

ASSESSING THE QUALITY OF SURVEY DATA ON ADOLESCENT SEXUALITY BY TALKING WITH THE FIELD STAFF

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Survey interviewers and supervisors are a rich source of information. Long hours in the field allow them to intimately observe and interact with study respondents. The trained interviewer can view the living conditions and relationship dynamics in the home and, more important, observe the respondents' reactions to survey questions revealed through their body language, verbal expressions, and apparent conviction. During this "window of opportunity," rapport often develops between the interviewer and the respondent, allowing the interviewer to gain valuable information far beyond the answers given in the survey questionnaire.

Although feedback from the field staff is common in survey research, systematic documentation of the feedback is unusual.¹ Yet such insights from the field interviewers are often an invaluable source of information to an analyst who must interpret the survey data.

The Nepal Adolescent and Young Adult (NAYA) Survey collected information about the reproductive health knowledge, practices, and behavior of a representative sample of Nepalese in the 14 to 22 age group. Its objective was to provide better guidance for the development of effective policies, strategies, and programs aimed at improving the reproductive health of this age group. The survey was carried out in five urban areas and eight rural districts of Nepal. Valley Research Group implemented the fieldwork with technical support from Family Health International.

Upon completion of the fieldwork, we, the research staff, met with the survey interviewers and supervisors to discuss their field experiences. The main purpose of these discussion sessions was to collect qualitative

information that would enhance the analysts' understanding of the quantitative data recorded in the survey questionnaires and clarify respondents' thinking behind their answers to the open-ended survey questions. Separate reports on the discussion sessions were prepared for the rural and urban areas (Thapa, Dhital, and Neupane, 2000a, 2000b). This background report synthesizes the main points reviewed in the discussion sessions in both areas.

Methodology

We convened a discussion session with the field staff from each of the 13 sample districts. The discussions were similar to the focus-group discussions held with young Nepalese before the formal survey was conducted. Each session involved nine to ten persons and lasted typically one to two hours. We followed a discussion guide designed to obtain information on the same topics from all the survey teams, though some groups discussed certain items in more detail than others. The discussions were tape-recorded and transcribed.

Profile of the Field Staff

The field staff were trained in Kathmandu for one week prior to conducting the survey. During their training they received instruction on the survey topics, the questionnaire, interview methods, and role playing. The training included discussion of potential problems that the interviewers might encounter in the field and field practice with the questionnaire. Interviewers were required to personally fill out two to four questionnaires upon returning to their district so that they would become comfortable with the survey questions.

A total of 111 persons (20 supervisors and 91 interviewers) were assigned to work in the field. Of them 64 were men and 47 were women. The ratio of interviewers to supervisors was 4.6 to 1 (Table 1). The supervisors were slightly older than the interviewers (30 years versus 26 years, on average). The majority of the staff were unmarried students having an average of 14 years' schooling. Two-thirds had spent their childhood in rural areas.

The fieldwork was conducted between 5 July and 26 August 2000 in the urban areas and in two phases in the rural sample areas: from 5 August to 2 October in the Hill region and from 29 August to 29 October 2000 in the Terai (southern ecological) region. The urban areas were oversampled to allow reliable estimates based only on the urban adolescent and youth population. Appropriate sampling weights (see Bastola 2000a, 2000b) are being used for the aggregate-level analysis.

In the urban areas, more than 18,000 houses were visited in the 100 census wards or blocks (Table 2). Those houses contained nearly 25,000 households (defined as residents who shared the same kitchen), or about 1.4 households per house visited. Among all the urban households surveyed, 10,298 had eligible respondents—that is, males and females aged 14 to 22 who had spent the previous night in their house. Similarly, in the rural Hill and Terai regions, nearly 22,000 houses were visited in the selected wards. Those houses contained nearly 23,000 households, or about 1.1 household per house visited. Among all the rural households surveyed, 10,610 had eligible respondents.

The Urban and Rural Samples

In urban areas, 3,053 eligible respondents in 2,000 households were selected for interview, representing 19.4 percent of the 10,298 households with eligible respondents (Table 3). The sample households were selected by means of sampling intervals and random numbers based on a random table. The largest numbers of respondents were unmarried males (1,278, or 93 percent of all males) and unmarried females (1,054, or 73 percent of all females). In the rural areas, a total of 4,000 households and 5,478 eligible respondents were selected for interview. The 4,000 rural households represented 37.7 percent of the 10,610 households with eligible respondents. Of the selected respondents, 58 percent of the females and 79 percent of the males were single. These differences in the percentages of single males and females were expected, given the societal norm of earlier marriage for females, especially in rural areas.

Of the selected urban households, 96.4 percent were successfully interviewed. The percentage for individual respondents was slightly lower, 92.5 percent (ranging narrowly from 91 percent to 95 percent). The ratio of eligible respondents selected for interview to the number of households selected for interview was 1.53 to 1 for all five urban areas. The ratio was highest in Kathmandu and lowest in Pokhara (not shown in Table 3). The high ratio in Kathmandu might have been due to in-migration by young people for education and employment opportunities. Altogether, 2,824 respondents (51 percent female and 49 percent male) were successfully interviewed in the five urban areas.

**Table 1: Profile of the Supervisors and Interviewers:
NAYA Survey, 2000**

Field staff	Number or mean	Percent
Supervisors	20	18
Interviewers	91	82
Ratio of interviewers to supervisor	4.6	
Gender		
Males	64	57.7
Females	47	42.3
Ethnicity		
Bahun	55	49.5
Chetri	22	19.8
Newar	19	17.1
Gurung, Magar, Tamang, Rai	11	9.9
Other (Tharu, Giri)	4	3.6
Age (mean, SD)	25.46 (4.26)	na
Supervisors	30.30 (3.73)	na
Interviewers	24.40 (3.58)	na
Educational attainment (mean, SD)	13.81 (1.47)	na
Marital status		
Unmarried	74	66.7
Married	37	33.3
Childhood place of residence		
Urban	42	37.8
Rural	69	62.2
Primary occupation (current)		
None	26	23.4
Housewife	4	3.6
Student	70	63.1
Other	11	9.9
Total	111	na

SD = standard deviation; na = not applicable.

