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11



In the Field

Topics covered in this chapter:

Organizing the fieldwork
Negotiating community access
Protecting the safety and well-being of respondents and fieldworkers
Finalizing the procedures and instruments
Managing nonresponse
Data quality control
Data entry

The process of data collection is the most critical link in the research chain. Mistakes made during this period are the most likely to have repercussions for women's safety, as well as for determining the usefulness of data. No amount of careful analysis can make up for flaws in data quality. This chapter will outline some of the main steps for carrying out fieldwork with attention both to the safety of women participating in the study and to the quality of data.

ORGANIZING THE FIELDWORK

Before beginning data collection, it is critical to make a detailed plan for how basic organizational and logistical issues will be addressed. This is particularly important in survey research, where the numbers of interviews are usually much greater, and where precision in selecting the right

respondent is crucial to the validity of the data. A great many practical issues need to be resolved before initiating fieldwork such as:

- **Preparation of a detailed budget.** This includes training, equipment, salaries of fieldworkers, transportation, and contingencies.
- **The timing of the fieldwork.** Does fieldwork coincide with periods during which access to communities will be more difficult, such as rainy season, elections, or when people are likely to be away from their homes for harvesting crops, seasonal labor, or religious or cultural festivals?
- **Transportation.** Arrangements may vary among different regions and between urban and rural areas. It is important to determine where public



BOX 11.1 AND DON'T FORGET . . .

In addition to the basic materials needed for performing interviews, there are many other items that research teams have found useful to take into the field with them, such as:

- Packets of tissues for interviewers to offer respondents if they cry.
- Coloring books, balls, and other distractions to keep children busy during interviews.
- A first aid kit with plenty of aspirin.
- A petty cash fund to be used to subsidize women's transport to sources of follow-up support.
- Cash reserves for emergencies.
- Educational materials about violence.
- Malaria prophylaxis for interviewers, where necessary.
- Small gifts for respondents such as posters, calendars, pens, canvas book bags.
- Phone cards or cellular phones (where appropriate).

transportation may be available, and when it will be necessary to hire vehicles, horses, boats, or other modes of transportation.

■ **Food and lodging.** Basic necessities for fieldworkers may be difficult to arrange in some areas, whereas in other areas fieldworkers may be able to purchase food or rent rooms. In many rural areas, fieldworkers may need to carry provisions with them and prepare their own food or hire someone to cook.

■ **Printing of questionnaires, manuals, pamphlets, and other materials.**

These include supervisor forms, referral sheets, and directories for local services for women.

Transportation conditions may vary a great deal between sites (examples from Japan, Bangladesh and Tanzania)



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- **Computers and equipment for data processing.** In survey research, several computers and printers will probably be needed in order to enter the data at the same time as the data collection is being performed.
- **Field office.** It may be necessary to borrow or rent a space for the period of the fieldwork to provide a meeting place for field staff storage for completed questionnaires and others materials, and space to perform data entry. This is especially important due to the need to maintain the confidentiality of the information collected.
- **Payment.** You need to plan in advance procedures for making sure that field workers receive their payment while in the field. If supervisors will be carrying large sums of cash, how will the money be protected? Breakdowns in financial systems can be demoralizing to staff and lead to serious disruptions in fieldwork.
- **Communication.** It is important to organize a system for maintaining contact between fieldworkers and main researchers during data collection. In some areas, telephones may be available, whereas in others, it will be necessary to look for alternative sources of communication, such as radios or cellular phones.
- **Purchasing and preparation of supplies.** Large amounts of materials need to be prepared in advance for interviewers and supervisors such as:
 - Backpacks for carrying materials
 - Identification cards
 - Special vests or T-shirts for interviewers, where appropriate
 - Blank paper
 - Colored pens and pencils
 - Clipboards
 - Tape, clips, staplers
- **Management and transportation of completed questionnaires.** A system



Preparing questionnaires in Bangladesh

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Sampling households in Thailand

must be developed for ensuring that completed questionnaires arrive intact to the field office as soon as possible and are stored in a secure location.

