



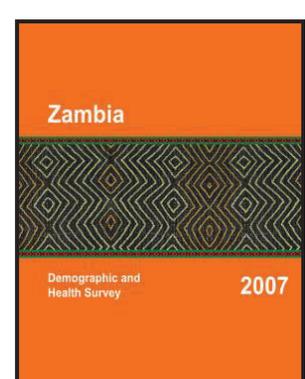
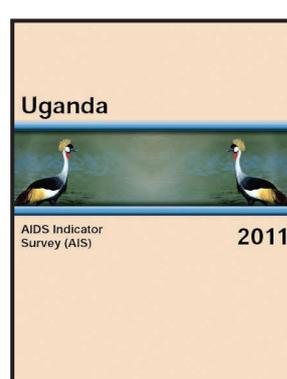
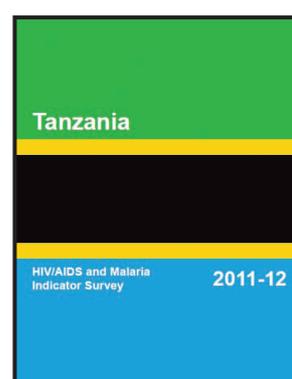
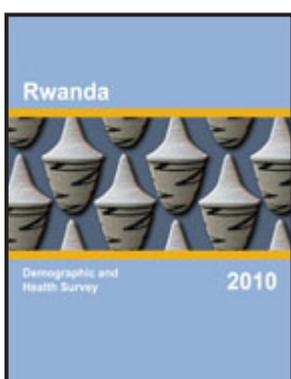
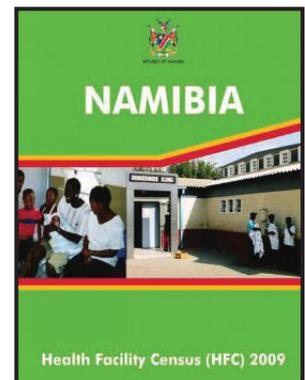
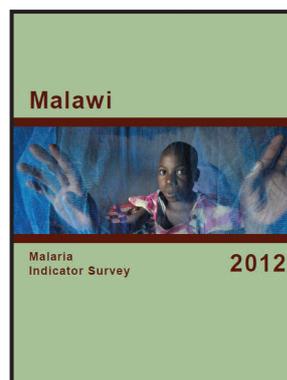
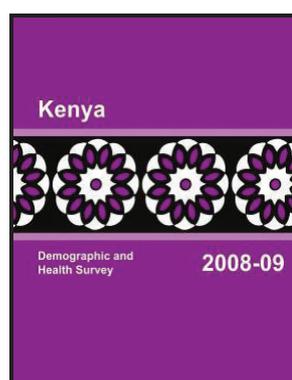
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MODULE 5

Understanding and Using the Demographic and Health Surveys

DHS Curriculum
Facilitator's Guide
March 2014



About the DHS Curriculum Facilitator's Guide

The following persons (in alphabetical order) have contributed to developing, reviewing, and editing *Understanding and Using the Demographic and Health Surveys – DHS Curriculum Facilitator's Guide*: Sarah Balian, Thada Bornstein, Sarah Bradley, Anne Cross, Joy Fishel, Lia Florey, Debbie Gachuhi, Hannah Guedenet, Kiersten Johnson, Shane Khan, Laurie Liskin, Erica Nybro, Cameron Taylor, and Sally Zweimueller

The DHS Curriculum Facilitator's Guide is a comprehensive package of ready-made training materials about understanding and using Demographic and Health Survey reports. The curriculum is designed for use in African universities and with public health program staff. Over 25 hours of instruction are divided into eight stand-alone modules designed to be a course on its own or customized and integrated into existing curricula. Each module is complete with instructor guides, Power Point slides, exercises, handouts, pre and post tests and answer keys. The DHS Curriculum Facilitator's Guide is available in both print and electronic versions.

Questions and comments regarding the DHS Curriculum can be sent to curriculum@dhsprogram.com

About The DHS Program

The DHS Program assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. Funded by the U.S. Agency for International Development (USAID) under the terms of Contract No. GPO-C-00-08-00008-00, The DHS Program is implemented by ICF Macro in Rockville, Maryland. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

The main objectives of The DHS Program are:

- 1) to provide decision makers in survey countries with information useful for informed policy choices
- 2) to expand the international population and health database
- 3) to advance survey methodology
- 4) to develop in participating countries the skills and resources necessary to conduct quality demographic and health surveys

Information about The DHS Program or the status of The DHS Program surveys is available on the Internet at <http://www.dhsprogram.com> or by contacting:

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Module 5: Understanding DHS Tables and Figures

PREPARATION

Review Instructor Guide

Equipment, Materials, Supplies

- LCD projector and screen
- Flipchart or writing board
- Markers
- PowerPoint presentation

Exercise Preparation

Review Handouts 5.2 and 5.3 and select four to six tables and figures for the exercise (see p. 5-13 for detailed instructions)

Handouts

Make copies for each participant of:

- Handout 5.1, *Learning to Read DHS Tables*
- Handout 5.2, *Practicing Reading and Interpreting Tables and Figures*
- Handout 5.3, *Answer Sheet* for Handout 5.2
- Handout 5.4, *Reading and Understanding DHS Tables*

Room Arrangements

Participants should be seated at tables in groups of four to seven, if possible

PURPOSE This module explains how to read and interpret DHS tables and figures.

OBJECTIVES By the end of this module, participants should be able to:

- Read and interpret tables and figures in the DHS

TIME 3 hours

MODULE OVERVIEW

Session 1	Reading and Interpreting Tables and Figures	3 hours
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Session 1

3 hours

Session Objective**Reading and Interpreting Tables and Figures**

Read and interpret tables and figures used in the DHS

STEP 1**PRESENT Slides 1 to 3.**

TELL participants that the focus of this module is learning how to interpret the tables and figures found in DHS reports.

TELL participants that the DHS presents all of its information in tables and figures. In order to get the most out of the DHS, they will need to know how to read and interpret them.

PRESENT Slide 4.

WRITE the following two phrases on the flipchart:

- Decoding a table
- Interpreting the data

ASK participants what these phrases mean to them. EXPLAIN that reading DHS tables and figures—or any other data tables—involves two tasks. The first task is to decode the table, that is, to identify what findings are being presented. The second task is to interpret the data, that is, to figure out what the numbers mean.

STEP 2**PRESENT Slide 5.**

DISCUSS the steps for decoding a table.

EXPLAIN that the first step is to read the title carefully because it tells you what the purpose of the table is and what type of table it is. The title will also help you complete the second step—that is, to identify the population and sub-populations described by the table.

Most tables have both columns and rows. Steps 3 and 4 are to identify the columns and rows. Columns run up and down the page vertically and are read from top to bottom; they usually refer to questions or indicators being studied. Rows run across the page horizontally and are read from left to right; they usually refer to the background characteristics of the population, such as sex, residence, and education.

PRESENT **Slide 6**.

EXPLAIN that DHS reports include four different types of tables. The following slides and **Handout 5.1** provide examples of each type.

Distribute **Handout 5.1**, and TELL participants to use it to follow along with the next PowerPoint slides.

PRESENT **Slide 7**.

EXPLAIN that this graph appears on page 1 of **Handout 5.1**.

ASK: Which of the four types of table is this one?

Answer: Percent distribution. This is the most common type of table in the DHS.

(NOTE for the instructor: In this animated slide, the part of the title with the phrase, percent distribution, is hidden. After someone has answered your question, CLICK the slide to make the phrase appear.)

ASK: What makes this a “percent distribution” table?

Answer: The categories in the table are subdivisions of the population, and they add up to 100%. In this table, for example, the population of all households is divided into those with female heads (26%) and those with male heads (74%). They add up to 100%. Similarly, the nine different categories of household size add up to 100%.

ASK: What does the title tell you about the population group described in the table? Answer: All Ethiopians who live in a household setting, as opposed to the homeless, prisoners, soldiers, etc.

ASK: What does the title tell you about the specific topic?

Answer: The percentage of households that have male and female heads, the percentage of households of different household sizes, and the percentage located in urban and rural areas.

ASK: What information is being tabulated? Answer: Households heads and household size.

ASK: How is the content being categorized? Answer: By sex (female and male heads of household), by household size (number of usual members), and by residence (urban and rural).

EXPLAIN that, overall, the data tell what percentage of

households in Ethiopia are located in urban and rural areas, what percentage of households in each of these areas is headed by a male or female, and the size of urban households compared to rural households.

ASK participants to identify the columns. Answer: Urban households, rural households, and all households.

ASK participants to identify the rows. Answer: The table has several categories of rows, including sex of head of household, number of usual members, number of households, and mean household size.

TELL participants that the table breaks down the total population of households into categories that add up to 100%. The main categories are mutually exclusive. For example, household heads are either male or female, and households are located in either urban or rural areas.

PRESENT **Slide 8**.

TELL participants that this slide is on page 2 of **Handout 5.1**.

ASK: What type of table is this? Answer: Percentages from multiple responses.

ASK: What makes this a “percentages from multiple responses” table? Answer: The categories listed are not mutually exclusive. In this table, for example, a household could own more than one of the items listed.

ASK: What are the population and sub-populations shown? Answer: The population is households. The sub-populations are urban households and rural households.

ASK: What are the columns? Answer: Urban, rural, and total.

ASK: What are the rows? Answer: Possessions, grouped into categories.

ASK: What is the total population of households? Answer: 9,033.

ASK: What percent of all households have a mobile phone? Answer: 59.4%.

ASK: Which type of household, urban or rural, is more likely to own a bicycle? Answer: Rural 41.1% versus urban 19.5%.

ASK: What is the actual number of households that have a mobile phone? Answer: 5,366.

ASK: How would you calculate this? Answer: 59.4% of 9,033
 $= 0.594 \times 9033 = 5,366$ households.

SHOW on flipchart how to calculate this.

TELL participants that the important points to note in this table are:

The categories are not mutually exclusive; a household can own several types of goods.

The percentages do not add up to 100% because households can be counted more than once.

PRESENT **Slide 9**.

TELL participants that this table is on Page 3 in **Handout 5.1**.

ASK: What type of table is this? Answer: A table of medians.

ASK participants to define median (from Module 2). Answer: The median is the middle value that divides the observations in half.

ASK: What is the title? Answer: Median age at first birth by background characteristics.

ASK: What are the population and sub-populations shown in this table? Answer: The total population is women age 20-49. Sub-populations include age groups (woman age 25-49, etc.); urban and rural women; regional groups (women who live in Tigray, Affar, etc.); educational groups (women with no education, primary education, and secondary or higher education); and household wealth quintile (lowest, second, middle, fourth, and highest). Further breakdowns emerge when age groups are combined with the other background characteristics, for example, urban women age 25-49.

ASK: What are the columns? Answer: Age groups.

ASK: What are the rows? Answer: The background characteristics, including residence, region, education, and wealth quintile.

ASK: What is the median age at first birth among women age 25-49? Answer: 19.2 years, as seen in last row, last column.

ASK: Who appears to begin having children earlier, rural or urban women? Answer: Rural women.

ASK: In which region do women begin having children earliest? Answer: Amhara—the median age at first birth

among women age 25-49 is 18.1 years.

PRESENT **Slide 10**.

TELL participants that this slide is on page 4 of **Handout 5.1**.

ASK: What type of table is this? Answer: A table of rates.

ASK: What is a rate? (NOTE for the instructor: This was covered in Module 2 and Module 3) Answer: A rate measures a part with respect to a whole. Here it measures the number of deaths of children among all children born alive. It is the frequency of an event (i.e., death) during a specified time period (usually one year), among a defined population (all children born alive).

ASK: What is the title? Answer: Early childhood mortality rates.

ASK: What is the population group described in the table? Answer: Young children.

ASK: What specific topic is addressed? Answer: The five kinds of childhood mortality rates.

ASK: What are the columns? Answer: The childhood mortality rates, including neonatal mortality, postneonatal mortality, infant mortality, child mortality, and under-five mortality.

ASK: What are the rows? Answer: The years before the survey, divided into five-year periods.

ASK: What is the infant mortality rate for 0-4 years before the survey? Answer: 51 deaths per 1,000 live births.

ASK: What is the under-five mortality rate for the 10-14 years before the survey? Answer: 143 deaths per 1,000 live births.

EXPLAIN that the important points in this table are:

- The rates are expressed per 1,000 live births.
- The numerator is the number of children who died during the time period.
- The denominator is all children born alive during the time period.
- This fraction is multiplied by 1,000 to get the rate.

STEP 3

PRESENT **Slide 11**.

REMIND participants that decoding the tables is only the first step in understanding them. We now must try to interpret and analyze them.

PRESENT **Slides 12 and 13**.

DISCUSS the bullets in these two slides. EXPLAIN to participants that the tasks and questions outlined here will help them examine DHS tables, begin interpreting the findings, and understand how the findings may be used. REMIND participants to follow this guidance every time they look at a DHS table.

PRESENT **Slide 14**

ASK participants to turn back to the table of household possessions on page 2 of **Handout 5.1**.

ASK: What are some major findings in this table? Answers: Urban households own more household effects than rural households. Radio is the most common possession in both urban and rural households. More than 60% of all households own a radio. Rural households are more likely to own agricultural land and farm animals than urban households.

ASK: What is the least common household effect, and what percent of households own it? Answer: A non-mobile telephone, owned by 1.5% of households.

ASK: What is the most common household effect and what percent of households own it? Answer: A radio, owned by 66.0% of households.

TELL participants to compare different household assets in terms of urban versus rural residence. ASK: What are some differences between urban and rural areas? Answer: One example is that urban households are more likely to own most goods than rural households; the exceptions are bicycles, boats, agricultural land, and farm animals.

ASK participants to look for patterns. Answer: There is a clear pattern of expensive products—including refrigerators, cars, and television—being more common in urban areas. However, ownership of all kinds of farm animals is higher in rural areas.

TELL participants to place the findings in context. ASK: Are there social, economic, or program-related reasons for the

results? Answer: People in urban areas own more goods because they are wealthier, because goods are more readily available in cities than in rural areas, because they are more likely to have electricity, and so on.

ASK participants if this table shows trends over time. Answer: No. TELL participants that some DHS tables do show trends over time. They may compare data from surveys conducted in different years; for example, these data on household possessions in Uganda could be compared to similar data collected by earlier DHS surveys conducted in 1988-89, 1995, 2000-01, and 2006. Alternatively, DHS tables may compare different age groups within the population, for example, the median age of marriage among women age 15–19, age 20–24, age 25-29, and so on.

TELL participants to pretend they are designing a mass media campaign on immunization in Uganda. ASK them what medium they would use for the campaign and why, based on this table. Answer: Radio, because 66% of households own a radio. Just 12% own a television.

ASK participants if they have any questions about the table.

PRESENT **Slide 15**.

TELL participants to look at the medians table on page 3 of **Handout 5.1**.

ASK participants to use the questions from **Slides 12 and 13** to analyze this table. DISCUSS their conclusions.

These points should come out in the discussion:

- Rural women give birth earlier than urban women.
- Women with no education give birth at a younger age than women with secondary or more education.
- There is no clear pattern in age at first birth by wealth quintile.
- Age at first birth is lowest in the Amhara region (18.1 years) and highest in Addis Ababa (23.0 years).

STEP 4

PRESENT **Slide 16**.

Tell participants to look at the pie chart on page 5 of **Handout 5.1**.

TELL participants that figures can be decoded in the same way as tables, even though they have no columns or rows. EXPLAIN that the wedges in this pie chart are the equivalent of the columns and rows in tables.

ASK: What is the title? Answer: Fertility preferences of women age 15-49.

ASK: What is the population? Answer: All women age 15–49.

ASK: How would you interpret the data? Answers: Almost half (47%) of women do not want any more children. Another 22% don't want another child for two or more years. That is a total of 69% who either want no more children or who do not want a child for at least two years.

ASK: What do these findings imply? Answer: A need for family planning.

ASK: What are the implications for programs? Answer: Programs need to focus attention on the more than two-thirds of women who do not want a child in the next two years or ever. These women are in need of and hence more likely to consider using contraception. They should be the target audience for family planning outreach and communication efforts.

PRESENT **Slide 17**.