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In the rural areas, about 94 percent of the households and an equal percentage of individual respondents were successfully interviewed. The ratio of eligible respondents to the number of households was 1.4 to 1, slightly lower than in the urban areas. Altogether, 2,730 females and 2,423 males were successfully interviewed in the eight rural districts selected for the survey.

The overall nonresponse rate (including incomplete interviews) was only 7.5 percent for the urban areas and 5.9 percent for the rural areas (Table 4). Of the total nonresponses in the urban sample, 42 percent of eligible respondents were not interviewed because they were not at home, despite up to three attempts by the interviewer to contact them. Nearly 29 percent of nonrespondents refused to participate in the interview. In 13 percent of the urban nonresponse cases the interview was terminated primarily because of interference by elders in the family or because the respondent was called away by other family members. In the rural sample, the three prominent reasons for nonresponse were the respondent's absence, refusal, and miscellaneous other reasons.

**Table 2: Sample Cluster and Household Size:
NAYA Survey 2000**

Description	Urban	Rural			Total
		Hills	Terai	Both	
No. of wards/blocks	100	80	80	160	260
No. of houses	18,311	9,153	12,585	21,738	40,049
No. of households	24,972	9,262	13,449	22,711	47,683
Ratio of households to houses	1.36	1.01	1.07	1.04	1.19
No. of households with eligible respondents	10,298	4,675	5,935	10,610	20,908
Proportion of households with eligible respondents to number of households	0.41	0.50	0.44	0.47	0.44

Overall, the field staff of 111 people visited more than 40,000 households and contacted more than 47,000 household heads. They attempted to interview more than 8,500 adolescents and young adults and completed interviews with nearly 8,000 respondents. In the course of collecting the data for the survey, they accumulated a great deal of field experience. The ensuring sections

discuss their perceptions of that experience, including difficulties in soliciting information about subjects that were personal and sensitive.

Findings

The discussion below focuses on two major components of the fieldwork. First, we discuss issues related to the household component of the survey, including location identification and interviews with the household head. The second component deals with interviews with the respondents themselves and the specific questions contained in the survey. In our follow-up discussions with the field staff, we asked them about those questions that we thought could be difficult to ask or for respondents to answer.

Household Lists

In both the rural and urban areas, the actual number of households in each sample block or ward was found to differ somewhat from the numbers in the sampling list, probably because the sampling list had been generated from the sampling frame based on the 1991 Census, the only sampling frame available. The boundaries of some of the sample clusters also proved to be incorrectly specified. This discrepancy was rectified upon verification with local officials.

In a majority of the districts, the field staff found more households than were listed in the sampling list. In two rural districts (Rupandehi and Kavre), however, there were fewer households than recorded in the sampling list. This might have been due to out-migration for employment. In one village (Saptari), most of the males had migrated to Punjab, India, and only females were available for interview.

Table 3: Sample and Interview Results: NAYA Survey, 2000

Description	Urban	Rural			Total
		Hills	Terai	Both	
Sample selected for interview					
No. of households	2,000	2,000	2,000	4,000	6,000
Eligible respondents selected for interview	3,053	2,695	2,783	5,478	8,531
Single females	1,132	1,036	635	1,671	2,803
Married females	413	414	805	1,219	1,632
Single males	1,397	1,102	953	2,055	3,452
Married males	111	143	390	533	644
Ratio of eligible respondents to number of households	1.53	1.35	1.39	1.37	1.42
No. of households per interviewer	43.8	55.6	62.5	59.1	54.0
Sample interviewed					
No. of households	1,927	1,815	1,933	3,748	5,675
Eligible respondents actually interviewed	2,824	2,512	2,641	5,153	7,977
Single females	1,054	982	595	1,577	2,631
Married females	391	370	783	1,153	1,544
Single males	1,278	1,028	883	1,911	3,189
Married males	101	132	380	512	613
Percentage interviewed					
No. of households	96.4	90.8	96.7	93.7	94.6
Individual respondents	92.5	93.2	94.9	94.1	93.5
Single females	93.1	94.8	93.7	94.4	93.9
Married females	94.7	89.4	97.3	94.6	94.6
Single males	91.5	93.3	92.7	93.0	92.4
Married males	90.9	92.3	97.4	96.1	95.2
No. of respondents per interviewer	64.2	69.8	82.5	76.2	72.2

Table 4: Reasons for Noninterviews: NAYA Survey, 2000

Reason	Number					Percentage distribution				
	Urban	Rural			Total	Urban	Rural			Total
		Hill	Terai	Both			Hill	Terai	Both	
Not at home	95	66	61	127	222	41.5	36.1	43.0	39.1	40.1
Incomplete	30	14	12	26	56	13.1	7.7	8.5	8.0	10.1
Refused	65	35	21	56	121	28.4	19.1	14.8	17.2	21.8
Other	39	68	48	116	155	17.0	37.2	33.8	35.7	28.0
Total	229	183	142	325	554	100	100	100	100	100
Percentage to the total sample	7.5	6.8	5.1	5.9	6.5	na	na	na	na	na

na = not applicable.

Lists of Families

In urban areas, some of the respondents and their parents or guardians wanted to know what benefit they would receive for participating in the survey. In some areas it was difficult to contact heads of households, and some of them were uncooperative or even rude. In rural areas, the interviewers encountered a variety of problems during the listing of the household members. For example, in Argakhachi District, the residents whose houses were not selected expressed disappointment, and many asked why their neighbor's house had been selected instead of theirs. A few residents even became aggressive and threatening. Many suspected (wrongly) that the selection process had been influenced by political favoritism. In their debriefings the interviewers mentioned to us that the ward chief and ward members assisted in clarifying the purpose of the survey and paving the way for the interviews.

In some rural areas, especially in Dailekh and Arghakhachi districts, rebel activities created problems for the interviewers. The rebels, often referred to as "Maoists," tend to travel in groups of unrelated males and females. Because the survey teams fitted such a profile, villagers suspected them of being rebels and were afraid of them. Some household heads would not tell the interviewers the names of the eligible respondents, saying that a respondent was not at home. The field staff dealt with this situation by meeting with teachers, local leaders, and other residents to solicit their support and ensure their credibility in the community.