Keeping track of all these details is an enormous job, and most survey researchers find that it is helpful to hire a full-time staff person to coordinate logistics. This should include sending out advance teams to update maps, to find out what arrangements are needed regarding food, transportation, and lodging, and to identify any possible obstacles to fieldwork. Investing resources in finding a person who is experienced in conducting community surveys will save enormous amounts of time and effort later on, and will ensure that the data collection proceeds smoothly.

NEGOTIATING COMMUNITY ACCESS

In addition to discussing plans with the advisory board and obtaining ethical clearance, it is important to obtain clearance from local authorities in each community. The research should be framed in general terms, for example, as a study on women's

health or family relations, to avoid having the content of the study become widely known beforehand. The same explanation can be used to describe the survey to other members of the community and in the households where women will be interviewed. In some areas, local groups provide services for victims of violence. These groups should also be contacted before initiating the study to explore the possibility of referring women with violence-related problems to these services, or coordinating in some other way. In the WHO study in Peru, rural community leaders were invited to an informational meeting where they helped the research team to construct community maps for sampling and to plan the route to follow between communities (see Chapter 7). In Thailand, village health workers were recruited to accompany the interviewers to each house in order to introduce them to the head of the household, and to help secure cooperation for the study.

PROTECTING THE SAFETY AND WELL-BEING OF RESPONDENTS AND FIELDWORKERS

The risk of harm to both respondents and fieldworkers has already been addressed at length in Chapter 2. This section will address more specifically the measures that will help to ensure the health and safety of respondents and interviewers while in the field.

Maintaining confidentiality

Much of the information provided by respondents will be extremely personal. As experiences in Ethiopia and South Africa illustrate (Box 11.1), the act of revealing details of abuse to someone outside the family can expose respondents to further risk. For these reasons, it is critical to maintain the confidentiality of information collected during a survey or from qualitative

research with survivors of violence. A number of mechanisms should be used to protect the confidentiality of the information collected, including:

- **Interviewer emphasis on confidentiality.** All interviewers should receive strict instructions about the importance of maintaining confidentiality. No interviewers should conduct interviews in their own community.
- **Do not write the respondent's name on the questionnaire.** Unique codes should be used to distinguish questionnaires. Where identifiers are needed to link a questionnaire with the household location or respondent, they should be kept separately from the questionnaires. Upon completion of the research, they should be destroyed, or, if consent was obtained for follow-up visits, should be kept safely and destroyed after an agreed upon period. In all further analysis, the codes should be used to distinguish questionnaires.
- **Privacy of interviews.** Interviews should only be conducted in a private setting. The participant should be free to reschedule (or relocate) the interview to a time (or place) that may be more safe or convenient for her. Other field staff (drivers, supervisors) may be enlisted to help distract spouses and other family members if it is difficult to achieve privacy.
- **Training on how to handle interruptions.** Interviewers should be trained to terminate or change the subject of discussion if an interview is interrupted by anyone. A short alternative questionnaire on a less sensitive topic concerning women's health (such as menstruation, family planning, or child spacing) can be developed to



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assist with this. The interviewer can forewarn the respondent that she will turn to the alternative questionnaire if the interview is interrupted.

Interviews in Ethiopia

- **The logistics of safety.** Logistics planning should include consideration of respondent and interviewer safety. This will require that sufficient time is budgeted to accommodate the possible need to reschedule interviews. It may also be necessary to identify additional locations (such as a health center) where interviews can be conducted safely and privately. It is a good idea for female interviewers to travel in pairs with a male escort in areas known to be unsafe for women alone. This is particularly true in circumstances where there is some likelihood that an interview may be interrupted, or where interviewers may have to conduct interviews in the evenings.
- **Secure storage of data sources.** Where tapes are made of in depth interviews with survivors of violence, these should be kept in a locked file and erased following transcription.



