, should ensure that the proposed survey meets international ethical standards for research involving human subjects. In addition to describing the KAP survey objectives and methods, the survey protocol should include details of plans for obtaining individual informed consent as appropriate, protecting confidentiality of data collected, and ensuring equitable benefits and risks for respondents related to their participation in the survey.

Informed consent: The interviewer should explain the purpose of the survey and seek the respondent's agreement to be interviewed. This process is called "informed consent". Respondents have the right to decline to participate or to elect at any time to discontinue the survey, which the interviewer must respect. In some cases, oral consent may be appropriate, particularly where written and signed consent forms are not culturally appropriate or possible,

or if written records constitute a risk to survey participants.

Confidentiality: It is always important to maintain the confidentiality of survey participants' responses. Whenever possible, use code numbers instead of names. Each participant should be told that all information that they provide will be kept confidential. TB programme managers must store data, particularly any data with name-identifiers, in a secure or locked place where there is no chance that other people could use the information. This is particularly important with a survey on TB-related knowledge, attitudes and practices, because TB remains a disease enshrouded by social stigma that affects the behaviour of patients, family members and medical providers. Confidentiality is also crucial to protect the identity of specific populations surveyed, such as foreign-born persons, incarcerated/newlyreleased prisoners, people living with HIV/AIDS and TB patients.

¹ Ethics review committees are sometimes referred to as Institutional Review Boards (IRB) or Human Subject Protection Committees (HSPC).

D. Create a workplan

To allot reasonable and sufficient time to each phase of the KAP survey, create a workplan that lists the steps in the process with a timeframe for completing each step. Your workplan can include a detailed list of activities, the month in which it should be completed, and the person who is responsible for completing it. See Annex B for a sample workplan that you can adapt to the steps in your own KAP survey process. The creation of a workplan can be particularly helpful in planning for ethical review of your survey, calculating the number of days or weeks needed for field work, and planning for analysis and dissemination activities.

Plan to spend at least three months involved in survey-related activities, and possibly longer. Not all of this will be full-time work in the field. Developing the protocol, questionnaire(s), selecting geographic areas, hiring local consultants and training interviewers will probably take more than one month. The data collection may take several weeks, and analysis and report writing also need to be allocated sufficient time. Creating a workplan will help you estimate the total time for completion of the KAP survey.

E. Develop a budget

Develop a budget for your KAP survey, including the costs for in-house labour as well as individual consultants and sub-contracts to agencies that you will hire for specialized work. Consider all possible resource requirements, including budget projections for the following categories:

- salaries/personnel costs (in-house labour)
- consultants (individuals) or sub-contractors (organization)
 - study design
 - statistics
 - training
 - data entry and analysis
 - editing for final publication
 - translation of questionnaires into local languages
- supplies
- equipment (computers or other equipment needed)
- communication (telephone, e-mail, fax)
- travel (transportation, per diem, room and board)
- dissemination meeting costs
- printing of forms and final report
- ethical committee review costs, if applicable
- miscellaneous (respondent compensation, facility rental for training).

Consider the in-house personnel needed to plan and conduct the survey (e.g. trainers, supervisors, interviewers, dissemination of results), and the required outside technical expertise to be hired (e.g. trainers, interviewers, data entry or data analysts). Be sure to include the administrative overhead costs related to managing the survey. WHO has developed a tool for planning and budgeting for TB control that may be useful.²

² More information can be found at the following web site: http://www.who.int/tb/dots/planningframeworks/gf_tb_proposals_preparation/en/

Key points to consider: Develop the survey protocol

- Your survey protocol and design should be consistent with the purpose and objectives of your survey.
- Identify an appropriate ethical review board to find out its process for reviewing research submissions.
- Use the workplan to allot sufficient days or weeks to each step in the survey process, and to track progress as you implement the survey.
- Your budget plan should carefully reflect the internal expertise required to design, conduct and manage the KAP survey, as well as the external consultants and other resources needed.

STEP 3: DESIGN THE SURVEY QUESTIONNAIRE

A.Develop the survey questionnaire

While it is not possible to develop one data collection tool that will be suitable in all settings, TB programme managers can use the broad guidance provided here and the sample KAP survey questionnaire in Annex C to adapt a questionnaire for their context. Annex D comprises a menu of sample questions that can be selected for use in your questionnaires.

The list of survey questions should be prepared with the goals of the survey in mind. Collect only the data required to make programming decisions about ACSM activities. Include questions that give you information that you "need to know", for making programme decisions, rather than information that is "nice/interesting to know". Ask yourself: *How will we use this information? Does the information have strategic value?*

Framing questions effectively is not as simple as it may appear. Asking a respondent where they first heard of TB may be interesting, but to make programme decisions about what communication channels to invest in, you need to know where the respondent *usually* gets health information from, which source they *trust* most, and through which channels they would *like* to get future TB information in the future.

Six tips for writing good survey questions (13)

1. Remember the purpose of the survey

Ensure that every question you ask supports the objectives of your survey. Refer back to the survey objectives and main areas of enquiry.

2. If in doubt, throw it out

A question should never be included in a survey because you cannot think of a good reason to discard it. If you cannot come up with a concrete research benefit that will result from the question, do not use it.

3. Keep your questions simple

Each question should focus on one aspect or topic. Compound sentences force respondents to retain a lot of information, and produce unpredictable results. To prompt a usable answer, break apart the complex ideas to keep each question simple, clear and concise.

4. Stay focused – avoid vague issues

If you ask: *When did you hear about TB*? you might get answers that refer to the last time your respondent heard a radio spot about TB, when you are really interested in the first time the respondent ever heard about TB. Be aware of imprecise language and avoid double negatives.

5. Avoid leading questions

It is misleading to write a question that the respondent believes has a "right" answer. *Most people think that TB is a shameful disease. Do you agree?* is an example of a leading question. Leading questions produce biased answers and consequently inaccurate survey results.

6. Make sure the respondent has enough information

Asking respondents: *How effective has DOTS been*? may not be as effective as *Five years ago, the government introduced a new comprehensive TB treatment system. Did you know this*? Followed by: *Have you seen any positive benefits resulting from this change*? It can be beneficial to break down questions that require background information into two parts: a screening item describing the situation which asks if the respondent knows about it, and a follow-up question addressing attitudes the respondent has about the topic.