Tell participants to look at page 6 of **Handout 5.1**.

TELL participants that this is another example of a typical figure used in the DHS.

ASK: How do we begin to interpret this figure? Answer: We follow the same steps that we used with the tables. First, we read the title, identify the population, and identify the rows and columns. ASK: What are the equivalent of rows and columns in this figure? Answer: The bars.

ASK: What indicator does the graph present? Answer: Under-five mortality rates by mother's background characteristics; in other words, the number of children who died before their fifth birthday per 1,000 live births. NOTE: DHS data on childhood mortality rates by background characteristics are for the 10-year period before the survey.

DISCUSS how to interpret the figure, making sure the following points come out:

- The slide shows differences in under-five mortality by

mother's background characteristics.

- Children in rural areas are more likely to die before age five than children in urban areas.
- Children born to women with no education are more likely to die by age five than children born to mothers with primary and secondary education.
- Mortality is lowest among children born to highly educated women and women in the wealthiest households.

ASK: What conclusion can be drawn from this chart? Answers: Educating mothers will help save children's lives. Child mortality is linked with a mother's wealth, in part because it affects her access to health care and services.

PRESENT **Slide 18**.

TELL participants to turn to page 7 of **Handout 5.1**.

TELL participants that a line graph is decoded just like a table. Instead of columns and rows, a line graph has an X and Y axis. The X axis is the horizontal line; the Y axis is the vertical line. The X axis is like the rows in a table; and the Y axis is like the columns.

ASK: What is the title? Answer: HIV prevalence by sex and age.

ASK: What are the axes? Answer: The Y axis is the percent of women and men in Rwanda who are HIV-positive. The X axis is age in years, divided into five-year increments.

ASK: What is the population? Answer: Women age 15–49 and men age 15–49.

ASK: What age group of men has the highest prevalence of HIV? Answer: Age 40–44.

ASK: What age group of women has the highest prevalence of HIV? Answer: Age 35–39.

ASK: What are some possible reasons for why women's infections peak at age 35–39 but men's infections peak at age 40–44? Answers: Men tend to have sexual relations with younger women. Women begin sexual activity at earlier ages than men.

DISCUSS with participants what conclusions can be drawn about the pattern of HIV infection in Rwanda. Make sure the

following points are made:

- Through age 40, women have a higher HIV prevalence than men.
- More women than men are infected earlier in life.
- For both sexes, prevalence initially increases with age but among women drops after age 40 and among men drops after age 45.

EXERCISE

(NOTE to the instructor regarding advance preparation: Review the 18 tables and 2 figures in **Handout 5.2** before conducting this session, and decide which ones to use for this exercise. Be sure to include at least one figure; they are found in examples 16 and 20. The first five tables are the easiest to decode and may be more appropriate for participants with fewer skills in this area. Decide what level of difficulty is best suited to the participants. It is recommended that you assign the same set of tables to all of the groups; this will help the exercise go faster.)

DIVIDE participants into groups of four to six.

DISTRIBUTE **Handout 5.2**.

ASSIGN each group enough tables and figures so that each group member has one exercise to work on individually.

GIVE the following instructions:

You will have 30 minutes total for this part of the activity. Select a team leader and timekeeper for your group. Divide up the tables and figures so that each person has one table or figure to work on individually. Once everyone has completed their exercise (about 15 minutes), begin a group review. Make sure the timekeeper keeps the group on schedule. Afterwards, each group will present one table or figure to the rest of the participants.

(NOTE for the instructor: Alternatively, you may assign a set of tables and figures to the small group to work on together. However, this will not allow as much individual practice as the first approach. If you take this approach, remind the group leaders to make sure that every member of the group has a chance to participate and practice reading tables and figures.)

After 30 minutes, have one group present a table or figure along with their answers. ASK if the other groups came up with any different answers. Proceed with the remaining groups, with each group presenting a different table or figure,

until all of the groups have presented.

TELL participants that they can complete and review the questions for the other tables and figures in **Handout 5.2** in their free time. DISTRIBUTE **Handout 5.3**, which provides the answers for all of the tables and figures in **Handout 5.2**.

STEP 5

End this module by SUMMARIZING the main points and asking participants if they have any questions about how to read and interpret DHS tables. Ask participants to read **Handout 5.4** during their free time.



Module 5

Understanding DHS Tables and Figures

Objectives for Module 5

By the end of the module, students should be able to:

- Read and interpret tables, graphs, and figures used in the DHS

Module 5, Slide 2

Module 5 Session 1

Reading and Interpreting Tables and Figures

Understanding DHS Tables

To read DHS tables you must be able to:

1. *Decode the table*, i.e., identify what findings are being presented
2. *Interpret and analyze the data*, i.e., figure out what the numbers mean

Module 5 Slide 4

Steps in Decoding Tables and Figures

- *Read the title* to learn the purpose of the table and identify the type of table
- *Identify the population* and sub-populations covered in the table (All women? Married women? Youth?)
- *Scan column headings*: Columns are read vertically, from top to bottom. They usually refer to the question being studied
- *Scan rows*: Rows are read horizontally, from left to right, across the table. They usually represent background characteristics such as sex, residence, and education.

Module 5 Slide 5

Types of Tables in the DHS

- Percent distribution
- Percentages from multiple responses
- Medians
- Rates

Note: The title usually tells you the type of table you are dealing with

Module 5, Slide 6

Which Type of Table? Percent Distribution Ethiopia DHS 2011

Table 2.7 Household composition
Percent distribution of households by sex of head of household and by household size and mean size of household, according to residence, Ethiopia 2011

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	64.2	76.8	73.9
Female	35.8	23.2	26.1
Total	100.0	100.0	100.0
Number of usual members			
0	0.2	0.1	0.1
1	16.5	5.0	7.6
2	18.5	9.9	11.9
3	17.8	14.2	15.0
4	14.1	16.0	15.5
5	14.1	16.9	16.3
6	8.4	14.0	12.7
7	4.7	10.4	9.1
8	2.4	7.3	6.2
9+	3.3	6.2	5.5
Total	100.0	100.0	100.0
Mean size of households	3.7	4.9	4.6
Weighted number	3,780	12,922	16,702
Unweighted number	5,112	11,590	16,702

Note: Table is based on de jure household members, i.e., usual residents.
¹ Foster children are those under age 18 living in households with neither their mother nor their father present.
² Includes children with one dead parent and an unknown survival status of the other parent.

Module 5, Slide 7

Which Type of Table? Percentages from multiple responses Uganda DHS 2011

Table 2.4 Household possessions
Percentage of households possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Uganda 2011

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	71.8	64.6	66.0
Television	45.0	4.9	12.4
Mobile telephone	88.8	53.1	59.4
Non-mobile telephone	4.8	0.7	1.5
Refrigerator	19.7	1.7	5.1
Means of transport			
Bicycle	19.5	41.1	37.1
Animal drawn cart	0.3	0.8	0.7
Motorcycle/scooter	11.4	7.1	7.9
Car/truck	10.1	1.6	3.2
Boat with a motor	0.1	0.4	0.4
Boat without a motor	0.2	1.0	0.9
Ownership of agricultural land	44.2	78.8	72.3
Ownership of farm animals ¹	35.7	67.7	61.7
Local cattle	14.5	23.2	21.6
Exotic/cross cattle	3.9	3.7	3.7
Horses/donkeys/mules	0.1	0.4	0.4
Goats	17.6	39.8	35.7
Sheep	2.2	8.6	7.4
Pigs	7.1	20.1	17.7
Chickens	23.7	51.2	46.0
Number	1,691	7,342	9,033

¹ Cattle, cows, bulls, horses, donkeys, mules, goats, sheep, pigs, or chicken

Module 6, Slide 8

Which Type of Table? Medians Ethiopia DHS 2011

Table 5.10 Median age at first birth
Median age at first birth among women age 20-49 and 25-49 years, according to background characteristics, Ethiopia 2011

Background characteristic	Women age	
	20-49	25-49
Residence		
Urban	a	20.5
Rural	19.2	19.0
Region		
Tigray	19.3	19.0
Afar	19.2	19.0
Amhara	19.7	19.1
Oromiya	19.5	19.2
Somali	a	20.2
Benchangul-Gumuz	18.7	19.5
SNP	a	19.9
Gambela	19.7	19.4
Harari	a	20.3
Addis Ababa	a	23.0
Dire Dawa	a	21.6
Education		
No education	18.9	18.8
Primary	a	19.6
Secondary or higher	a	24.1
Wealth quintile		
Lowest	19.2	19.2
Second	19.1	19.9
Middle	19.3	19.0
Fourth	19.3	18.8
Highest	a	20.2
Total	19.6	19.2

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Module 5, Slide 9

Which Type of Table? Rates Tanzania 2010

Table 8.1 Early childhood mortality rates
Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Tanzania 2010

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (${}_1q_0$)	Child mortality (${}_4q_1$)	Under-five mortality (${}_5q_0$)
0-4	26	25	51	32	81
5-9	30	41	71	37	106
10-14	33	62	96	53	143

¹ Computed as the difference between the infant and neonatal mortality rates

Module 5, Slide 10

Understanding DHS Tables

- To read DHS tables you must be able to:
 - Decode the table, i.e., understand what findings are being presented
 - Interpret and analyze the data, i.e., understand what the numbers mean

Module 5, Slide 11

Interpreting Tables and Figures (1)

- Determine the total population**, if presented, and sub-populations (for example, age groups, urban versus rural, or all women versus currently married women)
- Examine the range of the data**: Look for the lowest and highest values.
- Look for patterns**: Do results cluster in specific areas? Do values increase or decrease with certain background characteristics, such as wealth or education?

Module 5, Slide 12

Interpreting Tables and Figures (2)

- **Compare groups and sub-populations:** Are the results different for women than men?
- **Look for trends:** Does the data change over time?
- **Place findings in context:** Are there social, economic, program-related, or other reasons for the results?

Module 5, Slide 13

Percentages from Multiple Responses

Household assets, Uganda DHS 2011

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	71.8	64.6	66.0
Television	45.0	4.9	12.4
Mobile telephone	86.8	53.1	59.4
Non-mobile telephone	4.8	0.7	1.5
Refrigerator	18.7	1.7	5.1
Means of transport			
Bicycle	19.5	41.1	37.1
Animal drawn cart	0.3	0.8	0.7
Motorcycle/scooter	11.4	7.1	7.9
Car/truck	10.1	1.6	3.2
Boat with a motor	0.1	0.4	0.4
Boat without a motor	0.2	1.0	0.9
Ownership of agricultural land			
	44.2	78.8	72.3
Ownership of farm animals¹			
Local cattle	35.7	67.7	61.7
Exotic/cross cattle	14.5	23.2	21.6
Goats	3.9	3.7	3.7
Horses/donkeys/mules	0.1	0.4	0.4
Goats	17.6	39.8	35.7
Sheep	2.2	8.6	7.4
Pigs	7.1	20.1	17.7
Chickens	23.7	51.2	46.0
Number	1,691	7,342	9,033

¹ Cattle, cows, bulls, horses, donkeys, mules, goats, sheep, pigs, or chicken

Module 5, Slide 14

Medians

Median age at first birth, Ethiopia DHS 2011

Table 5.10 Median age at first birth
Median age at first birth among women age 20-49 and 25-49 years, according to background characteristics, Ethiopia 2011

Background characteristic	Women age	
	20-49	25-49
Residence		
Urban	a	20.5
Rural	19.2	19.0
Region		
Tigray	19.3	19.0
Afar	19.2	19.0
Amhara	19.7	19.1
Oromiya	19.5	19.2
Somali	a	20.2
Benzhangul-Gumuz	18.7	19.5
SNRP	a	19.9
Gambela	19.7	19.4
Harari	a	20.3
Addis Ababa	a	23.0
Dire Dawa	a	21.6
Education		
No education	18.9	18.8
Primary	a	19.6
Secondary or higher	a	24.1
Wealth quintile		
Lowest	19.2	19.2
Second	19.1	19.9
Middle	19.3	19.0
Fourth	19.3	18.8
Highest	a	20.2
Total	19.6	19.2

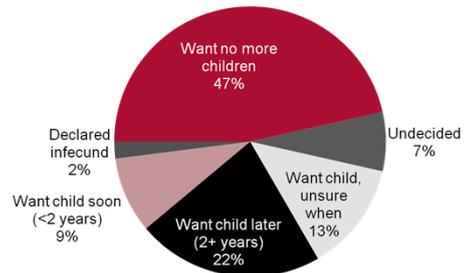
a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Module 5, Slide 15

Figure: Pie Chart

Namibia, DHS 2006-07

Figure 7.1 Fertility Preferences of Women Age 15-49



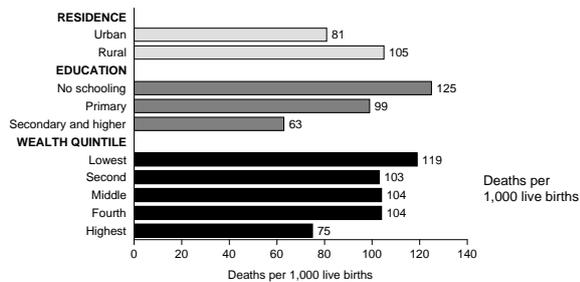
Note: "Want no more" includes sterilized women

Module 5, Slide 16

Figure: Bar graph

Rwanda DHS 2010

Figure 8.2 Under-5 Mortality Rates by Socioeconomic Characteristics



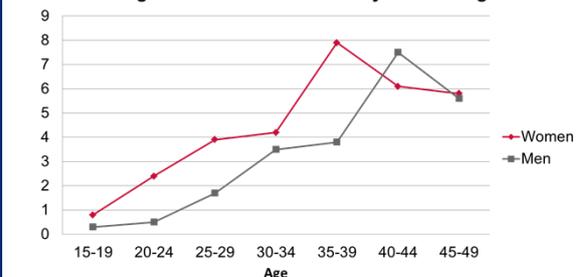
RDHS 2010

Module 5, Slide 17

Figure: Line graph

Rwanda DHS 2010

Figure 15.1 HIV Prevalence by Sex and Age



Module 5, Slide 18

Handout 5.1

Learning to Read DHS Tables and Figures

Use these tables and figures to follow along with the instructor's PowerPoint slides as you practice decoding and interpreting DHS tables and figures.

Percent distribution:

Household composition (Ethiopia DHS 2011)

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	64.2	76.8	73.9
Female	35.8	23.2	26.1
Total	100.0	100.0	100.0
Number of usual members			
0	0.2	0.1	0.1
1	16.5	5.0	7.6
2	18.5	9.9	11.9
3	17.8	14.2	15.0
4	14.1	16.0	15.5
5	14.1	16.9	16.3
6	8.4	14.0	12.7
7	4.7	10.4	9.1
8	2.4	7.3	6.2
9+	3.3	6.2	5.5
Total	100.0	100.0	100.0
Mean size of households	3.7	4.9	4.6
Weighted number	3,780	12,922	16,702
Unweighted number	5,112	11,590	16,702

Note: Table is based on de jure household members, i.e., usual residents.

¹ Foster children are those under age 18 living in households with neither their mother nor their father present.

² Includes children with one dead parent and an unknown survival status of the other parent.