The harvest season also hindered effective fieldwork, especially in Ilam District, where the cardamom and tea harvests made it difficult to meet respondents and household heads in their homes. In Kavre and Banepa districts, the household heads were anxious to list as many names as possible, thinking perhaps that they would receive some kind of benefit for doing so.

In a few cases, particularly among illiterate families, the household heads could not provide the full names of their family members because they were accustomed to calling a child or daughter-in-law by her birth-order or marriage-order title. The interviewers encountered many poor people in selected areas of Banke District. During the listing, it was difficult to record data on *sukumbasis* (landless squatters) who had migrated from India because many lacked national identity cards and had no permanent residence. In selected communities of Saptari District, many parents did not want their daughters to participate in the survey. As a result, the interviewers needed to spend much time trying to persuade them of the importance of participating. Language presented difficulty in some areas. Interviewers spoke Awadhi, Hindi, Maithili, and Tamang in some districts to communicate with the respondents and their parents. Aside from these instances of challenges and difficulties, local residents and respondents in the majority of the areas were cooperative and facilitated the conduct of the survey.

Contacting and Interviewing the Respondents

To make the interviews gender-friendly, women interviewed female respondents and men interviewed male respondents. Nevertheless, the interviewers encountered various obstacles in conducting the interviews.

In Kathmandu, for example, the interviewers found it difficult to meet with the respondents during the day because most of them were attending school. Before and after school, many urban teens were engaged in language or computer classes, making interview times difficult to schedule. Interviewers visited the same household two to three times trying to meet the respondents.

In selected business communities (e.g., Birgunj), the interviewers had difficulty meeting business and factory workers. Most employees left home early and returned late in the day. Many shop owners and workers were unwilling to participate in the interview and, if they agreed, refused to respond to many questions. Many business owners suspected that the interviewers might have come from the tax office to assess their tax situation. In Banepa,

the largest town in Kavre District, some people refused to participate because they distrusted the interviewers.

The interviewers also reported problems interviewing respondents employed as servants. The respondents' employers sometimes interrupted the interviews to call the servants back to work, preventing completion of the interview. Many servants were illiterate or poorly educated, and their interview time had to be lengthened to explain the questions to them. Some respondents living in rental housing were prevented from being interviewed by their landlord, who feared that the interview might cause a problem with taxes. In a few cases, husbands did not allow their wives to be interviewed, even though the wives wanted to participate in the interview. Some household heads did not want to respond to questions about their household assets.

Many parents seemed uncomfortable when the interviewer took the respondent to a separate place to conduct the interview. They would interrupt the interview to ask such questions as, "What are you asking?" or "Why can't you conduct the interview in front of us?" Other parents, however, were thankful to the interviewer. One said, "Our daughters and sons could at least learn something useful about health from you."

Now and then a parent asked to see all the topics of the questionnaire before allowing his or her child to participate in the interview. Some parents insisted on being present during the interview and monitoring their child's responses. This inhibited both the interviewer's and the respondent's participation in the interview. A parent or guardian might interrupt the interview, objecting to the subject matter or insisting that the respondent did not know anything about the questions being asked. When the parent left the room, however, most respondents easily answered the questions.

Some respondents, particularly young and illiterate ones, had difficulty understanding and answering many questions. Younger respondents in particular tended to be shy and embarrassed by questions that asked them about puberty, sexual intercourse, and their knowledge and use of family planning methods. Student respondents who had studied health or population subjects in school generally understood the questions and answered them more readily. Many of the respondents (and in some cases the interviewers too) felt that the questionnaire was too long, making it difficult for them to sustain their focus on the task and making interruptions likely.

Low literacy rates among respondents in the many of the rural communities resulted in low levels of understanding of some of the survey

topics, particularly those that were socially taboo. This problem may have affected the respondents' answers. Many questions had to be repeated and explained before participants could answer them. The interviewers felt that respondents often gave quick answers without having actual knowledge of the content, or else they simply answered "Don't know."

Particularly in remote communities with high rates of illiteracy (for example in Kavre and Dailekh districts), the respondents had trouble understanding many words used in the questionnaire. Interviewers had to learn local phrases and use them when confusion arose. In Kavre District, the predominance of the Tamang language in remote areas caused communication problems for the respondents and interviewers. Generally however, the interviewees with some education were able to understand the topics and questions. Because of this the response rate was high in communities where respondents had had some schooling.

In Banke District, the survey was difficult to administer because approximately half of the respondents were illiterate. The interviewers thought that parts of the survey were inappropriate for the Muslim areas of the district because as Muslim respondents showed no interest in the questions on family planning, pregnancy, and sexually transmitted infections. In the larger villages, prior experiences with nongovernmental organizations had prejudiced people against them, making it difficult for the interviewers to gain the trust of the respondents.

The large numbers of illiterate and lower-caste Indian immigrants residing in Mahottari District led to some problems in that area. Many people complained that because they did not have Nepalese citizenship and nationality cards, nongovernmental organizations offered them no assistance. Most respondents in the area lived in primitive huts and had no economic resources. The interviewers there spoke the Maithili language with respondents who did not understand Nepali.

The interviews lasted from 40 minutes to two hours, the amount of time depending largely upon the educational level of the respondent. Married female respondents required more time because of the additional modules on pregnancy and childbearing. Most respondents found the questionnaire to be too long, and some were offended by the personal questions about their sexual behavior and whether they had used drugs and alcohol. Despite all the difficulties described in this section, however, the field staff received excellent support for their work in most of the communities.

The Survey Questionnaire

The survey questionnaire consisted of 13 modules: respondents' background; residential history; family characteristics; puberty; menstruation; friendship, love, and marriage; sexuality; pregnancy and childbearing; knowledge and practice of family planning, knowledge and incidence of sexually transmitted infections, including HIV/AIDS; gender roles; mass-media exposure; awareness of girl-trafficking; and miscellaneous topics, including smoking, alcohol use, and drug use. Separate questionnaires were designed for unmarried females, married females, unmarried males, and married males (Family Health International and Valley Research Group 2000). The questionnaire for unmarried female and married females contained 240 and 260 possible questions, respectively, while the questionnaire for unmarried male and married males contained 212 and 223 possible questions, respectively.