Design questions to explore the possible individual, social and system barriers that you listed when determining your priority areas of research for the protocol. The questions should investigate the respondent's knowledge, attitudes and practices. A person's knowledge, attitudes and practices are overarching categories that encompass more complex and subtle psychological and social dynamics, such as their self-confidence and their susceptibility to peer pressure. Understanding these dynamics can help you design questions that will allow you to gather useful information for ACSM decision-making.

Many behavioural change theories emphasize determinants that can potentially help or hinder people in taking action to protect their health. The most common determinants (whether encouraging factors or barriers) include the following:

- perceived susceptibility (Can I get TB?);
- perceived severity (How serious a disease is TB?);
- perceived social acceptability (Do people I care about think TB-related health-seeking behaviour is important?);
- cues for action (What prompts me to seek TB diagnosis, care or treatment?);
- perceived self-efficacy (How difficult is it for me to adopt positive behaviours regarding TB?):
- access (Do I know where to get care and can I afford treatment?).

Behavioural determinants may exist at the individual, social or environmental level. To identify determinants that will enhance behavioural change or serve as barriers, the KAP survey should include questions that probe to see which of these determinants influence the respondent's outlook and actions regarding TB.

Effective surveys ask questions in a variety of ways. Consider including both open-ended and closed-ended questions in your KAP survey. Open-ended questions are questions to which there is not one pre-defined answer, whereas closed-ended questions have a set of pre-determined answers from which the respondent chooses. The benefits of closed-ended questions are that they are easy to standardize, and data gathered from closed-ended questions lend themselves to statistical analysis (12). Two common types of closed-ended questions are multiple-choice and Likert-scale. Ordinal ranking, categorical (Are you male or female?) and numerical (How old are you?) are other types of closed-ended questions that you could consider using.



Example of multiple-choice question:									
-	a) If you had TB, who would you talk to about your illness? <i>(check all that apply)</i>								
1.			Doctor or other medical worker						
2.		Spouse							
3.		Parent							
4.		Child(ren)							
5.		Other family member							
6.		Close friend							
7.		No one							
8.		Other:							
Exa	mple of L	ikert-scale ques	tion:						
Hov	v serious	a health probler	n do you think T	B is in this cour	ntry? (circle one	response)			
	1	2	3	4	5	6			
Not	Not a problem at all A very big problem								
Som	ne survey	questionnaires	use skip patterr	ns; a sequence	of questions th	nat skips some			
que	stions ba	sed on a respon	dent's answer. Ir	n the example	below, the resp	ondent who is			
not employed will "skip" down to question number seven, and will not respond to items									
regarding type of employment or income.									
Example of a skip pattern:									
4. Do you currently have paid employment?									
		Yes							
		No > Skip to q	uestion (7)						

The survey may be conducted in more than one language, in which case, each questionnaire will need to be translated. If the questionnaire is translated into a local language, consider back-translation to double-check translation accuracy (7).

B. Make a data analysis plan

Setting up a data analysis plan will help you examine the data thoroughly and ensure that the information collected links back to the survey objectives. A data analysis plan outlines the steps and conditions of analysis that will be conducted when the data are available. Typical steps in data management include:

- getting to know the data
- entering and cleaning the data
- analysing the data
- interpreting the data
- selecting the data presentation format.

Your data analysis plan should detail the following information:

- describe how you will conduct each of the data management steps listed above;
- specify the statistical analyses to be performed (descriptive, hypothesis tests, influencing factors), including types of analysis and related statistical tests;
- identify the number and qualifications of persons who will be involved in data entry;
- describe the software requirements. Epi Info is public-domain software that is free of charge. The software and its manual can be downloaded from the United States Centers for Disease Control Website. Other statistical analysis programmes include SPSS, SYSSTAT, STATA, SASS or KwikStat;³
- detail the timeline for analysis and production of data tables and final report.



3 More information can be found at the following web sites: http://www.cdc.gov/epiinfo (Epi Info); http://www.spss.com/ spss/ (SPSS); and http://www.texasoft.com (KwikStat).

C. Pre-test and finalize the questionnaire

Once you have drafted the questionnaires, pre-test each of them separately to find out how well the questions are understood by the interviewers and a sample of the respondents. Pre-testing is an essential step that determines if the data being collected are useful and whether there are questions that should be deleted or added before you print the survey instrument(s). The pre-test should help you find out:

- which questions the interviewers or respondents did not understand or were subject to multiple interpretations;
- which questions seemed redundant or unnecessary;
- how to improve the wording of questions.

Read the questionnaire out loud to see if the flow of questions is logical and reads well. Check that the instructions to the respondent are clear and that issues, such as the voluntary nature of their participation and the confidentiality of their responses, are cited. Check each question to ensure that the answers will give you the information you want, and that there are no compound questions. Go back and revise your questionnaire if any of these elements is missing.

Administer the questionnaire to a small number (10-30) of individuals randomly selected from the survey's intended population. Be sure not to include these respondents in your final sample. If needed, seek advice from a statistician concerning how to select participants and how many people should be interviewed. Two to five pre-tests is a minimum, and it is not likely that you will need more than 15–20 pre-tests to identify areas needing improvement. In some cases, you may be able to conduct the pre-test as part of the training of survey interviewers, and combined with practice interviews. If time and resources are limited, a minimal pre-test should be conducted by assembling a small number of respondents and asking them to read through the survey and discuss their reactions. If human resources are limited, consider

Tips for successful pre-testing (14)

- 1. Let the respondents know that you are pre-testing the survey instruments, and that you would like their feedback if any questions are unclear.
- 2. The respondents are the experts when it comes to understanding the questions. However, you must ultimately decide which of their suggestions are useful and which are impractical.
- 3. Look at the responses to any open-ended questions included in the instrument. Are the responses as detailed as you were expecting? If not, check to see if the wording, positioning or spacing of the question is sufficient.
- 4. Are there a lot of "do not know" responses? This may indicate a poorly constructed scale or unclear or inappropriate wording.
- 5. See if there are scaled items that received more than one response, no response or write-in answers. If this is the case, re-examine and refine your response scales.
- 6. Ensure that respondents had no trouble following the instructions and skip patterns.
- 7. Time how long it takes to complete one survey. Questionnaires that are too long may frustrate your respondents or interviewers.

collaborating with your programme partner organizations to conduct the pre-tests with community volunteers or clinic staff that they can help recruit.

