

BSc in Global Health

Defining & Assessing Health Needs: Practical Aspects of Field-Based Research

"Only crazy people do fieldwork!"

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London

BSc in Global Health

Defining & Assessing Health Needs: Practical Aspects of Field-Based Research

Focus on population-based (household) surveys – with references to the Manicaland HIV/AIDS Prevention Project in Zimbabwe as a case study ... – **process similar for other field studies**

Stages in the Research Process

- (1) Study design - research protocol
- (2) Funding applications
- (3) Operationalization
- (4) Implementation
- (5) Dissemination

Fieldwork elements in most of these stages – especially (3) and (4)

Study design – research protocol

- **Study objectives – research problem, literature review, theoretical framework, research questions & hypotheses, consultation**
- **Outline research design – study sites, research team (collaborators), feasibility studies, funding possibilities**
- **Detailed research design – outcome measures, precision, power / sample-size calculations, definition of study sites & population (eligibility criteria), study timetable**
- **Budget**

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Funding applications

- Each funder has their own forms & procedures – usually slow & bureaucratic!
- Few funders that will support combinations of research (as opposed to M&E) and programme activities – so often require multiple funders for scientific evaluations etc.
- Interest in ‘evidence-based’ programmes ... but rarely willing to support scientific evaluations
- Often interest in capacity building, public engagement & data sharing
- Research protocol used as the basis for applications – including fieldwork arrangements

Operationalization

- **Fieldwork budget & timetable – coordination with intervention (if any)**
- **Data collection tools – questionnaires, information sheet, consent forms, event calendar etc. PDAs, cell-phones, laptops (ACASI)?**
- **Sampling frame & sampling – GPS**
- **Standard operating procedures – including recruitment strategy (visits) & contingency plans**
- **Ethical approvals – UK & host organisation (IRB) & country**
- **Logistical arrangements – data processing systems, field office, accommodation & transport, equipment & materials for anthropomorphic measurements & specimen collection, etc., lab arrangements, job descriptions, financial systems**
- **Staff recruitment & training (including research ethics)**
- **Community entry & recruitment ... *implementation***

Questionnaire design

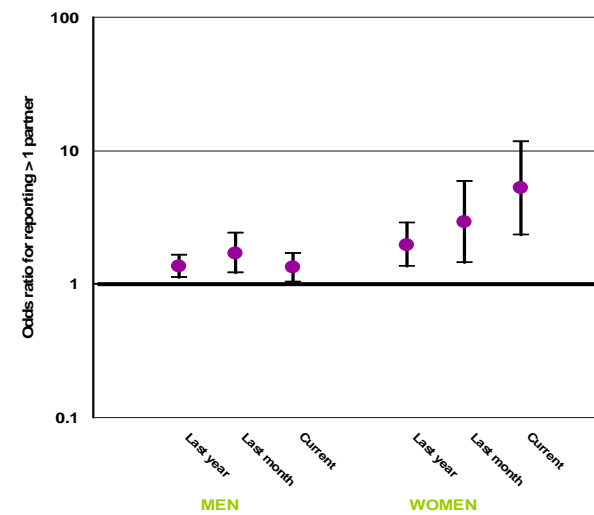
- **Relation to study objectives**
- **Types of questions – opinions/facts, open/closed (pre-coded responses), direct/indirect**
- **Validation – ‘gold standard’, reproducibility, triangulation**
- **Length**
- **Sequencing of questions – sensitive questions later in the interview**
- **Layout – instructions to enumerators, skip rules**
- **Internal consistency checks (+ possibly bio-markers)**
- **Translation & back-translation**
- **Pilot-testing**
- **Social desirability bias – approaches to collecting sensitive personal information**

Masters in Public Health

Global Health Module: Practical Aspects of Field-Based Research in Developing Countries



Informal confidential voting interviews



INDIVIDUAL QUESTIONNAIRE

FORM B

MUT5number:

Questionnaire processing dates:
 Consent form
 Corrections completed
 Data entered

QUESTIONNAIRE IDENTIFICATION

Q101 **Census district:** _____ **CT zone:**

Q102 **Village:** _____

Q103 **Name of head of household:** _____

Q104 **Category of respondent:** Date Intd R4 area R4 MUTNO

Q105 **Study site reference:** R4

Q106 **Household number:** R4

Q107 **Line number on household questionnaire:** R4

INTERVIEWER VISIT

1 2 3

Q108 **Date:** _____

Q109 **Time:** _____

Q110 **Interviewer:** _____

Q111 **Result**:**

CHECKED BY SUPERVISOR

Q112 **Signature:** _____

Q113 **Date:** _____

*RESPONDENT CATEGORY

- Follow-up respondent (from R4) 1
- New respondent: previously under age 2
- New respondent: non-regular visitor 3
- New respondent: in-migrant (since R4) 5
- New respondent: selected but unavailable R4 6
- New respondent: selected but refused R4 7
- New respondent: household missed R4 9
- Other (specify) 8

**RESULT CODES

- Completed 1
- Not at home 2
- Refused 3
- Partially completed 4
- Sick/hospital 5
- Out-migrated 100
- (specify destination code)
- Other (specify) 8

INDIVIDUAL QUESTIONNAIRE:

BACKGROUND CHARACTERISTICS

Q. No:

REF.	QUESTIONS & FILTERS	CODING CATEGORIES	SKIP TO
Q201	Record the current time (24 hour clock).	Hour / Minutes <input type="text"/> hr <input type="text"/> min	
Q202	Record gender of respondent.	Male 1 <input type="checkbox"/> Female 2 <input type="checkbox"/>	
Q203	In which country were you born?	Malawi 1 <input type="checkbox"/> Mozambique 2 <input type="checkbox"/> South Africa 3 <input type="checkbox"/> United Kingdom 4 <input type="checkbox"/> Zambia 5 <input type="checkbox"/> Zimbabwe 6 <input type="checkbox"/> Other (specify) _____ 8 <input type="checkbox"/> Don't know 98 <input type="checkbox"/>	
Q204	In what month and year were you born?	<input type="text"/> month <input type="text"/> yr	
Q205	How old were you at your last birthday? Check consistency with Q204.	Age in COMPLETED years <input type="text"/> yrs	If 30+, go to Q211
Q206	Is your NATURAL BIOLOGICAL father still alive?	Yes 1 <input type="checkbox"/> No 2 <input type="checkbox"/> Don't know 98 <input type="checkbox"/>	Q208 Q208
Q207	In which year did he die?	Year of death <input type="text"/> Don't know 98 <input type="checkbox"/>	
Q208	Is your NATURAL BIOLOGICAL mother still alive?	Yes 1 <input type="checkbox"/> No 2 <input type="checkbox"/> Don't know 98 <input type="checkbox"/>	Q210 Q210
Q209	In which year did she die?	Year of death <input type="text"/> Don't know 98 <input type="checkbox"/>	
Q210	Record father and/or mother's SITE/HHID/LINE if recorded in the household surveys.	Father <input type="text"/> Site <input type="text"/> HHID <input type="text"/> Line <input type="text"/> Mother <input type="text"/> Neither 98 <input type="checkbox"/>	
Q211	How many sons has your biological mother given birth to, including yourself (if male) and any sons who have passed away?	Respondent SHOULD be included if male. <input type="text"/>	
Q212	How many daughters has your biological mother given birth to, including yourself (if female) and any daughters who have passed away?	Respondent SHOULD be included if female. <input type="text"/>	
Q213	Of these sons that your biological mother has given birth to, including yourself (if male), how many are ... Respondent SHOULD be included if male. Read through all options one-by-one first BEFORE repeating to ask for answers.	No longer alive (deceased) <input type="checkbox"/> Living abroad - Australia <input type="checkbox"/> Living abroad - Botswana <input type="checkbox"/> Living abroad - Canada <input type="checkbox"/> Living abroad - Dubai <input type="checkbox"/> Living abroad - Malawi <input type="checkbox"/> Living abroad - Mozambique <input type="checkbox"/> Living abroad - New Zealand <input type="checkbox"/> Living abroad - South Africa <input type="checkbox"/> Living abroad - United Kingdom <input type="checkbox"/> Living abroad - USA <input type="checkbox"/> Living abroad - Zambia <input type="checkbox"/> Living abroad - don't know the country <input type="checkbox"/> Living abroad - other (specify) <input type="text"/> Living in this homestead <input type="checkbox"/> Living elsewhere in Zimbabwe <input type="checkbox"/>	Brothers/Sisters <input type="text"/>
Q214	Repeat Q213, this time asking about daughters. Respondent SHOULD be included if female.	Record responses in the second column in Q213.	

Interviewers & interviews

- **Interviewer selection:**
 - Command respect from & trusted by study subjects**
 - Pleasant disposition, well-mannered, well-dressed, reliable, punctual**
 - Local language**
 - Appropriate education level**
 - Sex, age & place of residence**
- **Training, manuals & performance monitoring**
- **Standardisation of interview approach? – reproducibility vs. truthfulness**
- **Locations & timing for interviews**
- **Non-response & participation (selection) bias**

Ethical considerations

- **Scientific merit – importance of the research question, scientific integrity of study design & conduct, likely validity of results**
- **Equitable selection of subjects – benefits & potential harm distributed equitably**
- **Informed consent – formalises & documents consent process; communal**
- **Benefits of participating in the study – compensation vs. incentives (coercion)**
- **Risks of participating in the study – support contingency measures (biomedical & psychosocial)**
- **Confidentiality – protect personal information, increase participation**
- **Staff training – basic research ethics & GCP**
- **Reporting requirements – adverse events, annual reviews, inspections**
- **Feedback of results to participants / communities**

Public health: weigh community benefits vs. individual rights?

Coercion & deception unacceptable – even if rationalized is for the ‘greater good’

Implementation

- **Community entry & recruitment**
- **Fieldwork management – field supervision, monitoring progress (against targets), data quality checks**
- **Data processing – including verification (double entry), reconciliation, cleaning, data editing**
- **Data analysis**

Qualitative data collection

- **Uses – hypothesis generation, interpretation of survey results (Why? How? ...), development of locally-appropriate survey methods / questions**
- **Methods:**
 - Participant & focused observations**
 - Focus group discussions**
 - In-depth & key informant interviews**
 - Participatory methods**
- **Increasing representativeness:**
 - Random selection from census or larger survey**
 - Stratify by major sectors of study population**
 - Triangulation of data from different approaches**
 - Special efforts to include hard-to-reach or uncooperative individuals**
 - Independent interpretation of tape-recorded discussions (subjectivity)**

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Dissemination of results

- **Involvement of data collectors in data analysis & dissemination (including publications)**
- **Conferences, publications, national meetings etc.**
- **Local dissemination – community meetings, results handouts for research participants, local stakeholder meetings, public engagement ('community conversations') ... policy makers**