Each interview began with the reading of a consent statement by the interviewer. After obtaining the respondent's consent, the interviewer asked questions about the respondent's demographic characteristics and socioeconomic background. These were followed by questions about the respondent's knowledge of, attitudes toward, and behavior related to health, particularly reproductive health.

Our discussions with the field staff focused on selected questions that were thought to be potentially problematic or sensitive. Those questions are discussed below.

The consent statement: You have been selected as a potential respondent for a survey aimed at understanding mainly reproductive health and related issues among males and females of ages 14 to 22 in selected urban and rural areas of Nepal. Some of the questions may be personal and sensitive. Your identification will be kept confidential and the responses will be used for research purposes only. I would like to request your consent to be interviewed.

Educated respondents in both the urban and rural areas easily understood and accepted the consent statement, whereas illiterate respondents required elaboration. For example, some illiterate respondents in rural areas required explanations in their local dialects. Some parents and respondents in urban areas became suspicious when they heard the words "confidential," "sensitive," and "research"; in a few incidences they refused to allow their child to be interviewed. Younger respondents, ages 14 to 16, did not

understand the purpose of the survey. Many of them just shook their heads and had no comment.

In what month and year were you born?

In the urban areas, the educated respondents and their parents had no problem providing the correct date of birth and the age of the respondents. Illiterate respondents and their parents often did not know the respondent's exact age, which then had to be estimated on the basis of related information. Some respondents could report their month of birth but did not know the year in which they were born, whereas others could not remember the month. A comment typical of some parents was, "You are an educated person and should know. Look at his face and help us determine his age." In some very poor areas, the household head might have reported the respondent's age incorrectly in order to have the child included in the survey in hopes of receiving a monetary benefit.

The interviewers used a number of methods to calculate a respondent's age. Sometimes the mother's age was asked and the difference was calculated by subtracting the number of years of marriage. The age given by the parents and that given by the respondent were often inconsistent. Interviewers reviewed citizenship papers and nationality cards if they were available. The interviewer might ask, "What other person in the neighborhood was born in the same year as you?" Then he asked that neighbor for his or her birth date. In one district, the parents of many respondents said that their child was born "during the drama of *Mahabharat*," a Hindu epic play that had been presented in the community. This proved to be a community event marker for many, and so the interviewers contacted the social institute to learn the exact year of its production.

Why did you stop going to school? (asked of respondents who had discontinued school)

In the urban areas of the survey, this question posed no problems. Many rural respondents, however, had difficulty articulating a specific reason. Most respondents had left school for multiple reasons, primarily economic necessity. Financial support was unavailable for them to continue their studies, or they were needed to help earn a living for the family. A few females in Ilam and Dailekh districts reported that they had left school to marry. Many females in Dailekh, Mahottari, and Rupandehi districts reported

that they had never attended school or had attended only primary school because their parents did not think it was important.

What is your father's and mother's completed level of schooling? (asked of all respondents)

Respondents had no problem with this question in the urban areas of the survey. In the rural areas, however, many respondents could not give correct information because they did not know the answer. Some siblings, when asked about their parents' education, gave conflicting answers.

Please give me some information about the house where you grew up with your parents/guardians. Excluding bathroom and toilet, how many rooms were there? Did that house have the following items? (The list included electricity, car, television set, bicycle, stove, radio, and refrigerator)

Most educated respondents in the urban areas had no difficulty identifying the household items, but some in Pokhara, Birgunj, and Biratnagar feared that giving a full account of their household's possessions could result in higher taxes. In contrast, illiterate respondents often had trouble counting the number of rooms and listing the assets of their households. The majority of homes in the rural areas had only one or two rooms and, unlike those in urban areas, lacked electricity and appliances. Homes in the Terai areas often included a bicycle, but many respondents in the Hill areas said they had never seen a bicycle. Most of the respondents' homes had a radio, though in rural areas of Kavre District only three or four homes among 120 were reported to have a radio.

To your knowledge, what is the usual age when boys and girls reach puberty? When a boy/girl reaches puberty physical changes are usually experienced. Can you mention these changes?

Many respondents, rural and urban, seemed embarrassed by the question. The interviewers thought this was the most difficult question to elicit responses to for that reason. Some male respondents just looked at the interviewer and smiled rather than answer the question. Knowledge about puberty was probably most underreported by respondents who were 16 years old or older. Respondents who had studied health education were less shy in their responses but probably reported less than they knew. The interviewers

also noted that some respondents answered quickly without appearing to give much thought to the correct answer.

Many respondents gave such vague answers as "becomes physically stronger or wiser." The interviewers felt they gave these responses to avoid the embarrassment of talking about specific physical changes. The interviewers gave hints and tried phrasing the question in different ways, but it was still difficult for most respondents to answer. The interviewers reported that it took an average of 20 to 25 minutes to ask and receive a response to the question. Most illiterate respondents did not appear to understand the question. Several urban respondents did not understand the word *paribartan* (transition, or puberty). Field staff who conducted interviews in Kavre and Dailekh districts thought that the respondents 14 to 16 years old did not reply because they did not understand the question. Some interviewers rephrased the question as, "What is the difference between your body and a child's body?" or "What are the changes that you can see?" Female respondents were embarrassed by the question on this topic at first but became more frank after the interviewer had developed rapport with them.

Where did you get your initial information about your puberty and associated changes?

Unlike the previous question about puberty, respondents had no problem with this one. Most of them said that they learned from their own experience. Other mentioned sources were school friends, the respondent's mother, neighbors, and radio broadcasts. The majority of respondents in Kathmandu said they had learned on their own.

How old were you when you had your first menstruation? (asked of female respondents)

Neither urban nor rural respondents were embarrassed to answer this question. In some areas, interviewers used the local words *pakha sareko* and *nachinuni* to refer to menstruation. Several illiterate respondents who could not remember their age at menarche asked their mothers.