Complete a full pre-test of the instrument for each language used in the survey. Expect to make some changes to the format or content of the document following your pre-test; do not pre-test using a final, printed version of your questionnaire. The pre-test is a step that cannot be omitted. Even experienced researchers can develop a survey instrument that benefits from the suggestions of the respondents (14).



Key points to consider: Design the survey questionnaire

- Keep the questionnaire as short as possible a long questionnaire will tire respondents and interviewers.
- Do not ask about more than one issue in a single question.
- Phrase questions carefully and simply, so that everyone including individuals with little formal education – can understand.
- If you are conducting the KAP among several distinct audiences, tailor your questionnaire to the information you need from each audience.
- Investigate software programs in advance, and include relevant information about the selected programme in your data analysis plan.
- Pre-test the questionnaires to ensure that they are easily understood by respondents.
STEP 4: CONDUCT THE KAP SURVEY

A.Choose survey dates and timeline

In choosing survey dates, some of the considerations include:

- Are there any holidays during the scheduled dates of the survey?
- What are the weather conditions during the scheduled time of the survey? For example, avoid data collection during the season of heavy rains.
- What is the potential availability of respondents? For example, harvest season may make people in rural areas less available for interviews.
- Will there be other project activities taking place at the same time that create potential conflicts or synergies?
- How many days are needed for training supervisors and interviewers?
- How many days do you expect interviewers to be in the field? This information is helpful for making budget projections.
- How many days are needed for data entry and analysis?

B. Recruit survey supervisors and interviewers

Just as you would if you were hiring a new employee, make a list of the qualities and qualifications to help you select appropriate interviewers and supervisors. You can adapt to your needs the sample qualifications listed on the next page. If you hire a specialized consulting organization to conduct the field research, they will be responsible for screening candidates. It may be useful to discuss with them the criteria that they will use for the hiring process, and how they plan to recruit candidates.

33

Qualifications for interviewers	Qualifications for supervisors
 Can read and write (specify languages) Can speak local language fluently (specify languages) Knows the geographic area of survey Works well as part of a team Demonstrates understanding of the survey research in general and the specific survey objectives Skilled communicator and good listener Well organized 	 Can read and write (specify languages) Experience supervising staff in the field Previous experience working on surveys (may be KAP, ethnographic, demographic, epidemiological, etc.) Knows the geographic area Available for full survey time period Excellent communication and observation skills Patient and skilled at providing constructive feedback to staff

To source prospective interviewers and supervisors, post announcements in the local papers, advertise on local radio stations, and contact partner organizations that may have conducted similar research in the past. It is often useful to screen prospective interviewers and supervisors over the telephone, and then invite qualified applicants to an in-person interview. Ask the applicants about their previous experience and use a checklist or interview guide to evaluate all candidates in the same manner. In some instances, it is wise to select and train several more interviewers than you actually need, to ensure smooth fieldwork if there are unforeseeable absences. Consider gender and whether it is culturally acceptable for women to be interviewing men and vice versa, or whether female respondents may feel more comfortable being interviewed by another woman.

In some instances, students of public health, nursing, sociology, linguistics or medicine may be excellent candidates for interviewers. Using students presents potential advantages such as lower costs, investment in their learning, knowledge about health topics, and/or familiarity with the local language and culture. These benefits should be carefully weighed with the need for experienced interviewers and the time available to train the interviewers.

C. Train supervisors and interviewers

Plan to conduct several days of training to prepare your interviewers and supervisors for the survey fieldwork. Interviewers that are unfamiliar with TB or that have limited survey experience will particularly benefit from training. Training also gives the supervisors an opportunity to become familiar with the survey objectives, content and plan for implementation in the field. Training should be conducted by a team, including individuals who are familiar with the survey objectives, research methods and logistics arrangements, in preparation for the fieldwork.

The training should include the following:

- survey purpose;
- roles and responsibilities of interviewer and supervisor;
- content and use of the questionnaires, survey forms and materials;
- item-by-item review of the questions, including skip patterns and special instructions;
- respondent selection procedures;
- informed consent and confidentiality procedures;
- review of frequently asked questions and answers;
- proper interviewing techniques, including listening skills and probing techniques;
- proper supervision and quality-control procedures in the field;

- demonstration of an effective interview, including skip pattern scenarios;
- role plays;
- practise interviews with interviewers working in pairs;
- final pre-testing of the questionnaire;
- logistics planning.

Be sure to include adequate time in the training schedule for interviewers to conduct practice interviews through role-playing. This allows the trainers to observe interviewer performance and provide valuable feedback to improve the interviewers' technique. Where a survey will include special populations like TB patients or people living in prisons, include extra background information and explore possible areas of personal bias or insensitivity. At the end of each day of training, the training team should schedule time to share their observations, evaluate the participants' progress and identify problems to address the next day. The training team should select the final interviewer teams and supervisor assignments based on language proficiency and observations of each participant's skills during the training.

Before the survey teams travel to the field, the training team should complete the following steps:

- determine structure for each survey team
- agree on hours and days allotted for the survey implementation
- distribute site assignments
- ensure that all administrative and logistical preparations are arranged
- distribute all supplies and materials for interviewers and supervisors.

D. Ensure the quality of data collected

One of the most important elements of the data collection process is quality control, as led by the field supervisors. Before deploying to the field, supervisors should have a clear and agreed-upon strategy for supporting the interviewers, trouble-shooting problems that arise in the field, and assessing and maintaining the quality of data collection (7). Before leaving each community where the survey is being conducted, supervisors should check for the following:

- sampling plan: the sampling plan should be followed as detailed in the survey protocol;
- completeness: all questionnaires should be completely filled out;
- need to re-interview: respondents can be contacted if questions about the validity of an interview arises.

Survey teams should meet at the end of every day to share experiences and submit completed questionnaires to the supervisors. Supervisors should look over all the completed questionnaires by hand to extract incomplete forms before data entry begins.