Handout 5.1

Percentages from multiple responses:

Household assets (Uganda DHS 2011)

Table 2.4 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Uganda 2011

Possession	Residence		Total
	Urban	Rural	
Household effects			
Radio	71.8	64.6	66.0
Television	45.0	4.9	12.4
Mobile telephone	86.8	53.1	59.4
Non-mobile telephone	4.8	0.7	1.5
Refrigerator	19.7	1.7	5.1
Means of transport			
Bicycle	19.5	41.1	37.1
Animal drawn cart	0.3	0.8	0.7
Motorcycle/scooter	11.4	7.1	7.9
Car/truck	10.1	1.6	3.2
Boat with a motor	0.1	0.4	0.4
Boat without a motor	0.2	1.0	0.9
Ownership of agricultural land			
	44.2	78.8	72.3
Ownership of farm animals¹			
	35.7	67.7	61.7
Local cattle	14.5	23.2	21.6
Exotic/cross cattle	3.9	3.7	3.7
Horses/donkeys/mules	0.1	0.4	0.4
Goats	17.6	39.8	35.7
Sheep	2.2	8.6	7.4
Pigs	7.1	20.1	17.7
Chickens	23.7	51.2	46.0
Number	1,691	7,342	9,033

¹ Cattle, cows, bulls, horses, donkeys, mules, goats, sheep, pigs, or chicken

Handout 5.1

Medians:

Median age at first birth (Ethiopia DHS 2011)

Table 5.10 Median age at first birth

Median age at first birth among women age 20-49 and 25-49 years, according to background characteristics, Ethiopia 2011

Background characteristic	Women age	
	20-49	25-49
Residence		
Urban	a	20.5
Rural	19.2	19.0
Region		
Tigray	19.3	19.0
Affar	19.2	19.0
Amhara	18.7	18.1
Oromiya	19.5	19.2
Somali	a	20.2
Benishangul-Gumuz	18.7	18.5
SNNP	a	19.9
Gambela	19.7	19.4
Harari	a	20.3
Addis Ababa	a	23.0
Dire Dawa	a	21.6
Education		
No education	18.9	18.8
Primary	a	19.6
Secondary or higher	a	24.1
Wealth quintile		
Lowest	19.2	19.2
Second	19.1	18.9
Middle	19.3	19.0
Fourth	19.3	18.8
Highest	a	20.2
Total	19.6	19.2

a = Omitted because less than 50 percent of the women had a birth before reaching the beginning of the age group

Handout 5.1

Rates:

Early childhood mortality rates (Tanzania DHS 2010)

<u>Table 8.1 Early childhood mortality rates</u>						
Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Tanzania 2010						
Years preceding the survey	Approximate calendar year	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (₁ Q ₀)	Child mortality (₄ Q ₁)	Under-5 mortality (₅ Q ₀)
0-4	2006 - 2010	26	25	51	32	81
5-9	2001 - 2005	30	41	71	37	106
10-14	1996 - 2000	33	62	96	53	143

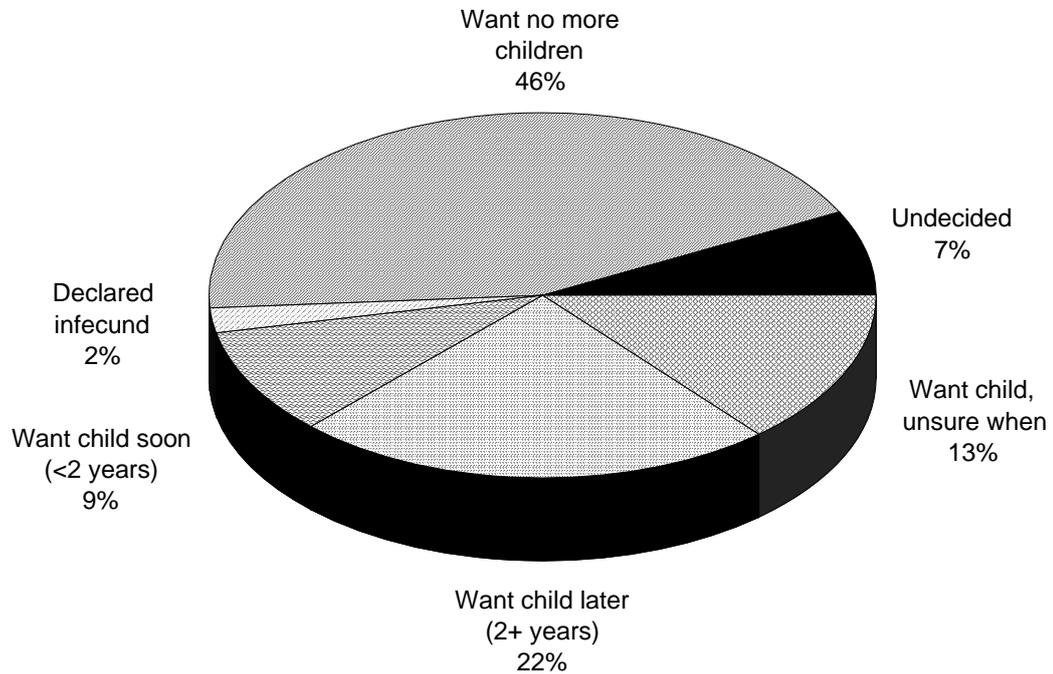
¹ Computed as the difference between the infant and neonatal mortality rates

Handout 5.1

Figures:

Fertility preferences of women (Namibia DHS 2006-07)

Figure 7.1 Fertility Preferences of Women Age 15-49



Note: "Want no more" includes sterilized women

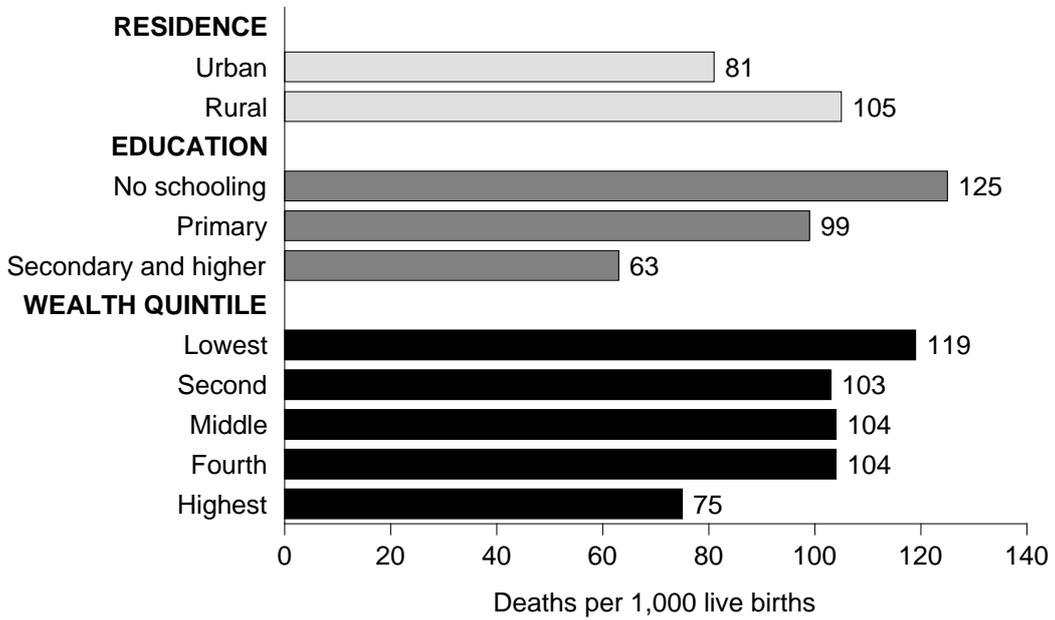
NDHS 2006-07

Handout 5.1

Figures:

Under-five mortality (Rwanda DHS 2010)

Figure 8.2 Under-5 Mortality Rates by Socioeconomic Characteristics



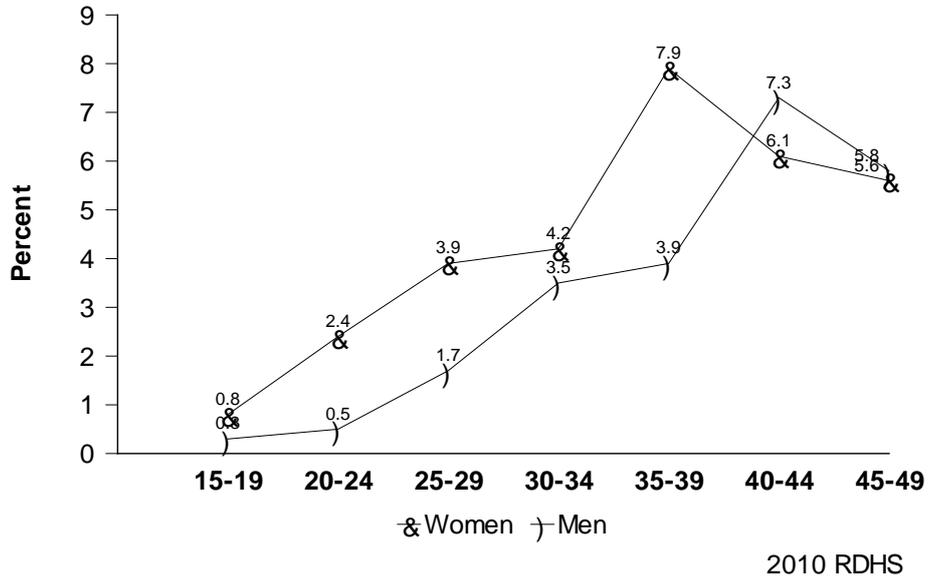
RDHS 2010

Handout 5.1

Figures:

HIV prevalence by sex and age (Rwanda DHS 2010)

Figure 14.1 HIV Prevalence by Sex and Age



Handout 5.2

Practicing Reading and Interpreting Tables and Figures

Example 1: Trends in contraceptive use

Method	1992 NDHS	2000 NDHS	2006-07 NDHS
Any method	23.3	37.8	46.6
Any modern method	21.4	37.1	45.7
Female sterilization	3.8	4.3	5.0
Male sterilization	0.1	0.3	0.2
Pill	7.1	5.7	5.4
IUD	1.3	0.7	0.6
Injectables	8.6	17.0	17.1
Implants	u	u	0.1
Male condom	0.5	8.9	17.0
Female condom	u	u	0.3
Any traditional method	1.8	0.7	0.9
Rhythm/periodic abstinence	0.6	0.1	0.3
Withdrawal	0.2	0.1	0.1
Other traditional methods	1.0	0.5	0.5
Number of women	5,421	6,755	9,804

u = Unknown

1. Identify columns and rows.
2. What percent of women used any method of contraception in 1992, 2000, and 2006-07?
3. What percent of women used male condoms in the 2000 NDHS?
4. What was the most popular modern method for women in the 1992 NDHS?
5. What is the overall trend in contraceptive use in Namibia from 1992 to 2006-07?

Example 2: Knowledge of fertile period

Table 7.10 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm/moon beads method, Uganda 2011

Perceived fertile period	Users of rhythm/moon beads method	Nonusers of rhythm/moon beads method	All women
Just before her menstrual period begins	14.6	6.8	6.9
During her menstrual period	0.0	1.2	1.2
Right after her menstrual period has ended	47.8	45.0	45.0
Halfway between two menstrual periods	32.9	13.2	13.5
Other	1.9	0.3	0.4
No specific time	1.0	16.7	16.6
Don't know	1.9	16.7	16.5
Total	100.0	100.0	100.0
Number of women	92	8,582	8,674

1. Identify columns and rows.
2. What percent of users of the rhythm/moon beads method know the correct fertile period (halfway between two menstrual periods)?
3. What percent of nonusers of the rhythm/moon beads method know the correct fertile period (halfway between two menstrual periods)?
4. What do all women most commonly perceive to be the fertile period? Is this knowledge correct?
5. What implications does this table have for family planning programs?

Example 3: Mean ideal number of children

Table 7.7 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Namibia 2006-07

Background characteristic	Mean	Number of women ¹
Age		
15-19	2.3	2,231
20-24	2.5	1,844
25-29	3.0	1,609
30-34	3.3	1,403
35-39	3.7	1,039
40-44	4.2	907
45-49	4.5	673
Residence		
Urban	2.8	4,739
Rural	3.3	4,967
Region		
Caprivi	3.5	471
Erongo	2.8	684
Hardap	2.4	313
Karas	2.7	317
Kavango	3.6	916
Khomas	2.7	2,201
Kunene	3.7	249
Ohangwena	3.8	1,024
Omaheke	3.0	371
Omusati	3.3	963
Oshana	2.9	814
Oshikoto	2.8	834
Otjozondjupa	3.2	549
Education		
No education/preschool	4.5	627
Incomplete primary	3.9	1,677
Complete primary	3.2	729
Incomplete secondary	2.7	4,721
Complete secondary	2.6	1,279
More than secondary	2.8	672
Wealth quintile		
Lowest	3.8	1,588
Second	3.4	1,649
Middle	3.1	1,868
Fourth	2.9	2,283
Highest	2.5	2,317
Total	3.1	9,706

¹ Women who gave a numeric response

1. Identify columns and rows.
2. What is the mean number of children that women report wanting?
3. In what region do women want the fewest children?
4. Do women age 15-19 want more or less children than women age 45-49?
5. What pattern is seen with women's education and the ideal number of children?

Example 4: Knowledge of ORS packets

Table 11.10 Knowledge of ORS packets or pre-packaged liquids

Percentage of mothers age 15-49 who gave birth in the five years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhoea, by background characteristics, Namibia 2006-07

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
Age		
15-19	89.3	282
20-24	90.2	985
25-34	91.3	1,767
35-49	91.2	864
Residence		
Urban	90.2	1,711
Rural	91.4	2,188
Region		
Caprivi	95.4	217
Ergo	92.6	257
Hardap	83.4	121
Karas	91.4	119
Kavango	89.0	481
Khomas	89.3	737
Kunene	89.0	136
Ohangwena	90.0	422
Omaheke	90.3	171
Omusati	94.1	365
Oshana	96.9	271
Oshikoto	92.9	340
Otjozondjupa	85.6	261
Education		
No education/preschool	85.5	372
Incomplete primary	90.1	784
Complete primary	93.3	303
Incomplete secondary	92.2	1,739
Complete secondary	91.4	494
More than secondary	86.9	205
Wealth quintile		
Lowest	90.8	788
Second	90.3	711
Middle	92.2	855
Fourth	93.3	856
Highest	86.7	688
Total	90.9	3,898

ORS = Oral rehydration salts

1. Identify columns and rows.
2. Overall, what percent of women know about ORS packets or ORS pre-packaged liquids for the treatment of diarrhea?
3. How does knowledge of ORS packets change with age?
4. In which region is knowledge of ORS packets highest? Lowest?

Example 5: Use of mosquito nets by children

Table 12.3 Use of mosquito nets by children

Among children under age 5 in all households, the percentage who slept under a mosquito net (treated or untreated) the night before the survey, under an insecticide-treated net (ITN), and under a long-lasting insecticidal net (LLIN), and among children under age 5 in households with at least one ITN, the percentage who slept the night before the survey under an ITN, by background characteristics, Tanzania 2010

Background characteristic	Children under age 5 in all households				Children under age 5 in households with an ITN ¹	
	Percentage who slept under any net the night before the survey	Percentage who slept under an ITN the night before the survey ¹	Percentage who slept under an LLIN the night before the survey ²	Number of children	Percentage who slept under an ITN the night before the survey ¹	Number of children
Age in years						
<1	73.3	63.8	23.0	1,635	76.9	1,356
1	74.3	65.1	21.8	1,620	77.8	1,356
2	72.0	63.3	24.8	1,512	76.0	1,259
3	70.8	63.1	25.6	1,658	74.7	1,402
4	71.3	62.6	26.7	1,553	74.9	1,300
Sex						
Male	72.0	63.5	23.3	3,957	75.3	3,335
Female	72.6	63.7	25.5	4,022	76.8	3,338
Residence						
Urban	80.3	64.1	17.2	1,553	80.5	1,236
Rural	70.4	63.5	26.1	6,426	75.0	5,437
Mainland/Zanzibar						
Mainland	72.4	63.9	24.6	7,768	76.3	6,499
Urban	80.8	64.9	17.4	1,481	81.2	1,183
Rural	70.4	63.6	26.3	6,287	75.2	5,316
Zanzibar	70.6	54.6	17.0	210	65.9	174
Unguja	70.0	51.9	13.7	125	65.6	99
Pemba	71.5	58.7	21.7	86	66.3	76
Zone						
Western	75.6	67.8	22.7	1,687	76.2	1,501
Northern	63.4	57.1	27.9	1,029	74.6	788
Central	65.8	59.1	31.6	780	81.7	565
Southern Highlands	59.7	52.1	22.8	1,089	60.9	931
Lake	85.3	76.4	23.0	1,660	81.7	1,554
Eastern	67.4	52.6	18.4	896	81.1	581
Southern	81.7	73.4	31.7	627	79.4	580
Region						
Dodoma	83.2	79.1	45.8	479	86.2	439
Arusha	50.1	43.5	27.4	288	78.9	159
Kilimanjaro	72.0	65.8	30.4	207	75.4	180
Tanga	59.5	52.2	26.4	333	66.9	260
Morogoro	41.2	28.2	19.4	327	74.9	123
Pwani	83.7	74.9	26.6	206	82.7	186
Dar es Salaam	81.9	62.0	13.0	364	82.8	272
Lindi	77.6	66.5	26.4	136	75.4	120
Mtwara	85.4	75.2	30.1	238	79.5	226
Ruvuma	80.4	75.4	35.9	253	81.3	234
Iringa	57.7	54.1	24.8	313	59.7	284
Mbeya	50.9	42.6	16.7	508	50.5	428
Singida	38.2	27.5	9.1	301	65.7	126
Tabora	65.4	58.5	20.6	462	68.9	392
Rukwa	78.8	67.6	31.9	269	83.1	218
Kigoma	69.2	55.6	21.9	409	69.0	329
Shinyanga	84.5	79.1	24.2	816	82.8	779
Kagera	71.4	64.6	22.9	485	71.5	438
Mwanza	91.8	82.7	25.3	789	87.7	744
Mara	89.3	78.6	18.3	386	81.6	372
Manyara	79.8	75.9	28.6	202	81.0	189
Unguja North	64.4	54.8	14.2	34	60.7	31
Unguja South	76.3	68.3	22.8	18	73.3	17
Town West	71.0	46.3	11.2	72	66.0	51
Pemba North	72.6	63.1	22.1	44	66.4	42
Pemba South	70.2	54.0	21.3	41	66.2	34
Wealth quintile						
Lowest	68.1	61.1	31.5	1,691	77.9	1,326
Second	70.0	64.0	25.7	1,874	74.4	1,613
Middle	68.3	61.7	24.0	1,832	71.7	1,578
Fourth	77.3	67.3	23.3	1,509	79.7	1,274
Highest	82.9	65.0	13.0	1,073	79.0	883
Total	72.3	63.6	24.4	7,979	76.1	6,673

¹ An insecticide-treated net (ITN) is a permanent net that does not require any treatment or a net that has been soaked with insecticide within the past 12 months.