Can a woman become pregnant if she has sex during her menstrual period?

Respondents in the urban areas seemed to understand the question and had no problem with it. However, respondents who had not studied health-education subjects had difficulty understanding the question. The interviewers

thought that illiterate respondents in particular did not understand the question and simply answered "Don't know." In the rural areas, responses differed according to the social norms of the respondents' ethnic group. In some districts (e.g., Argakharchi and Mahottari), the women answered that it was a great sin (*paap*) to have sexual intercourse during menses. In Dailekh most of the female respondents reported that women generally retired to the cowshed during their menses and therefore the chances of getting pregnant then were nil for them because they did not have physical contact with their husbands during that period.

Have you ever had a boyfriend/girlfriend? (asked of all respondents)

The interviewers in the urban areas experienced several problems with this question, depending upon the community. Most educated urban respondents easily understood the question, but illiterate respondents needed to have the term "boyfriend" or "girlfriend" clarified. In Pokhara and Lalitpur, unmarried female respondents hesitated to answer the question, leading the interviewers to suspect that the incidence of romantic relationships may have been underreported there. In Birgunj, unmarried males readily gave responses, whereas unmarried females were hesitant. In Biratnagar, unmarried females were shy in discussing the topic.

In rural areas, the interviewers encountered other problems. Many respondents initially did not understand the term "boyfriend" or "girlfriend," assuming that the term meant friends at school. Interviewers then used the expression, "someone you would later marry." In districts such as Ilam, where females married at a later age, female respondents were embarrassed by this question and usually avoided answering by quietly scratching the floor or serving tea and snacks. The interviewers therefore suspected that female respondents underreported such romantic attachments. In Dailekh, where most parents selected a future husband for their daughter when she was born, the female respondents understood the term "boyfriend" to apply to him. In Banke, most girls are betrothed at 8 to 10 years of age in a traditional Terai ceremony known as *gounq thaouna* and then married at the age of 14 to 16. So when the girls reported that they did not have a boyfriend, they were sincere in their answers. Male respondents had no problem answering this question and reported without hesitation if they had a girlfriend.

I will read a list of things commonly mentioned by women/men in choosing their future spouse. Tell me if you think they are important or not important to you.

Female respondents in all sample areas considered education to be the most important attribute when selecting a husband. In Kathmandu, respondents who were servants said that a prospective husband should be employed. Besides education, the most common answer given by rural respondents was that a man be of the same caste and have the approval of the girl's parents.

Do you think you were married too young, at the right age, or too old? (asked of married respondents)

Urban respondents had no problem answering the question. In most of the rural areas, where females are married and begin having children at an early age, the majority of respondents reported that they had been married too young. Illiterate and lower-caste respondents from the Kavre and Saptari districts reported that they had married at the right age because their parents had arranged the marriage and knew what was best for them. In the upper Hill area of Dailekh, where love marriages and elopement are customary, most male and female respondents said that they had married at the right age.

What type of marriage do you think is best, arranged marriage or love marriage?

The respondents easily understood and answered this question. Many urban respondents thought that both types of marriages were suitable, depending upon the couple's situation. The majority of rural respondents said that an arranged marriage was best.

Have you ever talked about sex and sex-related matters with anyone?

The respondents did not seem to understand the word *yaun* (sex), and so the interviewers explained the term or clarified it by using the equivalent term in their local dialect. Many female respondents who understood the question, especially unmarried girls, were too embarrassed to answer, and some even walked away from the interviewer to avoid giving an answer. Male respondents and students who had studied health or population subjects understood the question. Most replied that they had talked about sex with their

friends. In general, however, neither rural nor urban females wanted to discuss this topic, and the interviewers in Lalitpur thought that some respondents there may have been untruthful in their answers.

Do you agree or disagree that a woman should remain a virgin until she gets married?

In both urban and rural survey sites, male and younger respondents initially did not understand the word *kumaritwa* (to remain a virgin). Less-educated respondents at all sites required clarification of the term. Interviewers clarified it by defining virginity as not ever having had sexual intercourse. Nevertheless, some respondents may have considered having had a romantic attachment as losing their virginity. In some of the remote areas of Ilam District, some respondents thought that virginity meant not being married more than once. Despite the possible ambiguity, most respondents agreed that a woman should remain a virgin until she married.

Have any of your unmarried male/female friends had sexual intercourse? Has any of these friends ever become pregnant before getting married? (Has any of your male friends gotten a woman pregnant before getting married?)

Female respondents answered that very few of their unmarried friends had been involved in such activities. Their embarrassment about this topic probably led them to underreport their knowledge of premarital sex and pregnancy among their friends. The interviewers thought that most male respondents replied honestly, however.

Have you ever had sexual intercourse? (asked of unmarried respondents)

The interviewers had similar reactions to this question in rural and urban areas. Generally, single males were not embarrassed by the question and answered it readily, although in Mahottari District some males were so embarrassed that they looked away from the interviewer while replying. Female respondents were very embarrassed, and most would not answer the question. Some were angry that such a personal was being asked. A few walked away from the interviewer or refused to continue the interview. The interviewers thought that this question was inappropriate to ask of unmarried respondents, especially females. The majority of rural respondents reported having had no sexual intercourse, and the interviewers believed them.

Have boys or men ever teased you about your body or the way you were dressed—in a way that made you feel uncomfortable or afraid? (asked of female respondents)

Respondents had no problem understanding or answering this question in any sample area. In Kavre and Ilam, where both rural and urban areas were surveyed, rural respondents said that such activities did not occur, but urban respondents reported teasing and harassment. In the Muslim communities of Banke and Mahottari, respondents reported that such activities did not occur because of the strict religious custom of female separation. In Dailekh the respondents said that such behavior did not occur in their area because of the custom of early marriage.

Do you agree or disagree with the following statements regarding sexual behavior and female sexual rights? (The list included the statements that females have a right to say no to sex at any time and that sex is only for purpose of having a baby.)