To aid in organization of their work in the field, propose that the supervisors use field implementation checklists to track transportation (car, driver, petrol), provisions (water, first aid, maps) and survey materials (extra copies of questionnaires, pens, pencils). While the survey teams are in the field collecting data, finalize arrangements for data entry, analysis and results dissemination.



Key points to consider: Conduct the KAP survey

- Consider the number of interviewers, the weather conditions and the length of the interviews when calculating the number of days and period of the year for the survey.
- Practise, practise, practise! Allot plenty of time during training for interviewers to practise using the KAP survey questionnaires in role-plays that are observed by the training team.
- Make sure that all supervisors have a common understanding of their role in quality control, including ensuring that each questionnaire has been completed thoroughly and legibly **before** leaving the immediate area where the interview was conducted.



The type of data analysis you conduct will depend on your research questions, type of statistical analysis program, and the amount of work done in-house. To tabulate the survey questionnaires, you will need your analysis plan, a way to check for errors, and computer programs for entry and analysis.

A.Enter and clean the data

Next, you will want to organize and enter the data using a software program. Catching and correcting errors before the data are analysed is called "cleaning" the data. Manual checks can catch incorrect skip patterns, unreadable marks on the questionnaires, wrong codes and blank questions. Reduce or eliminate inappropriate items, and eliminate inconsistent or unusable responses or items for which respondents have selected conflicting answers (e.g. both "agree" and "disagree" are marked). Using the software program that you have chosen, create a database to organize the information. Enter the data into the database and conduct a final check to look for entry errors. Run counts or frequencies for each response, and evaluate where missing responses are present. Note categories where small numbers occur. Make

extra copies of the data, and keep the master files in a safe location.

B. Implement a data analysis plan

The purpose of the analysis is to obtain answers to the questions that you asked at the beginning of the process. Refer back to the key survey questions, as you interpret and draw conclusions about the data. Go systematically through your data analysis plan and refer to details about the software programs that will be used and the statistical manipulations that will be performed.

Code the data: Most quantitative surveys convert non-numerical data and each of the possible response categories into a unique numerical code. The numerical codes are usually listed in a "codebook" with a description of each variable and the possible values or survey answers that each variable can accept. A codebook is a reference that will enable you to return to your data set after time has passed, and remember how you worked with the data during the analysis. It also allows other people to interpret what you have done. Establishing a good system for data coding is essential if you intend

to repeat your KAP survey at a later date. Keep a log of any changes you make to data due to errors.

Look for differences between population groups: For every finding, consider whether that finding applies to the population as a whole or whether there might be important differences between certain subpopulation groups. If the sample size is large enough, run cross-tabulations to highlight differences between subgroups. For example, does knowledge about TB symptoms differ greatly between men and women? Are attitudes towards traditional medicine different between various ethnic groups? Are delays in seeking health care disparate across socioeconomic groups?

Test relationships in the data: Consider whether there are relationships between one variable and another. For example, is level of education related to TB stigma? Is income related to health-seeking behaviour? Is gender related to willingness to care for a family member with TB?

Select a data presentation format: Present your findings in a format that is appropriate for your audience, including data tables, narrative interpretation and creation of charts.

C. Interpret the findings

Keep the survey purpose and key survey questions in mind as you examine the main findings from the survey. If your survey used a framework such as the Cough to Cure Pathway, that model can also be used as an analysis tool. For the Cough to Cure framework, for example, the final objective of data analysis would be to identify factors that inhibit TB patients from completing the continuum of care, and that need to be addressed through ACSM interventions. Using the survey data, identify the specific barriers that respondents report. Conversely, the survey should also have uncovered factors that encourage people to seek TB care. Do the results confirm what your programme team expected? Which results are surprising or troubling? If possible, meet with TB project staff to share impressions and exchange ideas about the results. During discussion with staff and consultants, remember to identify areas that merit further exploration through qualitative research.

Key points to consider: Analyse the data

- Identify errors that occurred in the field or during data entry, before you start analysing the data.
- Remember to refer to your survey objectives, key questions and your data analysis plan for guidance through the data analysis phase.
- Use cross-tabulations to highlight differences between groups/categories of survey participants.
- Determine the findings that merit further attention through qualitative research.



STEP 6: USE THE DATA

A. Translate findings into action

Depending on the stated purpose and objectives of your survey, use the findings to design ACSM interventions or establish a baseline picture of the survey populations. Prioritize specific problems that the interventions can address, and select interventions that reduce the barriers and build on enabling factors. The survey findings should be analysed and articulated in a final report, disseminated to stakeholders in meetings or appropriate fora, and integrated into ACSM programming.

B. Write the survey report

When the analysis is completed, assemble the "picture" created by the data. The final survey report documents the KAP process and results. The results should be represented in graphs or charts as well as narrative descriptions. Make recommendations, if appropriate. Consider the most likely audiences for the survey report, including donor agencies, partner organizations, researchers and ACSM programme implementers. A typical KAP survey report outline might include the following:

- cover page with title of survey
- table of contents, abbreviations page and acknowledgements
- executive summary (1–3 pages)
- background on project
- survey objectives
- description of methods:
- survey population
- survey area
- sampling design
- short description of ethics and consent procedures
- training

- data collection and quality control
- data analysis
- results (significant body of text is in this section)
- discussion
- conclusion and recommendations
- bibliography
- annexes:
- survey instruments
- summary data tables
- map of country or survey area
- table of respondent categories, if not included in methods section
- list of persons involved with survey and roles
- training schedule.

Much of the background and methodology can be drawn from the survey protocol. The results section is usually the longest and most important section of the report, and will include relevant data tables as well as supporting narrative. The discussion section should include interpretation of survey results, comparison with other literature available on the topic, and discussion of programmatic implications of the results. Include in the bibliography the source for population data, survey methods or comparison data referenced in the discussion section of the report.

