Needs Assessment Procedures: Combining Quantitative and Qualitative Research for Development Projects

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MIT: ICT4D
10 September 2008

Why we need 'Needs Assessment'

1. Who generated your idea and why? Technologically interesting? Perceived need?
2. Does your target population **NEED** your product or intervention? Who determines this?
3. Does your target population **WANT** your product?
4. How open are you to changing your idea or product to correspond with local input?

Doing Your (Market) Research

- **Qualitative Methods**
  - Key informant interviews
    Public officials, business leaders, members of the community, etc.
  - Focus group discussions
- **Quantitative Methods**
  - Survey instruments
  - Review of public records
    Health system, utilities, etc.

Conducting Focus Groups

- Constructed vs. Existing Groups
- Size matters: 8-10 is ideal
  - Fewer than 6 too small; larger than 12 too large
- Construct a series of open-ended questions on your topic
- Use probes to direct conversation
- You need at least 2 people to conduct a focus group
  - Facilitator, Notetaker (2 Notetakers if not voice-recording)
- **Use focus groups to refine questions for survey**

Example of Focus Group Guidelines

Welcome! Today we are going to have a discussion on childhood diarrhea and its treatments. It will last approximately one hour. We hope that the results of this study will be used to improve health services in your community. If you are willing to participate, please sign the separate consent form.

1) What do you consider to be diarrhea in children?
     Prompts: frequency, consistency of stool

2) Is childhood diarrhea a problem in your community?

3) How often do children in your community have diarrhea?
     Prompts: rainy season vs. dry season, stage of development/age of child

4) What do people in your community do when a child has diarrhea?
     Prompts: types/amounts of food given, sources of advice, treatments

5) Have you ever heard of oral rehydration therapy (ORT)?
     Prompts: local brand names and providers

…

Survey Instrument Design

- What pieces of info are essential?
- Sequence questions
    - Leave most sensitive questions toward the end
    - If a question is sensitive and you don't really need it, toss it out (i.e. – income level, etc.)
- **Translation** and **Back-translation** of the survey instrument
- Calculate necessary sample size
    - See EpiInfo at www.cdc.gov for sample size calculator
- **Pre-test**
    - Check for wording, appropriateness, and interest

Sample of a Survey Instrument

- **Make a spot for interview ID**

- **Introduction**

- **Staging of questions, from general to specifics about your topic**

- **Don't collect more demographic data than you need**

Participant ID __ __ __ __ __
Date __ __ / __ __ / __ __
Delivered/Received by_____

Introduction

Hello. We are part of a study on the factors influencing the choice of treatment for diarrhea in your community. We hope that the results of this study will be used to improve health services in your community. If you are willing to participate, please sign the separate consent form and complete the following survey. All information you share will be kept strictly confidential. You are not required to answer any questions that you do not wish to answer.

Information about YOU

1) What is your age? _____ years   2) Are you MALE or FEMALE? (Circle your answer.)

3) How many years of education have you completed? _____ years

4) What is your employment status? (Circle the response(s) that best describes your situation.)
    a. Unemployed
    b. Student
    c. Full-time formal employment
    d. Part-time formal employment
    e. Full-time informal employment
    f. Part-time informal employment
    g. Disabled

5) Number of people in your household?

    _____ children   _____ adults

6) What is your marital status? (Circle the response that best describes your situation.)
    a. Never married
    b. Committed partner
    c. Married
    d. Separated
    e. Divorced
    f. Widowed

7a) Do you have children? (Circle your answer.)
    a. YES   (Answer question 7b.)
    b. NO   (Proceed to question 8.)

7b) If yes,   Number of livebirths   _____

    Number of living children   _____   Ages of living children _____

- **Keep it as brief as possible**

- **Leave space for open-ended comments**

Information about YOUR COMMUNITY

8) How would you define diarrhea?_____

9) Do you think that diarrhea is a problem for children in your community? (Circle your answer.)
   a. YES
   b. NO

10) Do you know anyone in your community who has lost a child to illness after diarrhea?
   a. YES
   b. NO

11) Do you treat diarrhea with any medicines or procedures?
   a. YES
   b. NO

12) Where in your community is a good place to go for treatment of diarrhea? (Circle all that apply.)
   a. Relative or friend   d. Health post/clinic
   b. Pharmacy   e. Other:_____
   c. Local healer

Information about Oral Rehydration Therapy

13) Have you heard of oral rehydration therapy(ORT)? (Circle your answer.)
   a. YES (If yes, PLEASE ANSWER QUESTIONS 14 through 17.)
   b. NO   (If no, PROCEED TO QUESTION 17.)

14a) Are you aware of anywhere in your community that offers oral rehydration therapy?
   a. YES
   b. NO

14b) If yes, Where is ORT available? (Please list all locations.)

_____

15) Have you ever used ORT to treat a child with diarrhea?
   a. YES
   b. NO

16) Is ORT good for diarrhea?
   a. YES
   b. NO

17) Do you have any comments about this survey or diarrhea treatment? (Please write below.)

Survey Development:
Questions to answer in your groups

1. **Who is your target population for survey?**
   - Health staff, educators, community members
   - Estimate of the size of the population for sampling
2. **What demographic data would you need?**
3. **What infrastructure (physical and human) information would help you design your project/product?**
   - Technical skills, availability of electricity, current practices
4. **What beliefs, opinions, and practices would affect utilization of your project/product?**

Further Resources

- Scrimshaw, Nevin S., Gary R. Gleason, R*apid assessment procedures: Qualitative methodologies for planning and evaluation of health related programmes*,1992 http://www.unu.edu/unupress/food2/UIN08E/UIN08E00.HTM

- Pertti J. Pelto and Gretel H. Pelto, *Studying Knowledge, Culture, and Behavior in Applied Medical Anthropology*, Medical Anthropology Quarterly, New Series, Vol. 11, No. 2, Knowledge and Practice in International Health. (Jun., 1997), pp. 147-163. http://links.jstor.org/sici?sici=0745-5194(199706)2%3A11%3A2%3C147%3ASKCABI%3E2.0.CO%3B2-A

- Corlien M. Varkevisser, Indra Pathmanathan and Ann Templeton Brownlee, *Designing and Conducting Health Systems Research Projects*. http://www.idrc.ca/en/ev-33011-201-1-DO_TOPIC.html

- Patricia M. Hudelson, *Qualitative research for health programmes*, World Health Organization. Division of Mental Health. WHO Doc No.: WHO/MNH/PSF/94.3. http://whqlibdoc.who.int/hq/1994/WHO_MNH_PSF_94.3.pdf

- The HIPAA rules: http://www.hhs.gov/ocr/hipaa/ http://physionet.org/physiotools/deid/doc/deid-paper.pdf see table 1, page 48

- Guidelines for Informed Consent Forms:
  - http://web.mit.edu/committees/couhes/informedconsent.shtml *Provides template forms
  - http://ohsr.od.nih.gov/info/sheet6.html
  - http://www.samford.edu/IRB/ic_examples.html

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Fall 2008