The interviewers in all areas found this to be a difficult question to ask and clarify, and thought that it should be reformatted, because the statements had to be read at least two or three times. The wording "Do you agree or disagree ...?" may have confused some of the respondents. Furthermore, some of the statements that the respondents were asked to agree or disagree with, for example the statement that women had the right to refuse sex, seemed meaningless to them. Such views, having originated in the women's liberation movement in Western countries, were probably alien to their experience.

When during her monthly cycle do you think a woman is the most likely to conceive?

Educated respondents understood the question but often did not know the correct answer unless they had studied health-related subjects in school. Many illiterate respondents did not understand the word *chakra* (cycle) and answered "Don't know," even after being given an explanation by the interviewer.

Have you ever been pregnant? (asked of female respondents)

Interviewers in all areas, urban and rural, considered this to be a difficult and inappropriate question to ask of unmarried female respondents. Most unmarried females did not answer the question, some were made

uncomfortable by it, others were offended that such a personal question would be asked, and many were angry with the interviewer for asking it when they had previously reported that they had not had sexual intercourse.

How many children do you want to have in your whole life?

In the urban areas, most of the respondents did not have difficulty understanding this question. Clarification was required only in some cases. Most of the urban respondents said they would like to have only two or three children. Most of the rural respondents, however, wanted to have two to five children. A mother-in-law in Dailekh who overheard her daughter answer "two children" yelled at the interviewer, "What nonsense things are you teaching her? We want to have many, many children. What will we do with only two children?"

Why do you want to have this number of children?

Most respondents believed that having fewer children meant that those children would have a better life and greater educational opportunities. Illiterate and less-educated individuals in both rural and urban areas wanted three or four children because they feared that one might die and they wanted to ensure that more than one was left. One married woman explained why she wanted to have four children as follows: "Two will go away and two will live with us."

Have you heard of the following contraceptive methods? (The list included all temporary and permanent methods.)

Some interviewers considered this question to be inappropriate for unmarried respondents and were embarrassed to ask it. Most of the respondents had never heard of periodic abstinence (rhythm) or withdrawal as methods of contraception. Among the rural respondents, particularly married ones, awareness of Depo-Provera (a three-month injectable) and condoms seemed high. Unmarried respondents probably knew more than they reported but because of parental monitoring during the interview did not admit it. Those respondents who said they had heard of contraceptive methods said that they had learned about them from the Radio Nepal. Many female respondents were unaware of them because they did not understand Nepalese or because their mothers-in-law did not allow them to listen to the radio.

Do you approve or disapprove of the following specific statements regarding the use of condoms? (Using condoms decreases sexual pleasure, Using condoms properly can prevent pregnancy, Using condoms prevents sexually transmitted infections, and My partner would not like to use condoms)

Interviewers in Kathmandu experienced no problem with this question. Those in Biratnagar and Birgunj, however, found this to be a difficult question to ask of unmarried females, who had no knowledge of or experience with condoms. Married women understood the question and answered it without embarrassment or hesitation. In many rural areas, the statements had to be read two or three times, but many respondents still did not understand what the interviewer was asking. The confusion arose primarily because some of the statements were positive whereas others were negative.

Have you heard of abortion?

Respondents in urban areas had no problem responding to this question, and most Terai and Hill respondents easily understood and answered the question once the interviewer replaced the Nepalese term, *garva patan*, with the local term for abortion. In the Terai the local terms used were *bachha giraune* ("to shake off the pregnancy") and *bachha khusaune* ("to push pregnancy off"); in Banke they were *giraune* in the Madeshi dialect and *tuhaune* in the Pahadi dialect. Muslim women also knew about abortion.

Do you approve or disapprove of abortion in the following situations? (The list included an unplanned pregnancy of a married woman, an unplanned pregnancy of an unmarried woman, a pregnancy harmful to a woman's health, and a pregnancy in which the fetus was likely to be deformed.)

The interviewers in Kathmandu suspected that respondents who said they approved of abortion in some of the situations mentioned or gave qualified approval, depending upon the situation, had undergone an abortion. Some respondents answered that they were unsure about it. Illiterate respondents in Birgunj had trouble understanding this question and required clarification.

Where was your most recent abortion performed? (asked of female respondents who reported ever having had an induced abortion)

In Ilam most respondents understood the local word *khulaune* (meaning "to clean up the clog," a euphemism for induced abortion). In Mahottari,

where the interviewers used the Maithili words *safaiya* or *baccha giraune*, they thought that the respondents who were asked this question had a negative view of induced abortion or that the respondents' parents influenced their answers by their presence during the interviews. Nevertheless, they felt that abortion was very uncommon in that district and estimated that only about 10 to 15 percent of the respondents underreported their abortion experience.

Have you ever heard of the following sexually transmitted infections, or STIs? (The list included HIV/AIDS, herpes, gonorrhea, and syphilis.)

In the urban areas the pattern of responses differed according to the city. In Kathmandu most respondents had heard of AIDS and syphilis. Interviewers in Pokhara suspected that their respondents underreported their knowledge of STIs. Birgunj respondents were aware of AIDS but believed that all STIs were like AIDS, and they had never heard of gonorrhea or syphilis. The respondents in Biratnagar had heard of AIDS but not the other infections.

In the Hill areas, most respondents had heard of AIDS but could identify none of its symptoms. Respondents in those areas had little or no knowledge of other STIs. In Dailekh a common derogatory term for another person is *bhirangi* (syphilis), and therefore respondents knew of the disease and its symptoms. Students who had studied health or population subjects in school knew about almost all the STIs and could list many symptoms.

Most of the Terai respondents did not know about AIDS or the other STIs. Even respondents who had heard of AIDS knew little about it except its name. In Banke the interviewers were surprised that even some college students did not know about AIDS, despite a large billboard with AIDS information on it that was posted near the college campus. A few illiterate respondents said that these diseases did not exist in Nepal or were imported from other countries. A few thought that AIDS was a disease of people who lived in cities like Kathmandu.