Again, no record of the names of the women interviewed should be kept.

- **One interview per household.** When the sampling unit for the survey is the household, only one woman per household should be interviewed about her experiences of violence. This is done to protect the confidentiality of the interview. In households with more than one eligible woman, the *WHO Ethical Guidelines for Researching Violence Against Women* recommend that a single respondent should be selected randomly for interview. Any interviews conducted with other household mem-

“Sometimes when I offered them the pamphlet the woman would say to me, ‘No no, please don’t give me the pamphlet, write the address down where I can go and put it on a separate paper, because if my husband found this paper he would kill me.’ So I would write the address in my notebook for her...”

Nicaraguan interviewer
(Ellsberg et al, 2001.⁴)

bers (either male or female) should not include questions directly exploring their use of violence, as this may result in them concluding that the key respondent was also asked about violence.*

Support for respondents

Although most women interviewed will not require any special help after participating in the interview, some women may be particularly distressed,

or may ask the interviewer for help in overcoming their situation. It is important to have resources set up in advance to deal with these situations. The research team should identify existing resources where women may be referred in each site, for example, a women’s center or shelter, or community clinic where personnel have some training in helping abused women. An interviewer can then provide a woman with a leaflet with the address of the center and

times when she can be attended to there. Some researchers have found it helpful to put a number of other addresses on the same piece of paper so that it is not obvious that these are services for abused women, in case someone else reads the paper.

Where few resources exist, it may be necessary either to arrange for the interviewers themselves to receive training in crisis intervention or to train other local individuals to provide such support. In particularly remote areas, it may be easier to have a trained counselor or women’s advocate accompany the interview teams and provide support on an as-needed basis. This may take the form of alerting all participants that a staff person trained in family issues will be available to meet with anyone who wishes at a set time and place. Preferably, this location should be a health center, church, or local organization where women can easily go without arousing suspicion. In Indonesia, during fieldwork in a rural area, a psychologist from the women’s crisis center in the city came on a weekly basis to visit the field site. In the morning, she would meet with any of the respondents who had been referred for counseling by the fieldworkers. In the afternoon, she would hold a group debriefing session for fieldworkers, as well as individual sessions if needed.¹

Finally, educational leaflets may be provided to women, giving additional information about violence and suggestions for how to protect themselves and where to go for help if they or someone they know is being abused. The leaflets should be small enough to be easily hidden, and care should be taken to ask women whether it is safe for them to receive the leaflet.

* This procedure can lead to a biased sample, as women in households with many eligible women will have a lesser chance of being selected to be interviewed. However, we believe that the risks of interviewing more than one woman per household outweigh the benefits obtained by a more complete sample. It is possible to adjust for this potential bias in the analysis stage. Experiences in Nicaragua and in the WHO multi-country study indicate that the prevalence estimates of violence were not significantly affected by this measure.



Emotional support for field staff

Listening day in and day out to stories of abuse can have emotional and personal consequences for interviewers. A common occurrence recounted by researchers on violence is that feelings evoked during the research begin to invade other areas of staff members' lives. For example, it is not unusual for team members involved in gender-based violence research to begin to have problems in their own relationships, either because they start to recognize aspects of their own relationships as abusive, or because the anger they feel towards male perpetrators begins to generalize to the men in their own life. This occurs so frequently in violence research that many researchers openly discuss it during interviewer training and encourage team members not to make any major life decisions during the course of the project.