C. Disseminate findings

The final survey report should be prepared and disseminated to relevant audiences. It may be useful for stakeholders from the government, non-profit-making organizations and related public health programmes to attend a dissemination meeting where the survey results are presented and recommendations for implementation of ACSM activities are proposed. Use of stakeholders' meetings as a complementary activity is presented in the next section of the guide. This type of forum encourages discussion and invites input from a wide array of experts, ultimately benefiting your project while contributing to a shared knowledge base about TB. It is also possible to give feedback from the survey results to members of the population who were interviewed. This can serve as a tool to engage communities or patients in planning more patient-oriented services, relevant media campaigns or other community-based activities for TB control. Consider publishing the results of the KAP survey to make the findings available to a wider audience. Options include local, national and international conferences, peer-review journals, and online or print newsletters and bulletins. Publishing KAP survey results contributes to the growing evidence base for effective ACSM in TB control.



D. Use ACSM KAP survey data in programming

There are a variety of ways that programme managers can use survey data once they have been analysed. The ways that you use the data relate back to your purpose in conducting the survey. Presenting KAP data as evidence for TB advocacy and communication builds credibility of your programme and provides journalists, public officials and politicians with strong evidence of the need for action. The data also allow your programme to design messages that are tailored to address the barriers to behavioural change identified in the survey.

The following are examples of how data representing trends found in the KAP survey can be translated into actions for ACSM programming that contribute to TB control objectives.

Use of data in advocacy:

- Integrate KAP statistics into TB information materials and media packages distributed to mass media and journalists.
- Educate political leaders and encourage them to draw attention to the fight against stigma in their public addresses.
- Show knowledge gaps or identify populations with special needs.

Use of data in communication:

- Create targeted messages that address motivations to engage in TB control behaviours.
- Design interpersonal communication and counselling training for health workers.
- Develop educational materials and messages to encourage family members of TB patients to take an active role in care.

Use of data in social mobilization:

- Identify the most popular community events for your programme to attend in order to raise awareness of TB prevention, symptoms and treatment.
- Identify factors affecting TB diagnosis and care that can be addressed during village or community meetings.
- Employ the media channels that the KAP survey identifies to be the most accessible and preferred.

The survey results may identify barriers in programme delivery that can be addressed in other areas of TB programming beyond the scope of ACSM. For example, the findings from a KAP survey on client satisfaction with DOTS services or barriers to seeking care could be used to make the services more patient-oriented. Depending on the information gathered, the findings may point to the importance of re-organizing clinic services by expanding clinic hours, coordinating with other health units, shortening queues or reducing fees. Improvement in these aspects of service maximizes the potential effectiveness of ACSM activities that aim to increase use of services.



Example from the Field: Results from a KAP survey in Indonesia

Indonesia ranks third among the 22 high-burden countries for TB. In 2004, the national TB programme led a TB prevalence survey that included a KAP component administered to 17,887 respondents in all 30 provinces of Indonesia. The KAP survey in Indonesia found that awareness of TB as a curable illness was quite high (see graph), while accurate knowledge of transmission and symptoms was low. Furthermore, fewer than one in five respondents knew that TB services are free of charge. Analysis of the data suggests that health education and media efforts should focus on informing the public of correct transmission and symptoms, and that TB services are free, rather than building awareness of TB or messages, such as "TB is curable".



TB knowledge in Indonesia

Key points to consider: Use the data

- The survey report should contain enough detail for a layperson to understand your methods, justification for choosing your survey population, results and conclusions.
- Organize a stakeholders' meeting to disseminate results of the KAP survey and gather suggestions and recommendations from local governmental and nongovernmental partners.
- Use KAP data as valuable evidence to influence allocation of resources, design of health education campaigns, choice of media channels, and choice of content for training health workers or other audiences.

SUPPLEMENTARY RESEARCH ACTIVITIES

In addition to the information collected through a KAP survey, you may elect to conduct additional formative research before or after the survey in order to better design the survey or to complement or further refine the data collected. Supplementary research activities may include qualitative or quantitative methods. The selection of methods may depend on available funding and time, but should ultimately be correlated with the type of information your programme needs. Surveys that use closed-ended questions to ensure consistency are limited in their ability to explore the "how and why" through probing questions. They can, however, reveal areas that need to be studied indepth using qualitative methods that employ semi-structured tools and smaller sample size. Qualitative methods may require less time and fewer financial resources, and can shed valuable light on the same issues of knowledge, beliefs and self-reported practice. However, qualitative methods are not designed to produce numerical estimates and statistical tests.

Several of the most widely-used qualitative research methods include focus group discussions, in-depth interviews with TB patients or medical providers, observation of patient-provider interactions and stakeholders' meetings. These methods are described briefly below. A variety of other qualitative approaches (such as case studies, narratives, and community mapping) are more limited, but can be extremely useful to meet specific research objectives (5). Each method has advantages and drawbacks; however, using several of the methods together allows a programme to triangulate results. This has the benefit of allowing you to check for consistency, reveal key themes and draw out additional issues that need to be addressed in the ACSM strategy.

- Focus group discussions are small in-depth discussions led by a facilitator, to explore the participants' opinions and experiences. In contrast to the KAP survey, this method allows for dynamic group interaction and exchange of perspectives among peers. Focus group discussions are characterized by extensive probing and open-ended questions that go beyond superficial responses and evoke participants' feelings. They are especially useful for answering questions of "how" and "why" when overall trends and quantitative data have already been identified through a KAP survey. Consider conducting focus group discussions with groups of TB patients or other key target audiences that your programme would like to understand in-depth. They sometimes work less well for intimate or culturally sensitive topics.
- Individual interviews are usually conducted by an interviewer using a semi-structured topic guide. Individual interviews can be particularly helpful with key informants (such as policy-makers, community leaders or religious leaders) to explore their individual opinions and experiences regarding TB in the country or community. Individual interviews can be more useful than focus groups for getting information on sensitive topics, such as the double stigma of HIV/ AIDS and TB co-infection. Interviews can be conducted with TB patients to learn about the onset of their symptoms, their first contact with a health worker, the point at which TB was diagnosed, their initial treatment action, their social support and their experience with stigma related to TB.



Example from the Field: Measuring client satisfaction with TB services in the Ukraine

Formative research, conducted by PATH as part of a USAID-funded TB control project in the Ukraine, suggested that the quality of interaction between TB patients and medical personnel might hinder timely diagnosis and continuation of treatment. To evaluate TB patient satisfaction with their interaction with healthcare personnel, PATH designed baseline and follow-up exit surveys for patients leaving TB facilities. Using the baseline findings, PATH developed a training programme to strengthen providers' interpersonal communication and counselling skills. A total of 358 TB specialists were trained in 25 training sessions held in five regions.