² A long-lasting insecticidal net (LLIN) is a ready-to-use, pre-treated mosquito net, which requires no further treatment during its expected life span.

1. What is the topic of the table?
2. Identify columns and rows.
3. What information about children under age five does this table present?
4. What is the range of results among zones for children who slept under an ITN the night before the survey?
5. Looking at background characteristics, which children are most likely to sleep under any nets?
6. What conclusions can you draw from this table?

Example 6: Knowledge of ways to reduce the chances of getting the AIDS virus

Table 13.2 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, and by having one sex partner who is not infected and has no other partners, by background characteristics, Uganda 2011

Background characteristic	Women				Men			
	Percentage who say that HIV can be prevented by:			Number of women	Percentage who say that HIV can be prevented by:			Number of men
	Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ^{1,2}		Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ^{1,2}	
Age								
15-24	79.0	87.3	73.6	3,677	83.9	90.9	79.1	872
15-19	75.7	85.1	69.5	2,048	82.4	89.8	77.2	554
20-24	83.1	90.1	78.8	1,629	86.7	93.0	82.4	318
25-29	79.2	89.6	75.1	1,569	87.1	92.6	83.0	361
30-39	80.7	89.6	75.5	2,112	82.6	91.6	78.3	592
40-49	75.5	90.5	72.0	1,316	83.1	89.5	76.9	348
Marital status								
Never married	76.3	85.8	70.4	2,123	83.9	91.0	79.0	834
Ever had sex	85.0	89.7	79.5	837	88.5	94.1	85.0	438
Never had sex	70.7	83.2	64.4	1,286	78.8	87.5	72.3	397
Married/living together	79.8	89.9	75.4	5,418	84.0	90.6	78.9	1,228
Divorced/separated/widowed	79.8	88.9	74.9	1,134	84.2	99.1	84.2	111
Residence								
Urban	86.4	91.7	82.1	1,717	87.2	93.5	83.5	439
Rural	77.1	88.0	72.1	6,957	83.1	90.6	78.1	1,734
Region								
Kampala	88.7	90.3	83.0	839	85.2	94.6	84.0	221
Central 1	87.6	91.9	81.3	956	88.4	98.5	87.5	209
Central 2	84.4	91.7	80.0	902	92.9	98.4	91.9	236
East Central	88.2	91.8	83.9	869	86.5	91.1	81.8	236
Eastern	70.3	81.1	66.4	1,267	79.4	70.4	60.9	289
Karamoja	38.3	85.1	37.3	289	53.1	80.9	52.9	55
North	87.7	94.8	85.5	735	92.3	98.2	91.1	199
West Nile	65.5	86.2	59.9	500	55.6	91.9	50.6	133
Western	78.8	87.0	72.5	1,221	88.6	95.1	85.7	322
Southwest	73.0	89.0	67.5	1,097	82.7	90.7	77.8	273
Education								
No education	65.0	84.2	59.9	1,120	71.3	84.4	62.8	90
Primary	78.4	88.1	73.4	5,152	83.9	90.6	78.9	1,309
Secondary +	86.6	92.3	82.2	2,402	85.5	93.0	81.6	774
Wealth quintile								
Lowest	66.7	83.4	62.1	1,519	76.3	76.5	63.2	345
Second	75.2	88.0	71.0	1,579	81.1	90.1	76.4	423
Middle	80.0	89.2	74.1	1,608	84.4	94.4	81.2	402
Fourth	83.2	90.3	78.9	1,726	87.5	94.8	84.5	486
Highest	85.7	91.4	80.7	2,242	87.7	96.0	85.5	517
Total 15-49	78.9	88.8	74.1	8,674	83.9	91.2	79.2	2,173
50-54	na	na	na	na	82.5	90.0	74.8	122
Total 15-54	na	na	na	na	83.9	91.1	78.9	2,295

na = Not applicable

¹ Using condoms every time they have sexual intercourse

² Partner who has no other partners

1. How many women age 15-24 does this table cover?
2. Women from which region seem least informed about HIV prevention?
3. Assuming that you were working on a condom promotion program for men, which population segments appear to be most in need of information?
4. What general conclusions for communication programs can you draw from this table?

Example 7: Coverage of prior HIV Testing: Men

Table 13.11.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Uganda 2011

Background characteristic	Percent distribution of men by testing status and by whether they received the results of the last test				Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
	Percentage who know where to get an HIV test	Ever tested and received results	Ever tested, did not receive results	Never tested ¹				
Age								
15-24	88.3	35.4	4.0	60.5	100.0	39.5	24.1	872
15-19	84.9	25.1	3.1	71.8	100.0	28.2	17.4	554
20-24	94.4	53.4	5.7	40.9	100.0	59.1	35.8	318
25-29	95.2	65.6	3.5	30.8	100.0	69.2	39.4	361
30-39	96.5	64.0	2.7	33.3	100.0	66.7	34.8	592
40-49	98.1	60.0	3.7	36.4	100.0	63.6	31.0	348
Marital status								
Never married	88.0	35.5	3.3	61.3	100.0	38.7	24.3	834
Ever had sex	94.8	48.5	3.6	47.9	100.0	52.1	33.3	438
Never had sex	80.5	21.0	3.0	76.0	100.0	24.0	14.3	397
Married/Living together	96.8	63.7	3.5	32.8	100.0	67.2	34.9	1,228
Divorced/Separated/Widowed	93.4	50.1	5.8	44.1	100.0	55.9	32.0	111
Residence								
Urban	96.9	66.1	2.0	31.9	100.0	68.1	38.9	439
Rural	92.3	48.6	4.0	47.4	100.0	52.6	28.6	1,734
Region								
Kampala	96.6	68.8	0.7	30.5	100.0	69.5	43.3	221
Central 1	92.2	55.6	2.2	42.2	100.0	57.8	30.9	209
Central 2	89.5	47.4	3.3	49.2	100.0	50.8	20.8	236
East Central	93.2	37.9	4.9	57.1	100.0	42.9	20.7	236
Eastern	92.2	50.3	5.5	44.2	100.0	55.8	32.4	289
Karamoja	73.7	51.2	0.0	48.8	100.0	51.2	33.6	55
North	99.2	67.7	6.4	25.9	100.0	74.1	44.7	199
West Nile	97.0	56.0	1.4	42.6	100.0	57.4	36.5	133
Western	94.6	50.5	4.8	44.7	100.0	55.3	30.9	322
Southwest	91.9	43.3	2.1	54.6	100.0	45.4	21.8	273
Education								
No education	84.1	31.9	7.3	60.8	100.0	39.2	25.0	90
Primary	90.7	45.0	3.8	51.3	100.0	48.7	25.2	1,309
Secondary +	98.7	66.7	2.8	30.5	100.0	69.5	40.6	774
Wealth quintile								
Lowest	90.3	48.6	4.2	47.1	100.0	52.9	32.1	345
Second	91.9	47.0	5.7	47.2	100.0	52.8	25.7	423
Middle	92.3	45.8	4.1	50.1	100.0	49.9	27.6	402
Fourth	94.5	52.0	2.5	45.5	100.0	54.5	30.9	486
Highest	95.9	63.8	1.9	34.3	100.0	65.7	36.0	517
Total 15-49	93.3	52.2	3.6	44.3	100.0	55.7	30.7	2,173
50-54	95.1	51.5	6.0	42.5	100.0	57.5	25.8	122
Total 15-54	93.4	52.1	3.7	44.2	100.0	55.8	30.4	2,295

¹ Includes 'don't know/missing'

1. What percent of men age 15-49 have ever been tested for HIV and received their results? How many men are in this group?
2. Men from which region were most likely to have been tested for HIV and received results in the last 12 months? In which region were they least likely to have been tested and received results?
3. Among men, which age group is most likely to have ever been tested for HIV and received the results?
4. What percent of men from Southwest region were ever tested but did not receive their results?
5. How would you describe the relationship between education and HIV testing?
6. What general conclusions can you draw from this table about HIV testing in Uganda?

Example 8: HIV prevalence by background characteristics

Table 8.5 HIV prevalence by socioeconomic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, by socioeconomic characteristics, Uganda 2011

Background characteristic	Women		Men		Both sexes	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Employment (last 12 months)						
Not employed	5.7	3,216	3.1	1,089	5.0	4,305
Employed	9.4	7,667	6.5	7,584	8.0	15,251
Residence						
Urban	10.7	2,299	6.1	1,710	8.7	4,009
Rural	7.7	8,584	6.1	6,963	7.0	15,547
Region						
Central 1	12.5	1,173	8.4	1,003	10.6	2,176
Central 2	9.7	1,132	8.0	884	9.0	2,016
Kampala	9.5	855	4.1	669	7.1	1,524
East Central	6.7	1,120	4.8	925	5.8	2,045
Mid Eastern	4.4	1,103	3.8	943	4.1	2,046
North East	5.3	904	5.2	683	5.3	1,587
West Nile	4.7	692	5.0	541	4.9	1,232
Mid Northern	10.1	1,075	6.3	935	8.3	2,011
South Western	9.0	1,389	6.6	946	8.0	2,335
Mid Western	9.1	1,440	7.1	1,143	8.2	2,584
Education						
No education	9.4	1,521	8.5	476	9.2	1,997
Primary incomplete	8.7	5,106	6.7	3,714	7.9	8,820
Primary complete	9.7	1,351	6.7	1,219	8.3	2,570
Secondary or higher	6.4	2,905	4.9	3,264	5.6	6,169
Wealth quintile						
Lowest	6.8	1,841	5.7	1,496	6.3	3,337
Second	7.5	1,979	5.1	1,626	6.4	3,606
Middle	7.3	2,014	6.5	1,672	6.9	3,686
Fourth	9.2	2,241	7.2	1,687	8.4	3,928
Highest	9.9	2,807	5.9	2,192	8.2	4,999
Total 15-49	8.3	10,883	6.1	8,673	7.3	19,556
50-59	6.9	959	6.3	851	6.6	1,810
Total 15-59	8.2	11,842	6.1	9,524	7.3	21,366

1. What is the prevalence of HIV among women in North East region?
2. How does this prevalence compare with men in the same region?
3. Describe the difference between urban and rural HIV prevalence among both men and women.
4. Describe the relationship between HIV prevalence and wealth.

Example 9: Exposure of women and men to mass media (two tables)

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Uganda 2011

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	23.3	24.0	75.2	7.6	18.3	2,048
20-24	16.8	23.6	77.1	9.2	18.6	1,629
25-29	12.3	21.2	74.1	6.0	20.3	1,569
30-34	13.1	16.8	72.1	5.2	22.4	1,086
35-39	10.1	14.6	69.4	3.8	27.0	1,026
40-44	10.9	12.9	74.6	4.1	22.4	729
45-49	10.4	12.9	73.9	5.8	24.9	587
Residence						
Urban	36.9	59.7	78.0	23.0	8.4	1,717
Rural	10.0	9.8	73.2	2.3	24.2	6,957
Region						
Kampala	41.1	77.4	73.5	29.6	6.2	839
Central 1	21.6	27.6	79.0	9.0	14.8	956
Central 2	26.8	20.0	79.7	8.3	15.3	902
East Central	11.0	14.4	77.2	4.1	20.1	869
Eastern	8.7	6.6	58.0	1.6	38.5	1,267
Karamoja	4.8	3.7	28.3	0.6	69.3	289
North	6.2	5.4	82.2	1.8	16.3	735
West Nile	9.5	8.2	77.9	1.6	20.4	500
Western	9.5	16.9	80.4	3.2	17.4	1,221
Southwest	10.0	10.0	80.0	2.7	18.0	1,097
Education						
No education	0.1	6.6	60.0	0.1	39.0	1,120
Primary	8.5	12.5	73.5	2.0	23.0	5,152
Secondary+	37.1	41.2	82.1	18.9	8.6	2,402
Wealth quintile						
Lowest	2.8	3.2	49.4	0.1	48.8	1,519
Second	5.6	4.6	72.5	0.5	25.7	1,579
Middle	8.6	5.6	79.6	0.8	18.3	1,608
Fourth	15.0	12.8	83.8	2.8	13.7	1,726
Highest	35.8	57.0	80.7	21.7	6.6	2,242
Total	15.3	19.7	74.1	6.4	21.0	8,674

Table 3.4.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Uganda 2011

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	21.3	32.3	83.7	10.5	12.3	554
20-24	29.3	37.4	85.6	19.0	11.3	318
25-29	29.5	36.4	90.7	19.5	6.9	361
30-34	28.3	28.5	85.4	16.4	10.4	323
35-39	21.9	25.4	82.4	13.7	14.4	268
40-44	20.3	16.9	86.7	7.5	12.5	191
45-49	22.5	16.1	84.0	10.6	15.0	157
Residence						
Urban	60.3	77.3	87.7	49.2	4.3	439
Rural	16.0	17.7	85.0	5.4	13.2	1,734
Region						
Kampala	57.7	88.7	86.1	49.2	3.3	221
Central 1	23.1	31.0	92.3	12.9	5.5	209
Central 2	29.6	34.3	88.5	18.1	8.6	236
East Central	19.7	34.4	88.1	11.8	9.4	236
Eastern	19.6	13.9	74.4	4.7	22.7	289
Karamoja	14.7	16.1	73.7	5.1	23.6	55
North	7.7	7.5	81.6	2.2	17.1	199
West Nile	25.6	8.0	76.9	5.2	18.9	133
Western	25.9	29.2	88.1	14.4	10.2	322
Southwest	19.3	20.4	93.5	10.8	6.1	273
Education						
No education	2.2	10.5	69.9	0.0	27.9	90
Primary	12.1	22.5	83.7	5.7	14.0	1,309
Secondary +	49.3	44.3	90.4	30.4	5.2	774
Wealth quintile						
Lowest	8.7	10.9	62.9	0.6	30.7	345
Second	12.7	12.7	87.6	2.1	11.2	423
Middle	13.8	13.4	87.9	4.6	11.5	402
Fourth	22.5	27.9	92.6	10.4	6.1	486
Highest	56.8	70.8	90.5	44.4	3.7	517
Total 15-49	25.0	29.8	85.5	14.3	11.4	2,173
50-54	17.3	21.2	87.6	8.6	11.8	122
Total 15-54	24.6	29.3	85.6	14.0	11.5	2,295

1. Which group, women or men, has less exposure to all mass media? What is the difference?
2. Which of the media is the most accessible to women and men?
3. Assuming you were planning a behavior change campaign in the West Nile region, which of the media would you choose?
4. How common is reading newspapers among women and men by age?
5. What can you say about access to television in Uganda?