In Mahottari District, male respondents pronounced AIDS as "iodex" or "aidas." Many had the opinion that the disease was dirty and therefore the patient was also dirty. Most respondents, however, had not heard of AIDS. Some respondents who knew about syphilis and gonorrhea used the terms *yaun rog* and *gandha rog* (*sexual or dirty diseases*) but did not know the diseases' symptoms. About a third of the female respondents knew about AIDS because several nongovernmental organizations had been working in the area, but some of those respondents had misconceptions about the disease.

During the last 12 months, have you had any disease that resulted from sexual intercourse?

In the urban areas, none of the respondents in Kathmandu or Biratnagar reported having had an STI during the previous 12 months. Some respondents in Biratnagar, however, did know of others who had had AIDS or another STI and had even died. In some cases the interviewers reworded the question so that respondents would not be offended by it. Interviewers believed that affirmative responses may have been underreported.

Interviewers in the rural areas felt that this was too sensitive a personal question. Although no respondents were offended by its being asked, many exhibited embarrassment when giving their answers. Only one respondent reported having had an STI. The interviewers believed that the respondents gave honest answers.

If parents could educate only one of their children, which should they educate—a son, a daughter, or should preference not be given [to one or the other]?

Most respondents in all the sample areas had no difficulty understanding this hypothetical question. Only some illiterate respondents had trouble understanding the word "preference." Responses in the Hill areas tended to fall into two categories: not giving preference to either sex, and giving preference to the son. In the Terai areas, most respondents felt that sons should be given preference in education.

Were you ever beaten or mistreated physically? (asked only of female respondents)

Some interviewers suspected that many respondents were not truthful in their answers and that underreporting likely occurred. Respondents who did report having been beaten said that their parents and teachers were the most frequent perpetrators.

Do you think a woman has reason to refuse sex to her husband in the following situations? (The situations are: if she is menstruating, if she doesn't want to get pregnant, if he beats her, if he is drunk, and if she has recently given birth)

Respondents in the urban areas had no difficulty in understanding the question. Most of them approved of the sexual rights of women listed in the

questionnaire. In the rural areas, in contrast, most interviewers reported that respondents did not understand the question, even after having the statements repeated several times. Many respondents answered "Don't know."

Which do you think is the most appropriate medium for the sex education of girls/boys? (asked twice—separately for each sex)

Illiterate respondents in the urban areas required clarification of the word "medium", but educated respondents easily understood and responded. The survey teams in the rural areas reported that, except in Mahottari, respondents had difficulty understanding the question. The interviewers in Banke rephrased the question by saying, "*Gaun ko keti harulai kasari dinu parche? Sahar ko lagi kasari dinu parcha?*" (How should we provide this education to girls and boys in the villages and cities?) Responses varied from one district to another.

Have you ever heard about trafficking of girls and women?

Interviewers and urban respondents had no problem with this question. Respondents in all rural areas except Dailekh had heard of female trafficking, but most reported that it was uncommon in their area. In Ilam, female trafficking was found to be a sensitive issue because many respondents knew that strangers came from the cities seeking girls for the Indian prostitution trade. The interviewers in this area were reluctant to ask about trafficking, fearing that the respondents would suspect them of being traffickers; and indeed many household heads and respondents did suspect them and declined to answer the question. In Dailekh, respondents did not understand the words *chelibeti* (girls/women) and *bechbikhan* (selling). The interviewers there reworded the question as follows: "Girls are taken and sold elsewhere. Have you heard about it?" Some Dailekh respondents then asked, "Why are girls sold in Bombay? And what do they do after being sold?" Most respondents in Dailekh had no knowledge of the prostitution trade in Bombay.

Have you ever used tobacco, alcohol, or drugs? Are you currently using any of these?

The interviewers related different patterns of response in the rural and urban areas. Some of the male respondents at all the urban sites admitted to drug use. A few female respondents in Kathmandu reported that they smoked. The use of tobacco, alcohol, and drugs may have been underreported in Lalitpur and Pokhara, where most of the female respondents did not readily

answer the question. In Birgunj and Biratnagar, respondents had knowledge about several types of drugs. In rural areas the respondents did not report alcohol or drug use, but both males and females reported heavy use of tobacco. Rural respondents did not consider marijuana to be an illicit drug; many rural Nepalese grow it and mix it with tobacco for daily use.

Do you often feel mentally depressed?

Many respondents, urban and rural, did not understand the term *manasik chinta* (mentally depressed). When interviewers substituted the term *pir* or *chinta* (worried), respondents easily understood it and answered without hesitation. Students reported feeling worried about passing their exams and about whether they would be able to continue their education. Illiterate respondents worried about obtaining good jobs and their future.

Challenges and Difficulties Experienced by the Field Staff

- In some communities affected by the rebels (particularly in Argakhachi, Kavre, and Banke), interviewers had trouble convincing residents that they were not themselves rebels. Interviewers were also physically threatened in those areas.
- In Dailekh and Saptari the interviews took place during in the monsoon season, and interviewers there faced a number of logistical challenges due to poor trails, landslides, and swollen river conditions.
- In Kavre, Mahottari, and Banke, where many people spoke several dialects, communication was a challenge, especially with female respondents.
- In Banke the Muslim community's custom of separating females from males made interviewing them difficult. Male interviewers were not allowed to see or talk to Muslim females, and therefore both female and male interviewers were needed to prepare the household lists.
- Female interviewers sensed that some villagers had negative attitudes toward them because they traveled with unrelated men and worked independently.
- Residents in many areas were tired of data collectors who requested information from them without offering any tangible assistance. For this reason, some people did not want to participate in the interview.

Comments and Suggestions from the Interviewers

- Most respondents were very interested in participating in the survey and wanted to know more about it. It would be desirable to provide survey participants with a brochure describing the purpose of the survey and the organizations involved in conducting it.
- To minimize the problem of noncooperation and nonresponse, it would be desirable to conduct two interviews simultaneously in the same household. The interviewers believed this would reduce the amount of interference from parents and other relatives, and that the refusal rate would be lower.
- The interviewers found interviewing 14- and 15-year-olds to be very uncomfortable. Young respondents did not answer many questions because they lacked personal experience and knowledge of the subjects they were being asked about.
- Some of the questions were not appropriate for respondents in remote and less-developed areas. They could not understand the questions because they had never been exposed to the subject material.
- The questionnaire was too long and should be shortened.