At baseline and follow-up, interviewers administered questionnaires to 312 men and women as they left TB facilities. Analysis of the baseline and final exit interviews reflected improvement in patient satisfaction in a number of areas and allowed project staff to document impact of the training intervention. At follow-up, a higher proportion of patients felt comfortable with the provider, was satisfied with the provider's explanation of TB treatment options and felt the provider listened to their concerns.



- Stakeholders' workshop: A workshop or meeting with community stakeholders can be held before or after the KAP survey and can serve a number of purposes. Strategically pick stakeholders from the project areas in which you will work, nongovernmental organization partners you will partner with, representatives of the Ministry of Health and community opinion leaders. The workshop can introduce the project and provide them with an opportunity to give input into the development of the implementation strategy. You can also conduct group exercises during the stakeholders' workshop to gather insights on what they see as key steps to strengthen and improve TB advocacy and communication. Stakeholders' workshops are an excellent forum for exploring opportunities for partnership and leveraging existing resources and information.
- Participant observation: Direct observation can provide information on actual behaviours, such as topics discussed during a client-provider visit or behaviours of health workers when patients come for TB screening. Observation can help discover how the observed parties interact, who the gatekeepers are, what information is transmitted and what non-verbal communication might reveal about their relationship.

All of these methods require careful documentation and appropriate qualitative analytic methods. Each method is well suited to answer certain types of questions, and should be considered in light of the research objectives and the advantages or drawbacks of using each method.



CONCLUSION

The ACSM KAP survey is an important link in the TB control framework for action. The data collected in KAP surveys are necessary to provide baseline information, evidence for prioritizing interventions and collecting in-depth knowledge about how TB impacts communities. Conducting a KAP survey enriches and informs ACSM programming at the country level and provides national TB programme managers and their staff with credible basis for strategic decision-making. KAP surveys provide baseline and follow-up measures of programme effectiveness and produce data that are valuable for planning ACSM activities.

The six-step process and the tools presented in the guide should be adapted to meet the needs of country programmes. The guide also encourages the use of supplementary research methods (such as observation and focus groups) to complement data gathered through KAP surveys. Use of KAP surveys paired with supplementary research is steadily increasing the global evidence base for effective use of ACSM strategies to support local, national and global TB control objectives.

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Annex A COUGH TO CURE PATHWAY

The Cough to Cure Pathway was developed as a diagnostic and planning tool by the Academy for Educational Development. The model maps out the ideal pathway of behaviour for an individual with TB, and possible barriers that may inhibit complete diagnosis and treatment.

From Cough to Cure: a Path of Ideal Behaviors in TB Control



Annex B SAMPLE KAP SURVEY WORKPLAN

Ac	ivity	y Month												
		1	2	3	4	5	6	7	8	9	10	11	12	18
1.	Define the survey objectives													
a.	Review existing materials	x												
b.	Determine the purpose	x												
C.	Identify areas of enquiry	x												
d.	Identify survey population	x												
e.	Create a sampling plan	x												
2.	Develop the survey protocol													
a.	Organize contents of protocol		x	x										
b.	Identify key research questions		x	x										
C.	Determine whether survey needs ethical review		x	x										
d.	Create a workplan			x										
e.	Develop a budget			x										
3.	Design the survey questionnaire													
a.	Develop the survey questionnaire			x										
b.	Pre-test and finalize the questionnaire			x										
C.	Make a data analysis plan			x										
4.	Conduct the KAP survey													
a.	Choose survey dates			x										
b.	Recruit and train supervisors and interviewers				x									
C.	Manage survey implementation				x	x	x	x	x					
5.	Analyse the data													
a.	Enter and check quality of data						x	x	x	x	x	x		
b.	Implement data analysis plan						x	x	x	x	x	x		
6.	Use the data													
a.	Translate findings into action											x	x	x
b.	Write survey report											x	x	
C.	Disseminate findings												x	
d.	Use survey data in programming													x

Annex C SAMPLE ACSM KAP SURVEY QUESTIONNAIRE

Survey objective: To explore TB-related knowledge, attitudes, stigma and health-seeking practices among the general public

Check one:

- □ Baseline data collection; or
- □ Follow-up data collection

Date:	_/_	/	
Location	cod	e:	

Information to read to respondent:

We wish to learn about your knowledge, attitudes and practices regarding tuberculosis (TB). We hope to understand your needs and the best way to bring information to you, as well as barriers to seeking medical care. The information you provide will be used to improve TB control.

Your answers will not be released to anyone and will remain anonymous. Your name will not be written on the questionnaire or be kept in any other records. Your participation is voluntary and you may choose to stop the interview at any time.

Thank you for your assistance.

Interviewer: Place an X in the box of the selected answer(s). Do not read responses unless the directions indicate.

General and demographic questions

1. How old are you?

- 1. Under 30
- 3. 41-50
- 4. 🗌 Över 50

2. What is your gender?

- 1. 🗌 Male
- 2. 🗆 Female

3. What is the highest level of education you have completed?

- 1. 🗌 No school
- 2. 🗌 Elementary
- 3. 🗌 High school
- 4. College
- 5. Higher education (professional or post-graduate)
- 6. 🗌 Religious schooling only
- 7. 🗌 Literacy classes only

4. Do you currently have paid employment?

- 1. 🗌 Yes
- 2. 🗌 No

5. How far do you live from the nearest health clinic or hospital?

- 1. 🗌 o–10 kilometres
- 2. 🗌 11–20 kilometres
- 3. 🛛 21–30 kilometres
- 4. 🛛 More than 30 kilometres

Health-seeking behaviour

6. Where do you usually go if you are sick, or to treat a general health problem?

(Check all that are mentioned.)