Example 10: Exposure to messages about condoms

Table 4.15 Exposure to messages about condoms

Percentage of women and men who have heard a message about condoms in the last few months prior to the interview, according to selected background characteristics, Namibia 2000

Background characteristic	Heard message about condoms: women					Heard message about condoms: men				
	Any source	Radio	Television	Print media	Number of women	Any source	Radio	Television	Print media	Number of men
Age										
15-19	76.9	72.4	40.9	45.8	1,499	81.2	76.1	47.3	50.1	694
20-24	83.4	80.3	48.1	53.6	1,339	85.9	83.1	55.5	57.6	610
25-29	82.1	80.4	48.1	51.8	1,104	89.3	85.5	60.2	62.5	448
30-34	83.0	81.4	50.7	51.6	1,013	86.8	84.1	57.5	54.9	378
35-39	83.8	81.9	49.1	51.7	751	89.6	88.6	58.3	54.8	247
40-44	75.8	74.6	43.9	43.7	633	86.4	84.4	57.5	58.6	216
45-49	80.1	77.9	44.2	44.7	415	86.1	83.8	46.9	43.1	174
50-59	na	na	na	na	na	86.8	84.1	41.1	40.8	188
Residence										
Urban	93.5	90.5	79.5	73.6	2,786	94.7	91.9	80.9	74.6	1,312
Rural	71.9	69.6	23.1	32.7	3,969	78.7	75.2	31.7	37.8	1,642
Directorate										
Northwest	71.0	68.0	20.4	36.9	2,792	77.3	73.2	34.6	47.2	1,047
Northeast	67.7	66.5	27.0	21.1	842	79.6	78.9	30.1	23.7	313
Central	92.5	89.5	70.0	57.2	1,231	91.7	87.9	67.7	57.4	615
South	93.6	91.2	78.0	76.1	1,890	93.2	90.5	72.3	69.2	980
Region										
Caprivi	76.9	75.8	27.6	15.9	322	95.2	95.2	24.5	28.7	114
Erongo	97.7	91.6	75.4	64.8	399	98.1	94.1	94.6	81.5	195
Hardap	94.1	90.7	69.2	67.0	292	92.3	87.8	65.2	54.1	128
Karas	94.2	86.4	79.6	71.4	261	91.5	81.3	73.2	55.4	123
Kavango	62.0	60.7	26.7	24.4	520	70.7	69.6	33.3	20.8	198
Khomas	95.3	94.3	86.2	86.4	1,152	97.1	96.2	80.4	82.3	624
Kunene	73.6	71.5	35.9	28.6	205	88.2	85.0	43.6	41.9	103
Ohangwena	63.1	59.6	14.4	37.5	684	66.9	63.1	26.5	38.9	275
Omaheke	80.8	79.1	38.9	33.1	185	73.4	71.1	31.0	25.9	104
Omusati	70.5	67.4	12.5	35.9	714	72.4	65.3	27.8	42.8	271
Oshana	74.9	71.1	24.1	36.5	789	79.7	76.0	32.0	40.7	251
Oshikoto	75.3	74.2	31.6	37.8	604	91.9	90.0	53.6	67.8	249
Otjozondjupa	95.4	94.0	77.7	61.7	627	88.8	85.0	59.1	47.6	317
Education										
No education	63.5	62.7	24.4	19.2	641	71.9	71.4	24.6	17.2	379
Incomplete primary	69.0	67.7	26.4	28.0	1,409	79.9	77.5	33.0	35.3	744
Completed primary	78.6	76.2	38.3	43.6	827	84.7	82.1	48.0	49.9	283
Incompl. secondary	85.9	82.5	52.5	57.5	2,907	90.3	86.0	66.1	68.2	1,115
Compl. secondary+	96.0	92.6	78.3	82.5	971	97.4	92.6	85.1	85.3	434
Total	80.8	78.2	46.4	49.6	6,755	85.8	82.6	53.5	54.1	2,954

na = Not applicable

1. Identify the columns and rows.
2. Identify the populations.
3. Which is the most common source of condom messages for women? For men?
4. What percent of women age 30-34 has heard a message about condoms on TV?
5. In what region have the most women and men heard messages about condoms?
6. What conclusions can you draw from this table?

Example 11: Current Use of Contraception

Table 5.2 Current use of contraception by age

Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Tanzania 2010

Age	Modern method									Any traditional method	Traditional method			Total	Number of women	
	Any method	Any modern method	Female sterilisation	Pill	IUD	Injectables	Implants	Male condom	LAM		With- drawal	Folk method	Not currently using			
ALL WOMEN																
15-19	10.7	9.4	0.0	1.0	0.0	2.1	0.2	6.1	0.1	1.2	0.7	0.3	0.2	89.3	100.0	2,172
20-24	29.2	24.0	0.1	5.5	0.2	9.3	2.1	6.0	0.9	5.2	2.5	2.1	0.7	70.8	100.0	1,909
25-29	35.9	29.8	0.1	6.7	0.5	14.0	2.6	4.3	1.6	6.1	2.9	2.5	0.6	64.1	100.0	1,668
30-34	38.8	30.6	1.2	7.9	1.0	12.8	3.2	3.0	1.2	8.2	4.3	2.9	1.0	61.2	100.0	1,422
35-39	35.5	29.5	5.0	7.5	0.4	9.4	2.0	3.0	2.0	6.0	2.6	2.8	0.5	64.5	100.0	1,290
40-44	36.7	29.0	8.6	6.6	0.9	7.5	2.3	2.4	0.7	7.7	3.7	2.4	1.6	63.3	100.0	938
45-49	23.7	19.6	11.7	1.7	0.4	4.2	0.4	0.9	0.3	4.2	2.8	0.9	0.5	76.3	100.0	740
Total	28.8	23.6	2.5	5.1	0.4	8.5	1.8	4.2	1.0	5.2	2.6	1.9	0.7	71.2	100.0	10,139
CURRENTLY MARRIED WOMEN																
15-19	14.9	12.0	0.0	1.5	0.0	5.0	0.9	4.4	0.1	2.9	1.3	1.2	0.4	85.1	100.0	399
20-24	29.6	23.9	0.1	6.6	0.3	10.6	1.8	3.1	1.4	5.7	1.7	2.9	1.1	70.4	100.0	1,210
25-29	36.9	29.7	0.2	7.3	0.6	14.6	2.9	2.5	1.6	7.3	3.5	3.1	0.7	63.1	100.0	1,338
30-34	40.7	32.0	1.2	9.0	1.3	13.3	3.2	2.3	1.4	8.7	4.2	3.6	0.9	59.3	100.0	1,137
35-39	37.0	30.0	5.9	8.0	0.5	9.9	2.0	1.6	2.1	7.0	2.9	3.5	0.6	63.0	100.0	1,036
40-44	39.7	30.6	9.8	7.1	0.4	8.0	2.5	2.1	0.6	9.1	4.3	3.0	1.8	60.3	100.0	741
45-49	27.3	21.8	13.8	2.0	0.4	4.2	0.6	0.4	0.4	5.5	3.6	1.2	0.7	72.7	100.0	550
Total	34.4	27.4	3.5	6.7	0.6	10.6	2.3	2.3	1.3	7.0	3.1	2.9	0.9	65.6	100.0	6,412
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																
15-19	39.7	34.5	0.0	7.0	0.0	8.0	0.0	19.5	0.0	5.2	2.8	0.6	1.8	60.3	100.0	170
20-24	57.6	47.9	0.0	9.3	0.0	17.0	4.6	17.1	0.0	9.7	9.0	0.7	0.0	42.4	100.0	186
25-49	52.0	47.6	4.2	8.2	0.7	16.5	3.2	13.5	1.4	4.4	2.7	0.0	1.7	48.0	100.0	387
Total	50.6	44.7	2.2	8.2	0.4	14.7	2.8	15.8	0.7	5.9	4.3	0.3	1.3	49.4	100.0	742

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhoea method

¹ Women who have had sexual intercourse within 30 days preceding the survey

1. Identify the columns and rows.
2. Identify the populations.
3. Which population uses contraception the most?
4. What is the contraceptive prevalence rate for currently married women age 30-34?
5. What is the most commonly used contraceptive method among currently married women?
6. What is the most commonly used method among unmarried women?
7. What conclusions can you draw from this table?

Example 12: Age at first sex among youth

Table 12.17 Age at first sexual intercourse among young people

Percentage of young women and of young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and of young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Ethiopia 2011

Background characteristic	Women						Men					
	Women age 15-24			Women age 18-24			Men age 15-24			Men age 18-24		
	Percentage who had sexual intercourse before age 15	Weighted number of women	Unweighted number of women	Percentage who had sexual intercourse before age 18	Weighted number of women	Unweighted number of women	Percentage who had sexual intercourse before age 15	Weighted number of men	Unweighted number of men	Percentage who had sexual intercourse before age 18	Weighted number of men	Unweighted number of men
Age												
15-19	7.1	4,009	3,835	na	na	na	1.2	3,013	2,832	na	na	na
15-17	5.7	2,454	2,341	na	na	na	1.5	1,870	1,726	na	na	na
18-19	9.4	1,555	1,494	32.2	1,555	1,494	0.7	1,144	1,106	10.8	1,144	1,106
20-24	16.0	2,931	3,022	42.2	2,931	3,022	1.3	2,319	2,330	14.0	2,319	2,330
20-22	14.9	1,954	2,020	41.3	1,954	2,020	1.0	1,543	1,522	13.9	1,543	1,522
23-24	18.3	977	1,002	43.9	977	1,002	1.9	776	808	14.2	776	808
Marital status												
Never married	0.3	4,022	3,866	3.4	1,877	1,858	1.0	4,622	4,446	8.6	2,768	2,736
Ever married	25.5	2,918	2,991	64.1	2,609	2,658	3.0	710	716	30.4	694	700
Knows condom source¹												
Yes	6.0	2,958	3,191	27.1	1,973	2,195	1.4	3,930	3,849	13.3	2,722	2,731
No	14.5	3,982	3,666	47.8	2,513	2,321	0.9	1,402	1,313	11.5	740	705
Residence												
Urban	5.8	1,877	2,448	24.0	1,287	1,720	0.9	1,218	1,561	12.6	853	1,157
Rural	12.8	5,063	4,409	44.6	3,199	2,796	1.4	4,114	3,601	13.0	2,609	2,279
Education												
No education	26.2	1,809	1,913	61.5	1,488	1,512	1.1	803	765	13.6	563	541
Primary	6.6	3,988	3,652	33.5	2,042	1,938	1.4	3,497	3,178	13.3	2,006	1,823
Secondary	1.5	750	786	17.4	589	592	0.5	712	751	9.4	590	617
More than secondary	2.1	393	506	9.5	367	474	1.6	320	468	16.0	303	455
Total	10.9	6,940	6,857	38.7	4,486	4,516	1.2	5,332	5,162	12.9	3,462	3,436

na = Not applicable

¹ For this table the following responses are not considered a source for condoms: friends, family members, and home.

1. Identify the topic of the table.
2. Identify the columns and rows.
3. What percentage of young men age 18-24 first had sexual intercourse before age 18?
4. What percentage of young women age 18-24 first had sexual intercourse before age 18?
5. What are the patterns for early sexual debut by background characteristics?
6. What conclusions can we draw from this table in light of the risk of HIV transmission and prevention?

Example 13: Prevalence of anaemia in women

Table 11.11.1 Prevalence of anaemia in women

Percentage of women age 15-49 with anaemia, by background characteristics, Ethiopia 2011

Background characteristic	Anaemia status by haemoglobin level				Weighted number of women	Unweighted Number of Women	
	Not pregnant: Pregnant	Any	Mild	Moderate			Severe
		<12.0 g/dl <11.0 g/dl	10.0-11.9 g/dl 10.0-10.9 g/dl	7.0-9.9 g/dl 7.0-9.9 g/dl			<7.0 g/dl <7.0 g/dl
Age							
15-19		13.4	10.9	2.2	0.3	3,841	3,617
20-29		16.3	12.3	3.2	0.8	5,811	5,838
30-39		17.3	13.3	3.4	0.6	3,782	3,817
40-49		21.5	18.3	2.7	0.5	2,348	2,296
Number of children ever born							
0		12.5	10.1	2.1	0.3	5,267	5,194
1		15.7	12.2	2.8	0.7	1,712	1,892
2-3		18.0	14.3	2.7	1.0	3,052	3,060
4-5		18.0	12.9	4.5	0.7	2,353	2,296
6+		21.1	17.1	3.5	0.5	3,397	3,126
Maternity status							
Pregnant		22.0	12.2	8.7	1.2	1,173	1,226
Breastfeeding		18.5	14.8	3.0	0.6	4,933	4,487
Neither		15.0	12.3	2.2	0.5	9,675	9,855
Using IUD							
Yes		(21.8)	(14.9)	(6.9)	(0.0)	34	42
No		16.6	13.1	2.9	0.6	15,748	15,526
Smoking status							
Smokes cigarettes/ tobacco		15.7	13.9	1.7	0.2	117	437
Does not smoke		16.6	13.1	3.0	0.6	15,665	15,131
Residence							
Urban		10.9	8.8	1.9	0.2	3,621	4,780
Rural		18.3	14.4	3.3	0.7	12,161	10,788
Region							
Tigray		12.4	9.7	2.3	0.4	1,077	1,688
Affar		34.8	24.0	9.3	1.5	141	1,260
Amhara		16.6	13.8	2.4	0.4	4,219	1,989
Oromiya		19.2	15.2	3.3	0.7	5,834	2,068
Somali		44.0	24.8	14.7	4.5	292	813
Benishangul-Gumuz		19.1	14.3	4.2	0.6	167	1,213
SNNP		11.3	8.8	2.1	0.4	3,090	1,943
Gambela		19.4	15.7	3.5	0.2	67	1,092
Harari		19.4	14.4	4.2	0.8	43	980
Addis Ababa		9.3	7.8	1.2	0.3	788	1,525
Dire Dawa		28.8	17.4	9.9	1.5	63	997
Education							
No education		20.3	15.9	3.5	0.9	8,081	7,889
Primary		13.6	10.5	2.8	0.3	6,017	5,551
Secondary		9.3	8.4	0.7	0.3	1,032	1,269
More than secondary		9.7	8.4	1.2	0.2	651	859
Wealth quintile							
Lowest		20.1	15.0	4.0	1.1	2,894	3,596
Second		18.9	15.3	3.1	0.5	2,940	2,327
Middle		17.1	13.6	2.6	0.8	2,936	2,184
Fourth		17.4	13.4	3.6	0.4	3,123	2,402
Highest		11.3	9.3	1.7	0.2	3,890	5,059
Total		16.6	13.1	2.9	0.6	15,782	15,568

Note: Prevalence is adjusted for altitude and for smoking status if known using formulas in CDC, 1998. Figures in parentheses are based on 25-49 unweighted cases.

1. Identify columns and rows.
2. What percentage of women has any anemia?
3. What is the range in the prevalence of mild anemia by region?
4. Discuss the pattern of anemia by maternity status.
5. What conclusions can we draw from this table for programs?