Emotional support for team members is essential. Not only does it help interviewers withstand the physical and emotional demands of intense fieldwork, but it also contributes to the quality of the data collection process. A focus group conducted with interviewers after completing a large-scale health survey that included a module on violence illustrates how disturbing and draining this work can be when appropriate support is not provided.⁴ One woman acknowledged that she had lived through similar experiences herself, and found it particularly hard to listen to the stories of abuse. Another interviewer admitted that she had dropped out of the study because she was unable to withstand the pressure of listening to women's stories. She explained:

... When we got to the part about violence, [the respondent] started to tell me that she had been raped first by her brother and her stepfather, but her mother never believed her, and mistreated her... She broke down crying, and I was so moved that I didn't know what to do,

BOX 11.2 PROTECTING THE SAFETY OF RESPONDENTS IN GROUP DISCUSSIONS: EXPERIENCES FROM ETHIOPIA AND SOUTH AFRICA.

In the WHO VAW study in rural Ethiopia, researchers visited a village for the purpose of piloting the questionnaire.² In this village, women were very reluctant to speak to interviewers alone, and when the subject of violence was brought up, many of them refused to continue the interview. Almost no woman who completed the interview acknowledged having ever been beaten by her husband (in stark contrast with the study findings that more than half of Ethiopian women in this region had been physically abused by a partner). One woman told an interviewer, "Do you think I am a fool, that I would talk to you about such things? My husband would kill me if I did." Eventually, the team learned that a group of people from the city had come to talk about domestic violence with the women. They asked women to describe their experiences in a public meeting, and one woman told how her husband had beaten her. Later in the day, the husband found out and beat her savagely. Everyone heard her cries but no one came to her rescue. Many women thought she had brought the abuse on herself by discussing personal matters in public and shaming her husband.

In another study carried out among female high school students in Cape Town, South Africa, the students revealed in the focus group discussions that they had been sexually harassed by male teachers in the school.³ According to the researchers,

The learners were grateful to have a sympathetic listener and spent a lot of time discussing these incidents. The girls were clearly victimized and feared these educators and did not want to identify them and neither did they want to be identified as being part of the research group. Plans had to be devised to keep their participation in the research secret from these men. During one incident, a male educator spoke to the researchers enquiring about the research, just outside the room in which the discussions took place. He appeared more than normally interested and asked to see the room. He was very forceful and opened the door, clearly wanting to see more than the room. It is suspected that he had some idea of what the research was about and he wanted to see which learners were involved. Luckily, none of the learners had arrived yet.

BOX 11.3 HOW TO PREVENT INTERVIEWER BURNOUT

1. Include as part of the research team a parttime psychologist or someone with counseling skills who can provide timely counseling for research staff.
2. Schedule weekly debriefing sessions for research staff to specifically discuss the ways in which the fieldwork is affecting their personal lives and physical and mental health.
3. Rotate job responsibilities among field staff to reduce the intensity of information gathering.
4. Schedule frequent team-building activities such as celebrations of achievements and birthdays to help team members feel comfortable asking for support when they need it.

because as a human being you can't listen to a story like this and not be moved. I tried to calm her down and give her some encouraging words, but the image of these stories affects you, to see how these women suffer, and especially the feeling that no



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It is important to organize regular activities to help field staff relax and “decompress” from the stress of interviews (examples from Samoa, Bangladesh and Peru).

one supports them, these are experiences that you never forget...

... We spent days thinking about that poor girl and how we left her, without being able to help her. All we did was give her the pamphlet and leave, and the interviewers were very upset, because they would think about their daughters, and that tomorrow something could happen to them and there would be no one to help them...⁴

Even in situations where support is available, researchers may be surprised by the intensity of the emotions that are awoken. One of us (Ellsberg) described an early experience with violence research this way:

Although I was not involved in the daily interaction with abused women, even supervising the fieldwork and analyzing the data turned out to be more painful than I could possibly have imagined... I found myself in tears as I added up the numbers of women who had been kicked in the stomach during pregnancy, or scrolling down the pages of responses to the question “How were you affected by the violence?” where the same words were repeated over and over, “I cry a lot,” “I am very nervous,” “I am always afraid.”