- 1. D Private clinic
- 2. 🛛 Government clinic or hospital
- 3. Traditional or homeopathic healer
- 4. Clinic run by an nongovernmental organization or church
- 5. 🗌 Other: _

7. How often do you generally seek health care at a clinic or hospital? (Check one.)

- 1. 🗌 Twice a year or more
- 2. 🗌 Once per year
- 3. 🛛 Less than once a year but at least twice in past 5 years
- 4. \Box Once in past 5 years
- 5. 🗌 Never in past 5 years
- 6. 🗌 Other: __

TB knowledge and awareness

8. Where did you first learn about tuberculosis or TB? (Check all that are mentioned.)

- 1. 🗌 Newspapers and magazines
- 2. 🗌 Radio
- 3. 🗌 TV
- 4. 🗌 Billboards
- 5. D Brochures, posters and other printed materials
- 6. Health workers
- 7. Family, friends, neighbours and colleagues
- 9. 🗌 Teachers
- 10. 🗌 Other (please explain): _____

9. In your opinion, how serious a disease is TB? (Check one.)

- 1. 🗌 Very serious
- 2. 🗌 Somewhat serious
- 3. 🗌 Not very serious

10. How serious a problem do you think TB is in your country/region? (Check one.)

- 1. 🗌 Very serious
- 2. 🗌 Somewhat serious
- 3. 🗌 Not very serious

11. What are the signs and symptoms of TB? (Please check all that are mentioned.)

- 1. 🗌 Rash
- 2. 🗌 Cough
- 3. Cough that lasts longer than 3 weeks
- 4. Coughing up blood
- 6. 🗌 Nausea
- 7. 🗌 Weight loss
- 8. 🗌 Fever
- 9. Ever without clear cause that lasts more than 7 days
- 10. 🗌 Chest pain
- 11. \Box Shortness of breath
- 12. \Box Ongoing fatigue
- 13. 🗌 Do not know
- 14. 🗌 Other: _____
- **12.** How can a person get TB? (Please check all that are mentioned.)
 - 1. 🗌 Through handshakes
 - 2. Through the air when a person with TB coughs or sneezes
 - 3. Through sharing dishes
 - 4. Through eating from the same plate
 - 5. Through touching items in public places (doorknobs, handles in transportation, etc.)
 - 6. 🗆 Do not know
 - 7. 🛛 Other (please explain): _____

13. How can a person prevent getting TB? (Please check all that are mentioned.)

- 1. \Box Avoid shaking hands
- 2. \Box Covering mouth and nose when coughing or sneezing
- 3. \Box Avoid sharing dishes
- 4. U Washing hands after touching items in public places
- 5. Closing windows at home
- 7. D By praying
- 8. 🛛 Do not know
- 9. 🛛 Other (please explain): _____

14. In your opinion, who can be infected with TB? (Please check all that are mentioned.)

- 1. 🗌 Anybody
- 2. 🗌 Only poor people
- 3. \Box Only homeless people
- 4. \Box Only alcoholics
- 5. 🗆 Only drug users
- 6. Only people living with HIV/AIDS
- 7. Only people who have been in prison
- 8. Other (please explain): _____

15. Can TB be cured?

- 1. 🗌 Yes
- 2. 🗌 No

16. How can someone with TB be cured? (Check all that are mentioned.)

- 1. \Box Herbal remedies
- 2. \Box Home rest without medicine
- 3. 🗌 Praying
- 4. \Box Specific drugs given by health centre
- 5. DOTS
- 6. 🗌 Do not know
- 7. 🛛 Other: ____

TB attitudes and care-seeking behaviour

17. Do you think you can get TB? (Ask respondent to please explain his/her answer.)

- 1. 🛛 Yes (because...) _____
 - 2. 🗆 No (because...) _____

18. What would be your reaction if you were found out that you have TB?

(Check all that are mentioned.)

- 1. 🗌 Fear
- 2. 🗌 Surprise
- 3. 🗌 Shame
- 4. 🗆 Embarrassment
- 5. Sadness or hopelessness
- 6. 🗌 Other: ____

19. Who would you talk to about your illness if you had TB?

(Check all that are mentioned.)

- 1. Doctor or other medical worker
- 2. 🗌 Spouse
- 3. 🗌 Parent
- 4. \Box Child(ren)
- 5. \Box Other family member
- 6. Close friend
- 7. 🗌 No one
- 8. 🗌 Other: _

20. What would you do if you thought you had symptoms of TB? (Check all that apply.)

- 1. \Box Go to health facility
- 2. 🗌 Go to pharmacy
- 3. 🗌 Got to traditional healer
- 4. D Pursue other self-treatment options (herbs, etc.)
- 5. 🗌 Other: ____

21. If you had symptoms of TB, at what point would you go to the health facility?

(Please check one.)

- 1. \Box When treatment on my own does not work > go to Q#23
- 2. \Box When symptoms that look like TB signs last for 3–4 weeks > go to Q#23
- 3. \Box As soon as I realize that my symptoms might be related to TB > go to Q#23
- 4. 🗌 I would not go to the doctor > go to Q#22

22. If you would not go to the health facility, what is the reason? (Please check all that apply.)

- 1. \Box Not sure where to go
- 2. 🗌 Cost
- 3. Difficulties with transportation/distance to clinic
- 4. \Box Do not trust medical workers
- 5. Do not like attitude of medical workers
- 6. Cannot leave work (overlapping work hours with medical facility working hours)
- 7. Do not want to find out that something is really wrong
- 8. 🛛 Other (please explain): _____

23. How expensive do you think TB diagnosis and treatment is in this country? (Please check one.)

- 1. 🗌 It is free of charge
- 2. 🗌 It is reasonably priced
- 3. It is somewhat/moderately expensive
- 4. 🗌 It is very expensive

Interviewer: If respondent gives monetary amount, note the amount here:

Do you know people who have/had TB? 24.

- Yes 1.
- \square No 2.

Which statement is closest to your feeling about people with TB disease? 25.

(Read the following choices and check one answer.)

- "I feel compassion and desire to help." 1.
- "I feel compassion but I tend to stay away from these people." 2.
- "It is their problem and I cannot get TB." 3.
- "I fear them because they may infect me." 4.
- "I have no particular feeling." 5.
- Other (please explain): _ 6.

26. In your community, how is a person who has TB usually regarded/treated?

- 1. Most people reject him or her
- Most people are friendly, but they generally try to avoid him or her 2.
- The community mostly supports and helps him or her 3.
- Other (please explain): _ 4.

Do you think that HIV positive people should be concerned about TB? 27.

- Yes > go to 27a 1.
- 2. No > go to 27b

27 a) Why?