Summary and Conclusion

The feedback received from field staff revealed similar experiences during the interview process despite the differences between urban rural areas and between individual districts. All groups discovered discrepancies between both the cluster boundaries and the number of houses described in the Central Bureau of Statistics data and those they encountered in the sample clusters. All agreed that the eligible respondents (males and females, ages 14–22) were busy people, especially in the larger metropolitan areas. Many of urban respondents, who had greater access to educational opportunities than those in rural areas, were enrolled in school and in before- and after-school courses, which limited their availability for interviews. Servants were especially difficult to interview because of their busy work schedules and frequent interruptions by employers. In many cases, interviewers returned to a house two or three times in an effort to contact the prospective respondent.

Field staff in several rural communities were met with distrust and even hostility by some residents, who suspected them of being rebel activists. Most interviewers, however, received excellent support from Village Development Committee members and ward members, who assured villagers

of the survey's legitimacy. In most cases the field staff had little trouble in contacting household heads and respondents, and few interviews were interrupted. The majority of households wanted to participate and were very cooperative. Many residents did not understand the sampling process or the reasons why every home was not interviewed. Many household heads and respondents expected compensation for the interview. Some household heads misreported the ages of their young family members in order to enable them to participate in the survey, hoping to receive compensation or benefits for their families. Respondents had no hesitation in reporting the number of rooms and household goods in their homes, but they often had trouble in correctly counting them.

In contrast with rural areas, in urban areas the interviewers occasionally encountered uncooperative household heads when listing the residents and assets in a household. In Birgunj and Pokhara, some household heads were distrustful of the survey objectives, suspecting that information was being collected for tax purposes. After recording information provided by the household head, the interviewer requested permission to interview the eligible respondents. This request was sometimes met with suspicion from the respondent's parents. A few parents, feeling uncomfortable that their children were being asked personal questions, closely monitored the interview. Because it is not customary in Nepal for adolescents to be interviewed, some parents believed their child would have little information to contribute to a survey questionnaire.

The interviewers found that the amount of time required to administer the questionnaire, which ranged from 40 minutes to two hours, depended upon the educational level of respondents. They encountered greater numbers of illiterate respondents in the rural districts than in the urban districts, and this impeded data collection. Educated respondents had no difficulty understanding the majority of the survey questions. Illiterate and less educated respondents, in contrast, required an involved explanation of many of the questions and often did not understand concepts, despite clarifications by the interviewer. Questions that required the respondent to agree or disagree with a series of statements were especially challenging, as many respondents had never encountered questions in that format.

In some rural areas, language barriers impeded the interview process. For instance, in Kavre many residents spoke only Tamang, and interviewers found it difficult to ask questions and receive information accurately. In other

districts the interviewers used Awadhi, Hindi, and Maithili to talk with participants.

Several sections of the questionnaire proved embarrassing for both interviewers and respondents to discuss. All interviewers agreed that the section on puberty was the most difficult topic for the respondents, most of whom were embarrassed by the topic. The majority of respondents exhibited shyness and embarrassment when asked questions about love, sexuality, family planning, and abortion. The topic of drug use and sexually transmitted infections produced an uncomfortable situation for both interviewers and respondents.

When respondents were asked whether they had a boyfriend or girlfriend, female respondents, especially in rural areas, hesitated to respond, perhaps owing to cultural traditions that do not encourage romantic relationships prior to marriage. Their answers varied according to the customs and social norms of their community. In Ilam, where girls tend to delay marriage, female respondents hesitated to answer this question and were thought to be untruthful in their responses. In Dailekh and Banke, where parents arrange their children's marriages when the children are born or are very young, female respondents had no understanding of the concept of boyfriend. Male respondents, however, were generally comfortable answering this question.

Asking respondents about their sexual behavior was very difficult for female interviewers, who felt especially uncomfortable posing such personal questions to unmarried female respondents. Unmarried female respondents' reactions to the questions ranged from embarrassment to anger that an interviewer would even think that an unmarried woman would be sexually active. The majority of respondents could not answer the question about the female reproductive cycle, even after having the question clarified.

There was great variance in respondents' knowledge of contraceptive methods and use. Most rural respondents had little knowledge of family planning methods or sexually transmitted infections. Respondents of both sexes did not know the difference between AIDS and other sexually transmitted infections and required a lengthy explanation before attempting to answer the question.

When respondents had difficulty discussing sexuality topics, the interviewers inferred that their answers were not very reliable. Younger respondents often would avoid looking directly at the interviewer or would say they did not know the answer. The interviewers reported that many unmarried respondents, even those in urban areas, had little or no knowledge of human

sexuality, the female reproductive cycle, or family planning methods, despite having higher education levels than respondents in rural areas. Those questions caused embarrassment and discomfort in the interview for both the respondent and interviewer, and the interviewers considered them to be inappropriate for younger respondents. So strongly did they feel about the inappropriateness of those questions that some interviewers omitted them when interviewing young, unmarried respondents. This was the most discussed topic in the debriefing sessions, and it was of great concern to many interviewers.

The questions about the mass media aimed at eliciting information about respondents' exposure to educational media and modern technology. Respondents who could not read or had never seen television or videos had difficulty understanding questions. Those living in areas where people had radios could conceptualize other types of media, but those in more remote areas found the questions puzzling and had few suggestions to give.

The insights gained from the debriefing sessions have implications for the interpretation and analysis of the NAYA Survey data. The responses to sensitive questions must be interpreted with caution. In particular, the respondents' educational level and gender were found to be critical factors that affected their responses to such questions. Aside from the few sensitive questions, however, the interviewers believed that responses to the majority of the questions came "from the heart" and that most of the adolescents and youth felt good about being asked about their experiences and perceptions concerning health issues.

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Note

1. An exception is Govindasamy and Vaessen's (1997) report of a study conducted in the context of the 1996 Nepal Family Health Survey. Govindasamy and Vaessen referred to the field interviewers as "informed respondents."

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