... What sustained us through this period was the sense that women had entrusted us with their stories and it was our job to

ensure they were used to help other women. We reminded ourselves that our main contribution was to bear witness to women's experiences, and that women were also grateful for the chance to be able to tell their stories...⁵

There are many ways that researchers can provide needed support to team members. One strategy is to retain a part-time psychologist or someone with counseling skills, trained in gender-based violence issues, who can provide timely counseling to interviewers and other research staff. The counselor can participate in the training workshop as well, assisting in discussions of post-traumatic stress disorder, crisis intervention, and other relevant topics.

A second preventive strategy is to schedule periodic “decompression sessions” or debriefings for field staff to discuss how the emotional impact of the research experience is affecting them. These meetings, similar to a “self-help group,” should be separate from meetings for reviewing technical aspects of the research. In these sessions, maintaining the confidentiality of both respondents and field staff is a primary consideration. The purpose of the debriefing sessions is to create an opportunity for the interviewers to discuss the content of the interviews and their feelings about the work. The goal is to reduce the stress of the fieldwork and prevent any negative consequences. Scheduling weekly sessions should meet the needs of most research teams. This strategy has the added advantage of being relatively cost-effective, as opposed to hiring a team psychologist or social worker for crisis intervention or counseling sessions.

A third strategy is to rotate job responsibilities, so interviewers have a break from listening to heart-wrenching stories. Research team members could temporarily shift from field interviews to quality control, driving, data entry, clerical and/or



“Have faith, women: Protect your health!” was the message of these canvas tote bags given to respondents in the Peru WHO study.



PHOTO BY HAFM JANSSEN

Thai researchers prepare gifts for respondents

administrative tasks. This strategy also allows fieldworkers to participate in and understand various stages in the process of data collection and preparation. It is important to be on the lookout for signs of “burn out” among field staff and to take immediate steps to reduce their exposure to potentially upsetting situations (Box 11.3). A single day’s rest can often be enough to allow team members to recuperate from stress.



Compensation for respondents

The decision to compensate respondents for their participation is a sensitive one, and should be discussed carefully with the local advisory group to ensure that the study is in line with what is considered appropriate locally. In many settings, it is felt that offering money to respondents provides an incentive for participation that violates the ethical principle of voluntary participation. On the other hand, it is important to recognize that respondents have sacrificed valuable time and effort to cooperate with the study. Many research teams have found ways of compensating respondents that do not involve money, such as key chains, canvas bags, calendars, and wall clocks with messages related to women's rights. In Japan, respondents were given gift certificates for bookstores.

It is important that the messages do not mention violence, as this could put women at risk. In Peru, canvas bags were printed with the message “Have faith, women, protect your health!” In Brazil, calendars marking important dates for human rights and women’s issues were distributed.

The Tanzania research team making the final adjustments in the questionnaire



PHOTO BY HARM JANSEN

FINALIZING THE PROCEDURES AND INSTRUMENTS

After the questionnaire has been pre-tested and the necessary adjustments have been made, the next step is to perform a final pilot test before actual data collection begins. By this time, the questionnaire should not require substantial revisions. The pilot testing is used mainly to refine the overall data collection procedures. Usually this phase is carried out as part of the process of training field staff.

After the interviewers have studied the questionnaire and practiced on each other, they can be sent to perform interviews in a neighborhood that is similar to, but not included in, the actual study sample. This process gives interviewers and supervisors the opportunity to practice selecting eligible households and informants, to make sure that questionnaires are being filled out properly, and to detect any other survey procedures that need to be streamlined or adapted. The questionnaires should also be entered by the data entry personnel, and used to test the data entry screens and data quality tables for errors.

