Sampling

Sampling Procedure

The sample was designed to permit detailed analysis— including the estimation of rates of fertility, infant/child mortality, and abortion—at the national level, for Yerevan, and for total urban and total rural areas separately. Many indicators can also be estimated at the regional (marz) level.

A representative probability sample of 7,580 households was selected for the 2010 ADHS sample. The sample was selected in two stages. In the first stage, 308 clusters were selected from a list of enumeration areas in a subsample of a master sample derived from the 2001 Population Census frame. In the second stage, a complete listing of households was carried out in each selected cluster. Households were then systematically selected for participation in the survey.

All women age 15-49 who were either permanent residents of the households in the 2010 ADHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. Interviews were completed with 5,922 women.

In addition, in a subsample of one-third of all of the households selected for the survey, all men age 15-49 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey. Interviews were completed with 1,584 men.

Appendix A of the Final Report provides additional information on the sample design of the 2010 Armenia DHS.

Response Rate

A total of 7,580 households were selected in the sample, of which 7,043 were occupied at the time of the fieldwork. The main reason for the difference is that some of the dwelling units that were occupied during the household listing operation were either vacant or the household was away for an extended period at the time of interviewing. The number of occupied households successfully interviewed was 6,700, yielding a household response rate of 95 percent. The household response rate in urban areas (94 percent) was slightly lower than in rural areas (97 percent).

In these households, a total of 6,059 eligible women were identified; interviews were completed with 5,922 of these women, yielding a response rate of 98 percent. In one-third of the households, a total of 1,641 eligible men were identified, and interviews were completed with 1,584 of these men, yielding a response rate of 97 percent. Response rates are slightly lower in urban areas (97 percent for women and 96 percent for men) than in rural areas where rates were 99 and 97 percent, respectively.

Weighting

In ADHS as in many DHS surveys, sample weights must be calculated to adjust for nonproportional allocation of the sample and different response patterns. The following describes how ADHS weights are constructed.

Sampling weights are adjustment factors applied to each case in tabulations to adjust for differences in probability of selection and interview between cases in a sample, either due to design or happenstance. In the 2010 ADHS, the sample was selected with unequal probability to increase the number of cases available (and hence reduce sample variability) for the smaller regions for which statistics were needed. As a result, weights need to be applied when tabulations are made of statistics to produce the proper representation. When weights are calculated because of sample design, corrections for differential response rates are also made.

Two main sampling weights were calculated for the 2010 ADHS: household weights and individual women’s weights. The household weight for a particular household is the inverse of its household selection probability multiplied by the inverse of the household response rate for the specific region-residence group in which the household is found. The individual weight of a respondent’s case is the household weight multiplied by the inverse of the individual response rate of individual response rate for the specific region-residence group in which the individual is found. The household and individual weights are standardized so that the sum of the standardized weights equals the sum of the cases over the entire sample. The standardization is done separately for each weight.

A sampling weight was also calculated for the male subsample. Strictly speaking the male weight was not necessary since there is only a need for the additional sample weights if there is a differential probability in selecting the subsamples. Notwithstanding the foregoing, the ADHS follows customary DHS practice and includes both household weights and
individual weights for the men’s surveys, normalizing the weights for the number of households in the subset for the men’s surveys, and to the number of men’s individual interviews even when no differential subselection has been used.
Questionnaires

Overview

Three questionnaires were used in the ADHS: a Household Questionnaire, a Woman’s Questionnaire, and a Man’s Questionnaire. The Household Questionnaire and the individual questionnaires were based on model survey instruments developed in the MEASURE DHS program and questionnaires used in the previous 2005 ADHS. The model questionnaires were adapted for use by NSS and MOH. Suggestions were also sought from a number of nongovernmental organizations (NGOs). The questionnaires were developed in English and translated into Armenian. They were pretested in July 2010.

The Household Questionnaire was used to list all usual members of and visitors to the selected households and to collect information on the socioeconomic status of the household. The first part of the Household Questionnaire collected for each household member or visitor information on their age, sex, educational attainment, and relationship to the head of household. This information provided basic demographic data for Armenian households. It also was used to identify the women and men who were eligible for an individual interview (i.e., women and men age 15-49). In the second part of the Household Questionnaire, there were questions on housing characteristics (e.g., the flooring material, the source of water, and the type of toilet facilities), on ownership of a variety of consumer goods, and on other aspects of the socioeconomic status of the household. In addition, the Household Questionnaire was used to obtain information on each child’s birth registration, ask questions about child discipline and child labor, and record height and weight measurements of children under age 5.

The Woman’s Questionnaire obtained information from women age 15-49 on the following topics:
- Background characteristics
- Pregnancy history
- Antenatal, delivery, and postnatal care
- Knowledge, attitudes, and use of contraception
- Reproductive and adult health
- Childhood mortality
- Health and health care utilization
- Vaccinations of children under age 5
- Episodes of diarrhea and respiratory illness of children under age 5
- Breastfeeding and weaning practices
- Marriage and recent sexual activity
- Fertility preferences
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Woman’s work and husband’s background characteristics

The Man’s Questionnaire, administered to men age 15-49, focused on the following topics:
- Background characteristics
- Health and health care utilization
- Marriage and recent sexual activity
- Attitudes toward and use of condoms
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Attitudes toward women’s status
Data Collection

Data Collection Dates

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Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

Training of Field Staff

The main survey training, which was conducted by NSS, MOH, and ICF International staff, was held during a three-week period in September and was attended by all supervisors, field editors, interviewers, and quality control personnel, a total of 104 people (83 females and 21 males). The training included lectures, demonstrations, practice interviews in small groups, and examinations. All field staff received training in anthropometric measurement and participated in two days of field practice.

Fieldwork

Thirteen teams collected the survey data; each team consisted of four female interviewers, a male interviewer, a field editor, and a team supervisor. Fieldwork began in early October 2010 and was completed by December 25, 2010. Senior ADHS technical staff visited teams regularly to review the work and monitor data quality. MOH, UNICEF/Armenia, UNFPA/Armenia, and USAID/Armenia representatives also visited teams to monitor data collection on child discipline and child labor modules and to observe the height and weight measurements of children under age 5.
The processing of the ADHS results began shortly after fieldwork commenced. Completed questionnaires were returned regularly from the field to NSS headquarters in Yerevan, where they were entered and edited by data processing personnel who were specially trained for this task. The data processing personnel included a supervisor, a questionnaire administrator (who ensured that the expected number of questionnaires from all clusters was received), several office editors, 12 data entry operators, and a secondary editor. The concurrent processing of the data was an advantage because the senior DHS technical staff were able to advise field teams of problems detected during the data entry. In particular, tables were generated to check various data quality parameters. As a result, specific feedback was given to the teams to improve performance. The data entry and editing phase of the survey was completed in March 2011.
Data Appraisal

Estimates of Sampling Error

Detailed information on sampling errors is provided in Appendix B of the Final Report.
## Related Materials

### Questionnaires

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### Reports

#### Demographic and Health Survey 2010 - Final Report

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#### Demographic and Health Survey 2010 - Key Findings

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