Example 14: Components of antenatal care

Table 9.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Ethiopia 2011

Background characteristic	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:		Weighted number of women with a live birth in the past five years	Unweighted number of women with a live birth in the past five years	Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services				Weighted number of women with ANC for their most recent birth	Unweighted number of women with ANC for their most recent birth
	Took iron tablets	Took intestinal parasite drugs			Informed of signs of pregnancy complications	Blood pressure measured	Urine sample taken	Blood sample taken		
Mother's age at birth										
<20	12.0	4.5	954	1,028	23.4	64.2	39.0	47.6	412	470
20-34	17.8	5.5	5,630	5,484	19.7	72.8	43.0	56.0	2,484	2,555
35-49	17.2	6.1	1,324	1,252	19.0	71.4	34.2	49.4	495	473
Birth order										
1	18.0	5.6	1,399	1,477	28.2	76.9	54.6	64.7	759	874
2-3	16.7	4.6	2,462	2,419	19.4	71.3	44.5	55.8	1,093	1,181
4-5	17.6	6.1	1,814	1,778	17.2	71.1	37.1	49.2	790	739
6+	16.3	5.9	2,233	2,090	15.8	67.1	27.4	45.6	749	704
Residence										
Urban	27.2	8.5	1,188	1,513	33.7	83.1	74.0	79.9	914	1,203
Rural	15.2	5.0	6,720	6,251	15.0	67.3	29.2	44.5	2,477	2,295
Region										
Tigray	33.6	3.9	530	847	27.5	86.3	48.0	66.9	342	546
Affar	23.3	3.4	78	714	26.5	62.4	58.2	68.2	27	205
Amhara	19.0	5.6	1,991	965	16.4	61.1	37.4	49.1	813	371
Oromiya	11.8	5.1	3,116	1,100	16.6	70.2	37.1	48.4	1,232	438
Somali	19.9	2.9	198	559	31.0	68.8	56.9	62.3	50	143
Benishangul-Gumuz	23.3	8.9	92	674	26.0	65.8	37.9	51.5	38	257
SNNP	15.0	6.9	1,634	1,053	17.3	72.5	31.1	48.6	663	421
Gambela	27.5	12.4	31	608	20.1	78.5	53.1	66.3	18	267
Harari	32.9	4.1	19	440	28.5	95.8	82.1	87.3	11	259
Addis Ababa	38.7	4.3	193	348	49.1	96.6	97.8	99.5	182	327
Dire Dawa	27.8	3.3	26	456	27.4	87.7	79.0	86.2	16	264
Education										
No education	14.8	4.2	5,270	5,184	11.6	65.5	29.3	42.7	1,800	1,791
Primary	19.1	8.1	2,270	2,095	23.9	76.0	47.9	61.4	1,256	1,256
Secondary	31.1	6.0	226	312	50.4	83.7	81.2	86.1	202	286
More than secondary	42.8	10.8	142	173	51.5	94.1	80.3	88.2	133	165
Wealth quintile										
Lowest	13.2	3.4	1,739	2,279	10.6	63.8	19.3	36.6	438	579
Second	12.6	5.1	1,696	1,354	13.9	64.2	24.3	39.8	595	491
Middle	15.2	3.3	1,628	1,241	11.5	63.3	28.6	40.2	618	512
Fourth	17.9	7.5	1,493	1,229	17.7	70.1	36.5	52.2	704	595
Highest	28.7	9.2	1,351	1,661	34.2	85.0	71.0	78.9	1,037	1,321
Total	17.0	5.5	7,908	7,764	20.0	71.6	41.3	54.0	3,391	3,498

1. Identify columns and rows.
2. Identify populations in the table. Which population is bigger?
3. Among women who received antenatal care for the most recent birth in the past five years, how many were informed of pregnancy complications?
4. What components of antenatal care are most common?
5. Discuss patterns of use of iron during pregnancy.
6. What conclusions for programs can we draw from this table?

Example 15: Fertility preferences (table and figure)

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Ethiopia 2011

Desire for children	Number of living children							Total 15-49	Total 15-59
	0	1	2	3	4	5	6+		
WOMEN¹									
Have another soon ²	55.4	23.9	17.1	14.9	12.1	8.2	6.7	16.9	na
Have another later ³	34.1	61.2	53.8	44.6	37.9	27.5	13.7	38.2	na
Have another, undecided when	4.0	2.4	3.0	2.1	2.2	1.7	1.7	2.3	na
Undecided	1.0	2.9	3.1	3.9	3.7	4.8	4.3	3.5	na
Want no more	3.4	9.1	21.4	31.9	41.4	55.8	68.6	36.5	na
Sterilised ⁴	0.0	0.0	0.5	0.4	0.7	0.5	0.7	0.5	na
Declared infecund	2.1	0.4	0.9	2.1	1.5	1.5	4.0	1.9	na
Missing	0.0	0.0	0.3	0.0	0.4	0.0	0.2	0.2	na
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	na
Weighted number	806	1,490	1,746	1,529	1,302	1,164	2,251	10,287	na
Unweighted number	878	1,658	1,772	1,462	1,287	1,137	2,010	10,204	na
MEN⁵									
Have another soon ²	55.6	21.0	15.9	14.3	15.6	7.5	10.8	17.7	17.4
Have another later ³	35.8	69.9	63.3	52.2	42.7	40.5	31.8	48.9	43.3
Have another, undecided when	3.2	1.6	1.5	2.7	1.8	2.5	1.7	2.0	2.0
Undecided	0.8	2.1	2.5	2.1	2.3	2.1	1.1	1.9	1.9
Want no more	3.2	5.2	15.7	27.7	36.6	46.0	53.1	28.4	32.8
Sterilised ⁴	0.0	0.0	0.4	0.3	0.1	1.0	1.0	0.4	1.0
Declared infecund	0.5	0.3	0.7	0.4	0.7	0.4	0.5	0.5	1.6
Missing	1.0	0.1	0.0	0.2	0.2	0.1	0.0	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Weighted number	554	1,024	1,219	1,051	934	714	1,375	6,872	8,089
Unweighted number	567	1,117	1,180	1,019	855	688	1,349	6,775	7,930

na = Not applicable

¹ The number of living children includes current pregnancy for women

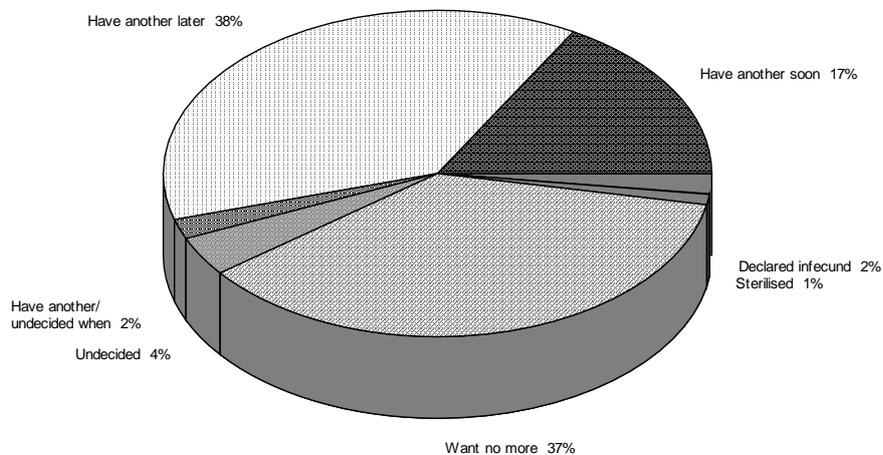
² Wants next birth within two years

³ Wants to delay next birth for two or more years

⁴ Includes both female and male sterilisation

⁵ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant, for men with more than one current wife).

Figure 6.1 Desire for More Children Among Currently Married Women



Note: Percentages add to more than 100 due to rounding.

EDHS 2011

1. Looking first at Figure 6.1, identify the population.
2. What percent of currently married women want no more children?
3. Looking at Table 6.1, what are the populations?
4. How many men age 15-49 are included in Table 6.1? How many women age 15-49?
5. Which population sub-groups are most likely to want another child soon?
6. How does desire for children vary by the number of living children for women and men?
7. On average, do women or men appear to want more children?
8. What are the program implications from this table and figure?

Example 16: Experience of physical mistreatment

Table 16.1 Experience of physical violence					
Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced physical violence during the 12 months preceding the survey, by background characteristics Kenya 2008-09					
Background characteristic	Percentage who have ever experienced physical violence since age 15 ¹	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Any (often or sometimes)	
Current age					
15-19	26.9	1.2	15.5	16.7	1,365
20-24	37.5	4.9	17.1	21.9	1,246
25-29	42.2	5.7	21.0	26.7	1,097
30-39	43.7	8.8	19.2	28.0	1,554
40-49	43.5	6.7	20.5	27.2	1,056
Employed last 12 months					
Employed for cash	43.7	7.6	19.9	27.5	2,785
Employed not for cash	45.2	6.1	22.1	28.1	916
Not employed	30.8	3.0	15.8	18.9	2,615
Marital status					
Never married	24.7	0.8	10.5	11.3	1,982
Married or living together	42.1	5.9	22.2	28.1	3,688
Divorced/separated/widowed	60.3	17.6	22.1	39.7	649
Number of living children					
0	28.2	1.3	12.8	14.1	1,840
1-2	37.8	5.6	18.0	23.6	1,921
3-4	44.7	8.9	21.5	30.4	1,412
5+	48.7	8.0	24.8	32.9	1,145
Residence					
Urban	34.8	6.7	14.2	21.0	1,584
Rural	39.8	5.1	19.9	25.0	4,734
Province					
Nairobi	28.5	5.3	10.0	15.4	546
Central	34.1	4.9	14.6	19.5	666
Coast	31.8	3.7	14.4	18.1	503
Eastern	33.3	4.0	15.1	19.1	1,010
Nyanza	56.6	6.8	28.9	35.8	1,046
Rift Valley	35.6	5.2	19.2	24.4	1,716
Western	44.5	8.3	19.9	28.2	691
North Eastern	31.9	6.6	16.2	22.9	140
Education					
No education	45.9	7.8	28.2	36.0	559
Primary incomplete	45.5	8.9	22.9	31.8	1,957
Primary complete	35.5	3.6	17.5	21.1	1,691
Secondary+	32.5	3.3	12.7	16.0	2,111
Wealth quintile					
Lowest	40.5	6.6	22.7	29.3	1,046
Second	44.1	5.6	20.2	25.8	1,131
Middle	41.4	5.3	21.3	26.5	1,204
Fourth	36.1	3.7	18.6	22.2	1,281
Highest	33.4	6.3	12.7	19.0	1,655
Total	38.5	5.5	18.5	24.0	6,318

Note: Total includes 3 women missing information as to employment status.
¹ Includes in the past 12 months

1. Identify columns and rows.
2. What is the population?

3. What is the range of experience of violence since age 15 among the provinces?
4. Are there any patterns in the experience of violence by background characteristics?
5. What conclusions can we draw from this table for programs and policies on violence?

Example 17: Median duration and frequency of breastfeeding

Table 11.5 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Kenya 2008-09

Background characteristic	Median duration (months) of breastfeeding among children born in the last three years ¹			Frequency of breastfeeding among children under six months ²			
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding ³	Percentage breastfed 6+ times in last 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
Sex							
Male	19.9	0.6	1.9	91.1	7.2	4.5	277
Female	21.2	1.3	2.5	95.4	7.0	4.8	237
Residence							
Urban	19.3	0.6	2.2	94.3	7.2	5.1	80
Rural	21.3	1.0	2.2	92.8	7.0	4.5	435
Province							
Nairobi	14.6	0.5	1.9	(95.3)	(7.4)	(5.8)	33
Central	19.2	0.6	3.7	(92.6)	(7.6)	(4.5)	38
Coast	19.8	0.5	2.4	95.4	7.8	4.8	39
Eastern	25.5	2.6	3.3	95.2	7.7	5.0	87
Nyanza	18.6	0.6	1.4	84.9	5.0	4.2	108
Rift Valley	21.0	1.7	2.3	97.0	8.0	4.4	143
Western	19.9	1.1	1.8	90.5	6.0	4.2	47
North Eastern	17.4	0.4	0.5	98.9	8.3	5.6	18
Mother's education							
No education	21.1	0.6	1.6	98.7	9.4	5.3	67
Primary incomplete	21.4	0.7	2.3	92.9	6.9	4.5	157
Primary complete	20.3	1.8	2.3	91.3	6.5	4.5	157
Secondary+	19.3	0.5	2.1	92.5	6.7	4.6	133
Wealth quintile							
Lowest	21.4	1.8	2.4	95.2	7.4	4.8	146
Second	19.3	0.7	2.1	91.5	6.4	4.6	97
Middle	20.1	0.6	0.9	94.0	7.2	4.3	93
Fourth	21.4	0.7	3.0	93.8	7.2	4.2	97
Highest	19.7	0.6	2.1	89.2	7.0	5.1	81
Total	20.5	0.7	2.2	93.1	7.1	4.6	514
Mean for all children	20.7	2.6	3.7	na	na	na	na

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted children.

na = Not applicable

¹ It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding

² Excludes children without a valid answer on the number of times breastfed

³ Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

1. Identify columns and rows.
2. Define these terms: median duration of breastfeeding, mean number of day/night feeds, and exclusive breastfeeding.
3. What percent of children are breastfed for more than 20.5 months?
4. What are the populations in this table?
5. Is exclusive breastfeeding common in the first six months of life?
6. What is the average number of feeds per day for children under age 6 months?
7. Looking at the provinces, what is the range of duration of any breastfeeding?
8. Does breastfeeding vary by other background characteristics?
9. What conclusions can we draw from this table?

Example 18: Place of Delivery

Table 9.6 Place of delivery
Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Kenya 2008-09

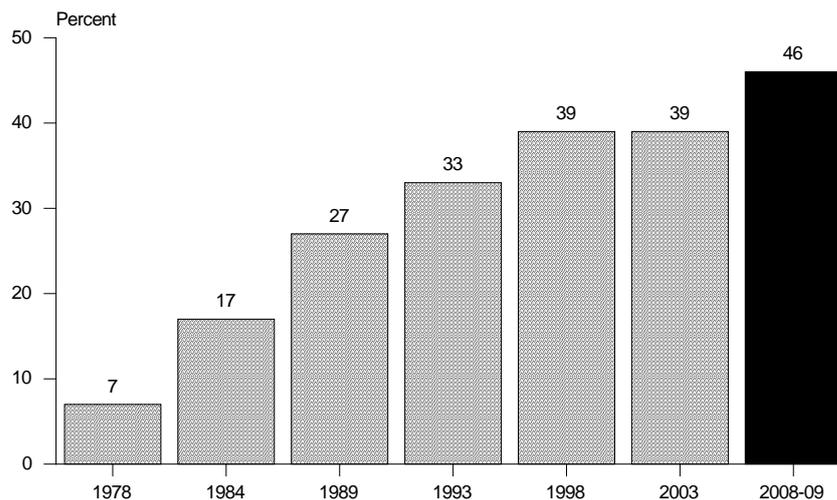
Background characteristic	Health facility		Home	En route	Other/missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	37.3	9.3	52.6	0.6	0.3	100.0	46.6	953
20-34	32.0	10.7	56.2	0.8	0.3	100.0	42.7	4,234
35-49	27.2	9.0	61.4	1.8	0.5	100.0	36.2	665
Birth order								
1	47.2	13.9	37.7	0.9	0.3	100.0	61.1	1,310
2-3	33.8	11.9	53.5	0.7	0.2	100.0	45.7	2,225
4-5	23.6	9.3	65.8	1.1	0.2	100.0	32.9	1,252
6+	21.2	3.6	73.3	1.3	0.6	100.0	24.8	1,066
Antenatal care visits¹								
None	5.1	5.6	87.5	1.2	0.6	100.0	10.7	290
1-3	29.7	8.5	60.7	1.1	0.1	100.0	38.2	1,730
4+	44.6	15.7	38.4	1.3	0.1	100.0	60.3	1,872
Residence								
Urban	51.6	23.1	24.5	0.3	0.6	100.0	74.7	1,074
Rural	28.0	7.4	63.3	1.1	0.3	100.0	35.4	4,777
Province								
Nairobi	45.7	43.7	9.9	0.0	0.7	100.0	89.4	334
Central	56.7	16.2	25.9	1.0	0.1	100.0	73.0	466
Coast	38.0	6.4	54.6	0.7	0.3	100.0	44.4	495
Eastern	33.5	9.3	54.8	2.0	0.4	100.0	42.8	890
Nyanza	34.7	9.4	54.9	0.9	0.0	100.0	44.2	1,145
Rift Valley	26.0	6.8	66.3	0.7	0.3	100.0	32.9	1,642
Western	19.1	6.3	73.3	0.9	0.5	100.0	25.3	703
North Eastern	16.6	0.7	81.3	0.0	1.4	100.0	17.3	178
Mother's education								
No education	12.3	2.8	83.5	0.7	0.6	100.0	15.0	763
Primary incomplete	23.6	4.4	70.8	0.9	0.3	100.0	28.0	1,952
Primary complete	37.1	10.9	51.0	0.9	0.1	100.0	48.1	1,761
Secondary+	49.6	22.0	27.0	1.0	0.3	100.0	71.6	1,375
Wealth quintile								
Lowest	16.0	2.1	80.9	0.8	0.3	100.0	18.0	1,445
Second	23.1	7.3	68.3	1.1	0.2	100.0	30.4	1,190
Middle	36.2	5.4	56.7	1.4	0.3	100.0	41.6	1,085
Fourth	39.9	11.6	47.2	1.2	0.2	100.0	51.4	1,038
Highest	52.9	28.0	18.4	0.1	0.6	100.0	80.9	1,095
Total	32.3	10.3	56.2	0.9	0.3	100.0	42.6	5,852

Note: Total includes 81 women with information missing on number of antenatal visits.
¹ Includes only the most recent birth in the five years preceding the survey

1. Identify columns and rows.
2. What is the population covered in this table?
3. Among provinces, what is the range in delivery in public and private health facilities?
4. Discuss home deliveries: Where are they most common? Which groups are most likely to deliver at home?
5. Is there any pattern between antenatal care and place of delivery?
6. What conclusions can we draw from this table?