MANAGING NONRESPONSE

Nonresponse occurs when the selected woman is unavailable because she has moved away and cannot be located, because she is temporarily away, or because she refuses to participate in all or part of the study. A high **nonresponse rate** reduces the validity of the findings because we cannot tell whether women who have experienced violence have participated to a greater or lesser extent than nonabused women. As a result, findings may underestimate or overestimate the prevalence of violence. For example, a survey on violence in León, Nicaragua, found that several

women had left their homes since the time when the sampling frame was developed. Efforts were made to track the women down in other cities and to talk to family members regarding the reason for the migration. It was found that many of the women had left their homes because of domestic violence, and in a few cases, women were currently hiding from their abusive spouses. This indicated that abuse might be even more common among nonrespondents than among the overall sample of women.

Nonresponse may be a great problem in certain areas, such as cities where most women work outside the home or live in apartment buildings.

Nonresponse may be classified in different groups, for example:

- Household refusal (no one in the household will give information about its members).
- No eligible woman is found in the household.
- The eligible woman is selected but she is not available to be interviewed.
- The eligible respondent refuses to participate in part or all of the survey.



PHOTO BY HAFM, JANSEN

In all surveys, it is important to minimize the degree of nonresponse. Box 11.4 gives examples of measures that research teams in the WHO multi-country study took to reduce refusals. It is a good idea to monitor the details of nonresponse by cluster, with follow-up procedures implemented in locations with high levels of nonresponse. It is important to obtain as much information as possible about nonresponses, to identify whenever possible why the person did not participate in the survey, and to assess whether there may be any degree of bias (such as lower prevalence of abuse) resulting from the incomplete data.

Gaining access to a household in Brazil

TABLE 11.1 CALCULATING RESPONSE RATES

	N	%	IRR*
Eligible woman refused/absent/didn't complete interview	184	5	5
Individual interviews completed	3255	83	95
Total households with an eligible woman	3439	87	100
No eligible women in household/ household empty/destroyed	502	13	
Total households selected	3941	100	

* Individual response rate (IRR) is calculated as: number of completed interviews/number households with eligible women x 100.



BOX 11.4 TECHNIQUES FOR MINIMIZING REFUSALS

These are some of the measures that were used in the WHO study in Peru, Brazil, and Japan to reduce refusals:

- Sending letters in advance on official stationary asking for permission to visit, and calling by phone to set up appointments.
- Sending letters to building managers asking permission for interviewers to enter the building.
- Meeting with community leaders beforehand to encourage community participation.
- Visiting households several times if necessary to find the respondent at home, including at night and on weekends.
- Asking community leaders or village health workers to accompany fieldworkers on the initial visit to a household.

Further, nonresponses should be carefully documented. Table 11.1 illustrates how the response rate may be calculated and presented. In this case, interviews were completed in 83 percent of the 3,941 households selected. However, in 13 percent of the households, there were no eligible women or the house on the map was empty or had been destroyed. Because the response rate only measures the percentage of completed interviews out of households with an eligible woman, the individual response rate is 95 percent rather than 83 percent.

Checking questionnaire in Thailand



PHOTO BY HARM JANSSEN

DATA QUALITY CONTROL

Maintaining control over the quality of data as it is being collected and entered into the computer will avoid many problems later on. Following are some suggestions for improving data quality.

Standardized training manuals

- **Training manuals for interviewers and supervisors.** The instruction manual helps ensure that all procedures with regard to carrying out the interviews are performed in a uniform way, thereby reducing the possibility of systematic bias in the study. The manual should outline the roles and responsibilities of each member of the field staff, how to select and approach households, and how to deal with unexpected situations.
- **Question-by-question coding manual.** This may be included with the interviewer manual if the questionnaire is not too long. It provides additional information about the purpose of each question and how it should be asked, as well as how to code the answers.

Supervision

The role of supervisors is to ensure that interviewers are following the guidelines of the study, for example in the way they are asking questions and maintaining privacy. Supervisors may observe interviews occasionally to monitor the quality of the interviews. Either the supervisors or an editor will review each questionnaire before leaving the field to make sure that it is filled out properly, that the skip patterns are followed, no information is missing, and the information obtained makes sense. This should be done as soon as possible after the interview is completed. Any mistakes

found at this stage should be corrected immediately. Interviewers may need to return to a household to obtain missing information (unless the respondent did not want to provide that information).