- 1.
 Person with HIV is more likely to develop TB 1.
 Person with HIV is not more likely than
- 2. Do not know
- 3. Other:

27 b) Why not?

- person without HIV to develop TB
- 2. 🗌 Do not know
- 3. Other:

TB awareness and sources of information

Do you feel well informed about TB? 28.

- 1. Yes
- \square No 2.

Do you wish you could get more information about TB? 29.

- 1. Yes
- No 2.

30. What are the sources of information that you think can most effectively reach people like you with information on TB? (Please choose the three most effective sources.)

- 1. 🛛 Newspapers and magazines
- 2. 🗌 Radio
- 3. 🗆 TV
- 4. 🗆 Billboards
- 5. D Brochures, posters and other printed materials
- 6. \Box Health workers
- 7. Family, friends, neighbours and colleagues
- 9. 🗌 Teachers
- 10. 🛛 Other (please explain): _____

31. What worries you the most when you think about TB?

Thank you very much for participating in our survey.

Annex D MENU OF SAMPLE ACSM KAP SURVEY QUESTIONS

An extensive list of sample questions that can be used on ACSM KAP survey questionnaires follows. They are divided by general topic area, but many of them are designed to explore factors that influence behaviour, such as perceived susceptibility, perceived severity or perceived social acceptability. These determinants may prompt healthy behaviours or serve as barriers to action.

Many of the questions require the development of an appropriate range of multiple responses or scales that a respondent would choose from (e.g. "Please check one response" or "Check all that apply"). Do not try to include all of them on your survey questionnaire; pick and choose the most important ones to your survey, and adapt or develop new questions that best fit your survey objectives.

Demographic information

- How old are you?
- What is your gender?
- What is your education?
- Are you working?
- How far do you live from the nearest health clinic or hospital?

Knowledge

- Have you ever heard of tuberculosis?
- What is the difference between tuberculosis and TB?
- What is MDR-TB?
- What is XDR-TB?
- What are the signs and symptoms of TB?
- How can a person get TB?
- What kinds of people are more likely to get TB?
- What populations are most susceptible to TB?
- How can a person prevent getting TB?
- In your opinion, who can be infected with TB?
- Can TB be cured?
- How can someone with TB be cured?
- Where can TB be cured?
- Can all TB be cured?
- What could a person do that would reduce his or her chances of a cure?
- What is the cost of TB diagnosis and treatment in this country?
- How much do you think TB treatment costs in this country?
- How long does TB treatment last?

Attitudes

- In your opinion, how serious a disease is TB? (Provide a scale or ask in relation to other diseases.)
- How serious a problem do think TB is in your country/region?
- Do you think you could get TB?
- How would you know that you have TB?
- What would be the first thing you did, if you learned that you have TB?
- What would be your reaction, if you found out that you have TB?
- What worries you the most, when you think about TB?

Health-seeking behaviour

- Where do you usually go if you are sick, or to treat a general health problem?
- How often do you generally seek health care at a clinic or hospital?
- What would you do, if you thought you had symptoms of TB?
- If you had a cough for more than three weeks or if you were coughing up blood in your sputum, what would you do?
- What help would you seek, if you thought you had symptoms of TB?
- When you are sick, what prompts you to go to a medical facility?
- If you would not go to the medical facility, what is the reason?
- If you had symptoms of TB, at what point would you seek medical help?
- If you had symptoms of TB, how long would you wait before seeking treatment?
- Who would you talk to about your illness if you had TB?

Exposure to communication and mass media sources

- Where did you first hear about TB?
- Is information on TB available to you?
- What are the sources of information that can most effectively reach people with information on TB?
- Where do you currently get health information from?
- What source of information do you trust most?
- How often do you watch TV?
- What hours of the day do you usually watch?
- What channels do you usually watch?
- How often do you listen to radio?
- What kinds of programmes do you like to listen to?
- What hours of the day do you usually listen?
- What channels do you usually listen to?
- How often do you read newspapers or magazines?
- What kinds of publications do you like to read?

Stigma

- Do you know people who have/had tuberculosis?
- How do community members realize that a person has TB?
- How do you feel towards people who have TB?
- If a close friend of yours had TB, how would your relationship change?
- In your community, how is a person who has TB regarded/treated?

- How should HIV positive people be concerned about TB?
- In your opinion, are some people more likely to become infected with TB than others? If so, who is more likely to be infected?
- Have you ever worked or lived with someone with HIV or AIDS?
- How did you know that the person was living with HIV or AIDS?
- What was the quality of life of the person with HIV?
- In your opinion, does having TB carry the same stigma as AIDS or less/more?
- If you had only one bed in a hospital for a TB patient or an AIDS patient, who would you give it to and why?

Gender

- Do women usually go to a health-care facility alone?
- Do men usually accompany their wives to visit a health-care facility?
- Are men or women more likely to get TB, or is their risk the same? Why do you say that?
- What would a man in your community do if his wife got TB?
- How would you react if you were informed your prospective daughter-in-law had TB?
- How would you react if you were informed your prospective son-in-law had TB?

Questions particular to health-care workers

- What is your level of health profession education?
- Where is the health facility you work in located?
- How long have you been working at this health-care facility/unit?
- Have you ever received training on providing health education?
- Is providing health education part of your duty at the unit?
- Do you currently provide education on TB?
- Do you currently provide education on HIV?
- Have you ever provided education on TB?
- Have you ever provided education on HIV/AIDS?
- If so, how often do you provide information on TB?
- If so, how often do you provide information on HIV?
- What materials do you use to guide your education sessions?
- What is the source of the materials you use for TB and HIV education?
- In your experience, what would help families discuss TB more openly?
- What do you think would make it easier for communities to have more open dialogue on health topics?
- What do you think is the best communication channel that is likely to be effective in reaching the majority of TB behavioural change targets in your community?
- What communication channels do you think health workers can use to encourage HIV prevention practices in your community?
- At what stage in their illness do you think TB patients usually begin seeking health care at your facility?
- How do people react once they find out that they have TB?
- Whom do they generally tell about their illness?
- Who are the treatment supporters most often proposed by your TB/HIV clients?
- In your community, how is a person who has TB usually regarded/treated?

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