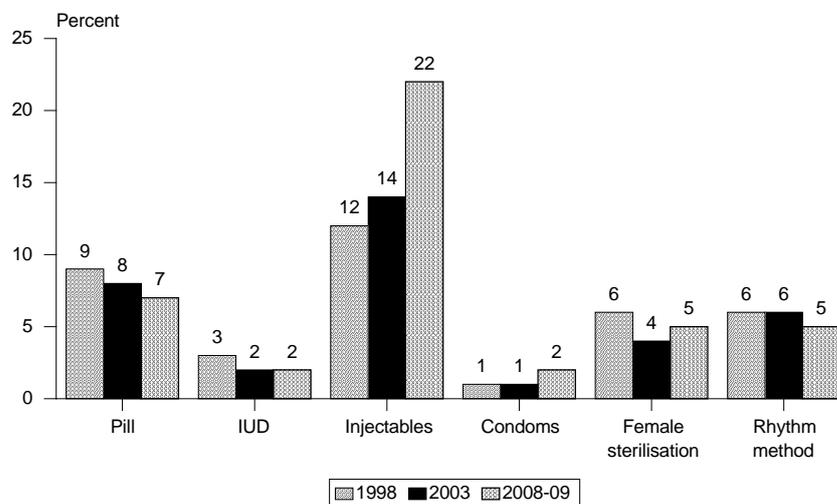
Example 19: Trends in contraceptive use (two figures)

Figure 5.1 Trends in Contraceptive Use, Kenya 1978-2008
(percentage of currently married women using any method)



Note: Data from the first five sources omit several northern districts, while the 2003 and 2008-09 KDHS surveys represent the entire country.

Figure 5.2 Trends in Current Use of Specific Contraceptive Method among Currently Married Women Age 15-49, Kenya 1998-2008



Note: The 1998 KDHS omitted several northern districts.

Kenya 2008-09

1. Look at Figure 5.2. What was the most widely used family planning method in 1998? In 2008-09?
2. How would you describe the trends in Figure 5.1?
3. How would you describe the trends in Figure 5.2?
4. What conclusions for programs and policies can we draw from these two figures?

Handout 5.3

Answer Sheet for Handout 5.2, *Practicing Reading and Interpreting Tables and Figures*

The answer to each question is in bold.

Example 1: Trends in contraceptive use

1. Identify columns and rows. **Columns: 1992 NDHS, 2000 NDHS, 2006-07 NDHS; rows: methods of contraceptive**
2. What percent of women used any method of contraception in 1992, 2000, and 2006-07? **23%, 38%, and 47%**
3. What percent of women used male condoms in the 2000 NDHS? **8.9%**
4. What was the most popular modern method for women in the 1992 NDHS? **Injectables**
5. What is the overall trend in contraceptive use in Namibia from 1992 to 2006-07? **Overall, contraceptive use has gone up among all women. However, the use of modern methods has increased, while the use of traditional methods has decreased. Currently, almost half of women use some method of contraception, and nearly all of them use a modern method.**

Example 2: Knowledge of fertile period

1. Identify columns and rows. **Columns: users of rhythm/moon beads method, nonusers of rhythm/moon beads method, all women; Rows: Answers to perceived fertile period**
2. What percent of users of the rhythm/moon beads method know the correct fertile period (halfway between two menstrual periods)? **32.9%**
3. What percent of nonusers of the rhythm/moon beads method know the correct fertile period (halfway between two menstrual periods)? **13.2%**
4. What do all women most commonly perceive to be the fertile period? Is this knowledge correct? **Right after her menstrual period has ended (45%). This is not correct; the correct answer is halfway between two menstrual periods.**
5. What implications does this table have for family planning programs? **These data show some alarming results for family planning programs. The rhythm method will not be effective if the women using it do not know the correct fertile period. More education is needed to ensure that women who rely on the rhythm method have the knowledge required to use the method correctly.**

Example 3: Mean ideal number of children

1. Identify columns and rows. **Columns include: mean number of children for women, number of women. Rows are background characteristics**
2. What is the mean number of children that women reported wanting? **3.1 children**
3. In what region do women want the fewest children? **Hardap (2.4 children)**
4. Do women age 15-19 want more or less children than women age 45-49? **Less children: women age 15-19 want 2.3 children compared with 4.5 children for women age 45-49.**
5. What pattern is seen with women's education and ideal number of children? **In general, the more education a woman has, the fewer children she wants.**

Example 4: Knowledge of ORS packets

1. Identify columns and rows. **Columns include: percent of women who know about ORS packets or ORS pre-packaged liquids, number of women. Rows are background characteristics.**
2. Overall, what percent of women know about ORS packets or ORS pre-packaged liquids for the treatment of diarrhea? **91% of women**
3. How does knowledge of ORS packets change with age? **Knowledge of ORS packets is slightly higher among older women.**
4. In which region is knowledge of ORS packets highest? **Oshana (97%)**
Lowest? **Hardap (83%)**

Example 5: Use of mosquito nets by children

1. What is the topic of the table? **Use of mosquito nets by children under age five in all households; plus use of ITNs by children under age five in households with an ITN**
2. Identify columns and rows. **Columns are types of nets. Rows are background characteristics.**
3. What information about children under age five does this table present? **The percentage who slept under any mosquito net, an ever-treated net, and an ITN, broken down by various background characteristics. Plus, among children under five in households with an ITN, the percentage who slept under an ITN, broken down by various background characteristics.**
4. What is the range of results among zones for children who slept under an ITN in ALL households? **Results range from a low of 52% in the Southern highlands zone to a high of 76% in the Lake zone.**
5. Looking at background characteristics, which children are most likely to sleep under any nets? **Children 1 year old; urban children; Mainland (as compared to the Zanzibar); Lake zone; wealthiest quintile**

6. What conclusions can you draw from this table?
 - **There is a clear link between children's use of nets and wealth and urban living—probably related to the availability of nets.**
 - **There is little difference by gender.**
 - **Youngest children are most likely to sleep under any net.**

Example 6: Knowledge of ways to reduce the chances of getting the AIDS virus

1. How many women age 15-24 does this table cover? **3,677**
2. Women from which region seem least informed about HIV prevention? **Karamoja and West Nile regions**
3. Assuming that you were working on a condom promotion program for men, which population segments appear to be most in need of information? **Men age 15-19; men from the Karamoja and West Nile regions; men with no education; men in the poorest households.**
4. What general conclusions can you draw from this table?
 - **Ugandans seem well informed about AIDS prevention, particularly about limiting sex to one partner.**
 - **Women know less about condoms than men, but over three-quarters of women know about condoms.**
 - **Overall, men are slightly more likely than women to know two ways (condoms and limiting partners) to prevent HIV.**

Example 7: Coverage of prior HIV testing: Men

1. What percent of men age 15-49 have ever been tested for HIV and received their results? **52.2%** How many men are in this group? **$2,173 \times 0.522 = 1,134$**
2. Men from which region were most likely to have been tested for HIV and received results in the last 12 months? **North (44.7%)** In which region were they least likely to have been tested and received results? **East Central (20.7%)**
3. Among men, which age group is most likely to have ever been tested for HIV and received the results? **25-29 (65.6%)**
4. What percent of men from Southwest region were ever tested but did not receive their results? **2.1%**
5. How would you describe the relationship between education and HIV testing? **Men with secondary or higher education are much more likely to have ever been tested for HIV and received their results than men with no education. Testing increases with increasing levels of education.**
6. What general conclusions can you draw from this table about HIV testing in Uganda?
 - **Over half (52.2%) of men have ever been tested and received the results; 30.7% were tested in the last 12 months and received the results.**
 - **Wealthier and more educated men are more likely to have been tested than poorer and uneducated men.**

- **Men living in urban areas are much more likely to have been tested than those living in rural areas.**
- **Testing is most common in the Kampala and North regions.**

Example 8: HIV prevalence by background characteristics

1. What is the prevalence of HIV among women in North East region? **5.3%**
2. How does it compare with men in the same region? **Nearly the same as men (5.2%)**
3. Describe the difference between urban and rural HIV prevalence among both men and women. **Among women, HIV prevalence is higher in urban areas (10.7%) than in rural areas (7.7%). Among men there is no difference in HIV prevalence by urban-rural residence (6.1%, each).**
4. Describe the relationship between HIV prevalence and wealth. **In general, prevalence increases with wealth for both women and men.**

Example 9: Exposure of women and men to mass media (two tables)

1. Which group, men or women, has less exposure to all mass media? What is the difference? **Women have less exposure. About 21% of women have no access to media, compared with 11.4% of men.**
2. Which of the media is the most accessible to women and men? **Radio (74.1% of women and 85.5% of men)**
3. Assuming you were planning a behavior change campaign in the West Nile region, which of the media would you choose? **Radio, since 77.9% of women and 76.9 % of men in the West Nile region listen to radio at least once a week.**
4. How common is reading newspapers among women and men by age? **Young women age 15-19 are much more likely to read the newspaper than older women. The pattern among men is less clear.**
5. What can you say about access to television in Uganda? **TV viewing in Uganda is concentrated in urban areas and among the most educated and most wealthy.**

Example 10: Exposure to messages about condoms

1. Identify the columns and rows. **Columns are sources of condom messages. Rows are background characteristics**
2. Identify the populations. **Women 15-49 and men 15-59**
3. Which is the most common source of condom messages for women? For men? **Radio is the most common source for both women and men.**
4. What percent of women age 30-34 has heard a message about condoms on TV? **51%**
5. In what region have the most women and men heard messages about condoms? **Erongo, where 98% of women and men report having heard a message from any source**
6. What conclusions can you draw from this table?
 - **While radio is the most common source of condom messages, TV and print media are also very common sources.**

- **Access to condom messages varies by region.**
- **Women and men with more education are more likely to have heard messages about condoms.**

Example 11: Current Use of Contraception

1. Identify the columns and rows. **Columns are types of contraceptives. Rows are women's age.**
2. Identify the populations. **All women age 15-49; all currently married women age 15-49; all sexually active unmarried women age 15-49**
3. Which population uses contraception the most? **Sexually active unmarried women (51%, compared with 34% of currently married women and 29% of all women)**
4. What is the contraceptive prevalence rate for currently married women age 30-34? **41%**
5. What is the most commonly used contraceptive method among currently married women? **Injectables (11%)**
6. What is the most commonly used method among unmarried women? **Male condom (16%)**
7. What conclusions can you draw from this table?
 - **Modern methods are more widely used than traditional methods.**
 - **Sexually active unmarried women are much more likely to use condoms than currently married women.**
 - **The three most commonly used methods are condoms, injectables, and pills. Female sterilization, implants, LAM, and traditional methods are each used by less than 5% of all women.**

Example 12: Age at first sex among youth

1. Identify the topic of the table. **Age at first sex among young women and men age 15-24 by background characteristics**
2. Identify the columns and rows. **Columns are sex by age 15 and by age 18 for women and men. Rows are background characteristics.**
3. What percentage of young men age 18-24 first had sexual intercourse before age 18? **13%**
4. What percentage of young women age 15-24 first had sexual intercourse before age 18? **39%**
5. What are the patterns for early sexual debut by background characteristics?
 - **Women start having sex earlier than men.**
 - **Never married youth are less likely to have sex than those who are currently or ever married.**
 - **Women who know of a source for condoms are less likely to have sex than women who do not; the reverse is true for men.**

- **Rural women have sex earlier than urban women; there is less difference by rural-urban residence for men.**
 - **Less educated women have sex earlier than those with more education; differences by education among men are minimal.**
6. What conclusions can we draw from this table in light of the risk of HIV transmission and prevention?
- **Young women are at risk of getting HIV much earlier than young men.**
 - **More educated women and those from wealthy households wait longer to start having sex. Why?**

Example 13: Prevalence of anaemia in women

1. Identify columns and rows. **Columns refer to anaemia status (any, mild, moderate, severe). Rows are background characteristics.**
2. What percentage of women has any anaemia? **17%**
3. What is the range in the prevalence of mild anaemia by region? **It ranges from a low of 8% in Addis to a high of 25% in Somali.**
4. Discuss the pattern of anemia by maternity status.
 - **Women who are pregnant or breastfeeding are more likely to have any anaemia than women who are neither pregnant nor breastfeeding.**
 - **Women who are pregnant or breastfeeding are markedly more likely to have moderate and severe anaemia than women who are neither pregnant nor breastfeeding.**
5. What conclusions for programs can we draw from this table?
 - **Anaemia affects almost one in five women in Ethiopia.**
 - **There is a marked difference in anaemia by region, with women in Somali, Affar, and Dire Dawa most likely to have moderate and severe anaemia.**
 - **The poorest and least educated women and those in rural areas are more likely to be anaemic than their wealthier, more educated, or urban counterparts.**
 - **Severe anaemia is much less common than mild and moderate anaemia.**

Example 14: Components of antenatal care

1. Identify columns and rows. **Columns are components of antenatal care among women with a live birth in the past five years and among women who received antenatal care for most recent birth in last 5 years. Rows are background characteristics.**
2. Identify populations in the table. Which population is bigger? **There are two populations. The larger is: women with a live birth in the past five years (7,908). The smaller is: women who received antenatal care for the most recent birth in the last five years (3,391).**

3. Among women who received antenatal care for the most recent birth in the past five years, how many were informed of pregnancy complications? **678 (.20 x 3,391)**
4. What components of antenatal care are most common? **Taking blood pressure (72%) and taking blood samples (54%).**
5. Discuss patterns of use of iron during pregnancy.
 - **There is very little difference by birth order.**
 - **Iron use is higher among urban than rural residents.**
 - **It varies among regions, ranging from a low of 12% in Oromiya to a high of 39% in Addis Ababa.**
 - **Iron use increases dramatically with education and wealth.**
6. What conclusions for programs can we draw from this table?
 - **Antenatal care is not common in Ethiopia. Most pregnant women do not get the majority of antenatal care components during pregnancy.**
 - **Only 17% of all pregnant women take iron pills, and only 6% are treated for intestinal parasites during pregnancy, even though these are often recommended treatments for all pregnant women.**
 - **Antenatal care needs improvement. Just 20% of women are informed of signs of pregnancy complications.**
 - **Poor women, rural women, and women with no education receive the least care.**

Example 15: Fertility preferences (Table and figure)

1. Looking first at Figure 6.1, identify the population. **Currently married women age 15-49**
2. What percent of currently married women want no more children? **37%**
3. Looking at Table 6.1, what are the populations? **Currently married women and currently married men by number of living children**
4. How many men age 15-49 are included in Table 6.1? **6,872** How many women age 15-49? **10,287**
5. Which sub-populations are most likely to want another child soon? **Women and men who have no living children or only one living child.**
6. How does desire for children vary by the number of living children for women and men? **For both men and women, the desire for more children declines with the number of living children. 69% of women and 53% of men with six or more children want no more.**
7. On average, do women or men appear to want more children? **Men**
8. What are the program implications from this table and figure?
 - **Family planning messages should be targeted to women with many children, because they are most likely to want to delay or limit pregnancies.**

- **Even men and women with no or few children may have a need for family planning.**