Random repeat interviews

Supervisors may randomly repeat parts of interviews to make sure that the information in both the interviews is the same. This is particularly important in the study of violence, where an interviewer's own attitudes or behavior may influence whether a woman will disclose experiences of violence. Therefore, the "interviewer effect" is particularly important to control as much as possible. If supervisors will be revisiting households, it is important to mention this in the informed



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BOX 11.5 ENSURING DATA QUALITY IN THE WHO MULTI-COUNTRY STUDY ON WOMEN'S HEALTH AND DOMESTIC VIOLENCE AGAINST WOMEN

Within each country, a range of mechanisms was used to ensure and monitor the quality of the survey implementation in different settings. This included:

- The use of a standardized and detailed training package.
- Clearly explaining the requirements and conditions of employment to each interviewer and supervisor, and maintaining the option to fire staff who were not performing adequately, or who had negative attitudes towards the topic of study.
- Compiling details of eligible members of each household during the survey. Possible sampling biases could then be explored by comparing the sample interviewed with the distribution of eligible respondents.
- Close supervision of interviewers during fieldwork, including having the beginning of the interview observed by the supervisor for a proportion of interviews.
- Conducting random re-checks of some households, without warning. Several respondents were reinterviewed by the supervisor using a brief questionnaire. This visit was used to assess how the respondent was selected and to assess the respondent's perceptions about the interview (at the time of the original interview respondents were asked for permission for the supervisor to return).
- Continuous monitoring for each interviewer and each team of a number of performance indicators such as the response rate, number of completed interviews, and rate of disclosure of physical violence.
- Having a questionnaire editor in each team, who reviewed each of the questionnaires once they were completed, identifying inconsistencies and skipped questions. Within any cluster, this enabled any gaps or errors to be identified and corrected before the team moved on to another cluster.
- A second level of questionnaire editing was done upon arrival in the central office by "office editors."
- Extensive validity, consistency, and range checking was conducted at the time of data entry by the check program that is part of the data entry system.
- All the survey data were double entered, and inconsistencies were identified and addressed through a comparison of the two data sets.

(From WHO, 2000.⁶)

Fieldworkers editing questionnaires in Samoa



All WHO VAW study sites used standardized data entry screens that were modified in each site to include any additional questions (example from Bangladesh).

consent procedure and to ask for permission to revisit the respondent.

Technical debriefing

In addition to the emotional debriefing meetings already referred to in Chapter Ten, regular meetings with interviewers during the fieldwork are important for identifying and correcting problems in the data collection. Such problems include ambiguities in questions that are being interpreted differently by various interviewers or questions where large discrepancies are found.

Interviewer observations

Whenever possible, interviewers should be encouraged to write detailed observations at the end of the interview. These observations can include information

about the interview itself, such as whether anyone interrupted and whether the informant seemed nervous or credible. The observations can also provide additional information about the woman's history that may help to clear up apparent inconsistencies, or contribute valuable insights into the problem under study.

Final debriefing

A final debriefing should be carried out with fieldworkers and supervisors after the data collection is completed. The purpose is to gather information about the field process in general, problems that were encountered that might influence the quality of the data, and the general views of staff regarding the veracity of the information provided by respondents. For example, it would be useful to hear whether women seemed reluctant to answer the questions on violence, and whether there were problems achieving complete privacy. Did it appear that respondents were telling the truth about their experiences? In one such debriefing, a fieldworker commented that "some women said no with their mouths [about being abused] but yes with their eyes."⁴ These comments will be extremely valuable later on in helping to interpret the findings.

DATA ENTRY

Data entry and analysis is greatly facilitated by using a computer package designed specifically for the entry and statistical analysis of survey data. We recommend the use of Epi Info, an epidemiological package developed by the Centers for Disease Control (available in DOS or Windows format at <http://www.cdc.gov/epiinfo/>). The advantages of Epi Info are many:

- It is free, easy to obtain, and has been translated into several languages.

BOX 11.6 EXAMPLE OF A FIELDWORKER'S OBSERVATIONS

This woman was raped by her brother, and then beaten and sexually abused by her husband. She finally left him, after 10 years of abuse, but he continued to follow her, to threaten her with a machete, and once dragged her by the hair down the street. She went to the police for help, but they said there was nothing they could do. She is still frightened that he will come back to kill her, and she broke down crying during the interview. I gave her a booklet about violence and I referred her to the university mental health clinic. Nicaraguan interviewer

(From Ellsberg, 2000.⁵)

BOX 11.7 DATA ENTRY AND PROCESSING IN THE WHO MULTI-COUNTRY STUDY ON WOMEN'S HEALTH AND DOMESTIC VIOLENCE

A data entry system was developed in Epi Info 6.0 with standardized data entry screens and extensive error check programs. In each country, all information collected on the administration sheet, household selection forms, household questionnaire, and female questionnaire needed to be entered in this system. The system was developed centrally. A member of the Core Research Team installed the program in each country, assisted in customizing the program to accommodate country adaptations of the questionnaire, and trained data entry staff and the data entry supervisor during one week in use of the program and in all other aspects of data processing. Although some of the questions and/or answer options differed between countries, a standardized approach to coding was adopted and every deviation of the original question was carefully documented in a central codebook. These procedures helped ensure that the data in each country were essentially entered in the same way, and that decisions about coding were implemented universally. All data were double entered and double entry errors were identified using the validation module Epi Data.

Open-ended questions were initially entered verbatim, and then coded, based on a uniform coding system that was developed after reviewing the responses obtained in each country. Each country team was responsible for the entry, cleaning, and preliminary analysis of the data for their own country. Assistance from the central technical support team was provided where necessary.

(From WHO, 2000.⁶)

- It is easy to use, and many researchers and data analysts are already familiar with it.
- It allows for data entry screens with logical checks, and basic statistical analysis. The Windows version also does more advanced statistical analysis, such as logistic regression and life table analysis.
- Data entered in Epi Info can easily be exported to other statistical programs for more advanced analysis, such as SPSS or Stata.

No matter what data entry system you use, it is important to ensure that the data are entered correctly. Sloppy data entry can lead to enormous problems later on, that take months to detect and clean. Whenever possible, data entry should be carried out at the same time as data collection. This will make it much easier to identify and correct problems in the data collection before it is too late. Following are some of the most common methods for controlling the quality of data entry.

- **Logical controls.** Many data processing software packages (including Epi Info)



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allow you to program logical checks into the data entry program. These checks can reduce errors by specifying the values that can be entered in a specific field (for example, if it is a yes/no question, then only the two values representing yes and no will be accepted). They can also carry out automatic checks to maintain the internal consistency of the data. For example, the program will check to make sure that a woman's reported age coincides with her birth date, or if she has already

Data entry in Tanzania



indicated that she has no children, the program will automatically skip any questions regarding children.

- **Double entry of data.** This is the most reliable way to ensure the quality of data entry. It involves entering each questionnaire twice by different people, and then comparing the data for discrepancies. While this is a very reliable method, it does increase costs. Therefore, some researchers prefer to use double entry at the beginning of data entry, to identify and correct common mistakes. Then, as errors are reduced, data can either be entered once, or double entry of data can be performed randomly on a smaller proportion of questionnaires.
- **Data quality tables.** Data quality tables are useful for determining refusal rates and comparing results on specific variables for which information already exists. They can reveal problems occurring in specific field teams or with individual interviewers. In prevalence studies, it is a good idea to keep track of the percentage of women disclosing violence per interviewer, and to perform additional supervision of interviewers with particularly high or low rates of disclosure.

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