Example 16: Experience of physical mistreatment

1. Identify columns and rows. **Columns are experience of violence since age 15 and recent experience of violence in last 12 months. Rows are background characteristics.**
2. What is the population? **6,318 women**
3. What is the range of experience of violence since age 15 among the provinces? **It ranges from a high of 57% in Nyanza province to a low of 29% in Nairobi province.**
4. Are there any patterns in the experience of violence by background characteristics?
 - **Younger women have slightly less experience with violence than women in mid 20s and older. Rural women are somewhat more likely to experience violence than urban women. Violence is more common among women with less education.**
 - **Divorced/separated/widowed women have experienced more violence than currently married women.**
 - **There are wide variations by province both in violence since age 15 (ranging from 28% in Nairobi province to 57% in Nyanza) and in recent violence (ranging from 15% in Nairobi province to 36% in Nyanza province).**
 - **Women who are not employed have less experience of violence than working women.**
 - **Ever experience and recent experience of violence is higher among poorer women, but one in 3 of the wealthiest women have ever experienced violence.**
5. What conclusions can we draw from this table for programs and policies on violence?
 - **Women in Kenya frequently suffer from violence. Almost 4 in 10 women (39%) have experienced violence since age 15, and almost one in four (24%) have experienced violence in the last year. Violence occurs among women of all ages, education, and wealth.**
 - **Violence appears to be more common in certain provinces, namely Western and Nyanza.**
 - **28% of women who are married or living together with a partner experienced violence in the last 12 months.**
 - **Such a common problem should be addressed by programs and policies.**

Example 17: Median duration and frequency of breastfeeding

1. Identify columns and rows. **Columns are median duration of breastfeeding and frequency of breastfeedings for children <6 months. Rows are background characteristics.**
2. Define the terms: median duration of breastfeeding, mean number of day/night feeds, and exclusive breastfeeding.
 - **Median duration of breastfeeding: the time in months that divides in half the duration of breastfeeding among all children born in the three years before the survey. In Kenya, for children born in the 3 years before the survey, the median duration of any breastfeeding is 20.5 months.**
 - **Mean number of day/night feeds: the mathematical average of feeds per day and night among all infants**
 - **Exclusive breastfeeding: feeding infants only breast milk and no other food, water, or other liquids. The median number of months for exclusive breastfeeding is 0.7 months.**
3. What percent of children are breastfed for more than 20.5 months? **50% (because the definition of median is that half of the population falls below and half of the population falls above this number)**
4. What are the populations in the table? **Children born in the three years before the survey (514) and children under six months.**
5. Is exclusive breastfeeding common in the first six months of life? **No. Half of children are exclusively breastfed for less than 0.7 months or about 3 weeks. The average (mean) duration of exclusive breastfeeding is only 2.6 months or about 11 weeks.**
6. What is the average number of feeds per day for children under 6 months? **7.1 feeds**
7. Looking at the provinces, what is the range of duration of any breastfeeding? **It ranges from 14.6 months in Nairobi to 25.5 months in Eastern.**
8. Does breastfeeding vary by other background characteristics?
 - **Girls are breastfed slightly longer than boys (21.2 months versus 19.9 months).**
 - **Predominant breastfeeding is the same in urban and rural areas.**
 - **The median duration of any breastfeeding is similar in all wealth and education groups.**
9. What conclusions can we draw from this table?
 - **WHO recommends exclusive breastfeeding for the first six months of life. This is very uncommon in Kenya.**
 - **Babies are breastfed for a long time (the median duration is 20.5 months, although there is variation among provinces), but they are *exclusively* breastfed for a very short time.**

- Feeding infants six or more times in 24 hours is the norm: 93% of all infants under age six months were breastfed this frequently.
- The fact that the median duration of exclusive breastfeeding is low is a cause for concern, because it indicates that (1) infants are exposed to pathogens in other liquids and foods and (2) infants are not getting all the nutritional and immunological benefits of exclusive breastfeeding.

Example 18: Place of Delivery

1. Identify columns and rows. **Columns are place of childbirth. Rows are background characteristics.**
2. What is the population covered in the table? **Live births in last five years before the survey (5,852)**
3. Among provinces, what is the range in delivery in public and private health facilities? **It ranges from a low of 17% in North Eastern province to a high of 89% in Nairobi.**
4. Discuss home deliveries: Where are they most common? Which groups are most likely to deliver at home? **Home births are most common in North Eastern province (81%), among older women (61%), among later birth order children (73% of 6+), and in rural areas (63%). The less education a mother has, the fewer ANC visits, and the poorer the household, the more likely a woman is to deliver at home.**
5. Is there any pattern between antenatal care and place of delivery? **Yes, the more ANC visits a woman made, the less likely she was to deliver at home. For example, 88% of women who had no ANC visits delivered at home compared to only 38% of women who made four or more ANC visits delivered at home.**
6. What conclusions can we draw from this table?
 - **Most babies in Kenya are born at home (56%). Only in two provinces—Nairobi and Central—do less than one-half of mothers give birth at home.**
 - **The public health sector delivers about one in three babies, compared with only one in ten babies in the private sector.**
 - **Access to services is probably a major factor in place of delivery since rates are so much higher in urban areas and among the wealthy.**
 - **Women in North Eastern, Rift Valley, and Western provinces are far more likely to give birth at home than women from other provinces.**

Example 19: Trends in contraceptive use (Two figures)

1. Look at Figure 5.2. What was the most widely used family planning method in 1998? **Injectables (12%)** In 2008-09? **Injectables (22%)**
2. How would you describe the trends in Figure 5.1? **The use of both any family planning has increased with each survey. The rate of increase leveled off between 1998 and 2003 and then increased in 2008-09.**
3. How would you describe the trends in Figure 5.2? **Use of injectables has increased from 12% in 1998 to 22% in 2008-09. The use of all other methods has decreased or remained the same since 1998.**
4. What conclusions for programs and policies can we draw from these two figures?
 - **Family planning use has increased 6-fold since 1978. Women and men in Kenya want to have more control over the size and spacing of their children.**
 - **The method mix has changed since 1998, with injectables increasing in popularity.**
 - **Female sterilization is still not widely used in Kenya.**

Reading and Understanding DHS Tables

Statistical tables can look intimidating at first glance. This flyer suggests ways to read and understand tables from the 2011 Ethiopia DHS.

Example 1: Knowledge of HIV Prevention Methods A Question Asked of All Survey Respondents

Step 1: Read the title and subtitle. They tell you the topic and the specific population group being described. In this case, the table is about women age 15-49 in Ethiopia. This represents the entire female survey population.

Step 2: Scan the column headings—the top horizontal row. They describe how the information is categorized. In this case, each column represents one aspect of knowledge of HIV prevention methods that the women report to have.

Step 3: Scan the row headings—the first vertical column. These show the different ways the data are divided up into categories based on population characteristics. In this case, the table presents women’s knowledge of HIV-prevention methods by age, marital status, urban-rural residence, educational level, and wealth. Most of the tables in DHS reports will be divided into the same categories.

Step 4: Look at the very last row at the bottom of the table. These percentages represent the totals of all women age 15-49 who know each method of HIV prevention. In this case, 55.9% of women age 15-49 know that using condoms reduces the risk of getting HIV, and 64.6% know that limiting sexual intercourse to one uninfected partner reduces the risk of getting HIV.

Step 5: To find out what percentage of women with primary education know that using condoms and limiting sex to one uninfected partner reduces the risk of getting HIV, draw two imaginary lines, as shown on the table. This shows that 52.4% of women of women age 15-49 with primary education know that using condoms and limiting sex to one uninfected partner reduces the risk of getting HIV.

Table 12.2 Knowledge of HIV prevention methods **1**

Percentage of women age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting HIV by using condoms every time they have sexual intercourse, and by having one sex partner who is not infected and has no other partners, by background characteristics, Ethiopia 2011

Background characteristic 3	Using condoms and limiting sexual intercourse 2			Weighted number of women
	Using condoms ¹	Limiting sexual intercourse to one uninfected partner ²	Using condoms and limiting sexual intercourse to one uninfected partner ²	
Age				
15-24	61.6	67.8	48.5	6,940
..15-19	61.6	68.4	48.7	4,009
..20-24	61.5	66.9	48.3	2,931
25-29	55.8	64.2	42.9	3,147
30-39	52.3	63.2	39.6	3,971
40-49	46.0	58.5	34.4	2,457
Marital status				
Never married	67.2	71.1	53.6	4,469
..Ever had sex	81.5	73.9	64.5	344
..Never had sex	66.1	70.9	52.7	4,126
Married/Living together	51.0	62.0	38.8	10,287
Divorced/Separated/Widowed	56.0	63.5	42.9	1,758
Residence				
Urban	76.6	73.0	60.6	3,947
Rural	49.4	62.0	37.8	12,568
Education				
No education	42.2	56.0	30.8	8,394
Primary	65.5	72.1	52.4 5	6,276
Secondary	82.4	78.1	65.2	1,117
More than secondary	90.9	78.9	73.4	728
Wealth quintile				
Lowest	42.3	57.1	30.9	2,986
Second	47.0	60.8	35.0	3,041
Middle	50.4	60.7	38.1	3,031
Fourth	55.1	66.8	44.0	3,215
Highest	76.5	73.7	60.9	4,242
Total 15-49	55.9	64.6	43.2 4	16,515

Practice: Use this table to answer the following questions (answers are upside down, below):

- a) What percentage of women age 15-49 are aware that using condoms AND limiting sex to one partner reduces the risk of getting HIV?
- b) In what age group are women most aware that limiting sex to one uninfected partner reduces the risk of getting HIV?
- c) Are urban or rural women more likely to know that using condoms reduces the risk of getting HIV?

Handout 5.4

Example 2: Prevalence and treatment of symptoms of ARI A Question Asked of a Subgroup of Survey Respondents

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children under five (a) children who had symptoms of ARI, and (b) among children who had symptoms of ARI from group “a,” the group who sought medical treatment or advice or who received antibiotics.

Step 2: Identify the two panels. First identify the columns that refer to children under five who had symptoms of ARI (a), and then isolate the columns that refer only to the children under five who had symptoms of ARI and sought medical treatment or advice or received antibiotics (b).

Step 3: Look at the first panel. What percentage of children under five had symptoms of ARI? It’s 7.0%.

Now look at the second panel. How many children under five are included in this group? Only 773, or 7.0% of 11,042 children under five who had symptoms of ARI. The second panel is a subgroup of the first.

Step 4: There are only 773 children under five who had symptoms of ARI and who sought treatment or advice or received antibiotics. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable. For example, look to see the percentage of children under five who received antibiotics whose household uses charcoal as cooking fuel: 4.8%. This percentage is in parentheses because there are fewer than 50 children (unweighted) in this category. Readers should use this number with caution—it may not be accurate. (For more information on weighted and unweighted numbers, see Example 4.)

Look also to see the percentage of children under five who sought medical treatment or advice whose household uses kerosene as cooking fuel. There is no number in this cell—only an asterisk. This is because fewer than 25 children (unweighted) in this category had fever. Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Table 10.5 Prevalence and treatment of symptoms of ARI **1**

Among children under age five, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey, and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider, and the percentage who received antibiotics as treatment, by background characteristics, Ethiopia 2011

Background characteristic	Children under age five:		Children under age five with symptoms of ARI:		
	Percentage with symptoms of ARI ¹	Weighted number of children	Percentage for whom advice or treatment was sought from a health facility or provider ²	Percentage who received antibiotics	Weighted number of children
Age in months					
<6	7.1	1,265	25.9	3.1	90
6-11	9.0	1,120	32.2	5.1	101
12-23	8.8	1,930	36.1	12.3	171
24-35	6.7	2,063	26.8	8.3	139
36-47	7.3	2,381	20.3	5.1	173
48-59	4.4	2,282	19.1	3.4	100
Sex					
Male	6.9	5,676	25.4	7.8	393
Female	7.1	5,366	28.7	5.8	380
Cooking fuel					
Electricity or gas	1.5	56	*	*	1
Kerosene	6.1	56	*	*	3
Charcoal	4.4	537	(80.3)	(4.8)	24
Wood/straw ³	7.3	9,612	24.9	7.3	706
Animal dung	5.2	758	(26.6)	(0.0)	39
Mother's education					
No education	7.2	7,611	24.6	6.4	551
Primary	6.6	3,012	27.7	7.2	200
Secondary	7.2	252	*	*	18
More than secondary	2.4	168	*	*	4
Wealth quintile					
Lowest	7.6	2,476	15.5	3.0	188
Second	6.1	2,444	25.2	7.8	148
Middle	8.6	2,277	22.1	5.7	197
Fourth	8.0	2,158	33.2	11.7	173
Highest	4.0	1,687	61.7	6.1	67
Total	7.0	11,042	27.0	6.8	773

An asterisk indicates that a figure is based on fewer than 25 cases and has been suppressed. Numbers in parentheses are based on 25-49 unweighted cases.

¹ Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related and/or by difficult breathing which was chest-related) is considered a proxy for pneumonia

² Excludes pharmacy, shop, and traditional practitioner

³ Includes grass, shrubs, crop residues

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks on a table, you can proceed with confidence that enough cases were included in all categories that the data are reliable.

Practice: Use this table to answer the following questions (answers are upside down, below):

- Which age group has the highest percentage of children under five who had symptoms of ARI?
- Among children whose household uses animal dung for cooking, what percentage of children with symptoms of ARI sought medical treatment or advice? Can you use this answer with confidence? Why or why not?

a) 6-11 months—9.0%; b) 26.6%; but because this is based on fewer than 50 cases, you cannot use this number with any confidence.

Example 3: Unmet Need for Family Planning Comparing Data and Understanding Patterns

Step 1: Read the title and subtitle. In this case, the table is about unmet need for family planning among married women age 15-49 in Ethiopia.

Step 2: Scan the column headings—the top horizontal row. In this case there is only one variable, the percent of women with an unmet need for family planning. This variable is divided into three sub-categories: unmet need for family planning for spacing (first column) or for limiting births (second column) and the total unmet need for both spacing and limiting births (third column).

Step 3: Scan the row headings—the first vertical column. These show the different ways the data are divided up into categories based on population characteristics. This table presents unmet need for family planning by age, urban-rural residence, region of residence, educational level, and wealth. The data in these categories will help you understand how unmet need for family planning varies throughout the country.

Step 4: Answer the following questions to understand how unmet need for family planning is spread throughout the population:

- What are the highest and the lowest percentages of total unmet need for family planning (range) within the regions? Unmet need for family planning ranges from 10.6% in Addis Ababa to a high of 29.9% in Oromiya Region.
- Look for patterns: Does unmet need for family planning vary within specific populations? For example, is there a clear pattern of unmet need for family planning by wealth? By education? By age? You can also compare unmet need for spacing and limiting. Unmet need for family planning for spacing is highest among young women; in contrast, unmet need for family planning for limiting is highest among older women.
- Compare different groups: Do urban residents have a different unmet need for family planning than rural residents?

Step 5: What does all this mean? First, 25.3% of married women have unmet need for family planning. This means that the current national program is not meeting the needs of a large percentage of the population. Unmet need is highest in Oromiya, Benishangul-Gumuz, and S.N.N.P. regions; more intensive efforts are needed in these regions. In addition, more intensive efforts are needed to reach younger women and poorer women.

Table 7.7 Need for family planning among currently married women 1

Percentage of currently married women age 15-49 with unmet need for family planning, by background characteristics, Ethiopia 2011

Background characteristic 3	Unmet need for family planning ¹ 2		Total
	For spacing	For limiting	
Age			
15-19	30.3	2.4	32.8
20-24	20.3	1.5	21.8
25-29	21.5	5.1	26.6
30-34	15.8	9.8	25.6
35-39	11.6	15.8	27.4
40-44	7.8	19.9	27.7
45-49	1.5	13.7	15.2
Residence			
Urban	8.1	6.9	15.0
Rural	18.1	9.4	27.5
Region			
Tigray	15.0	7.0	22.0
Affar	12.4	3.7	16.0
Amhara	12.4	9.7	22.1
Oromiya	20.7	9.2	29.9
Somali	20.9	3.1	24.0
Benishangul-Gumuz	15.3	9.2	24.5
S.N.N.P	15.2	9.8	25.0
Gambela	12.9	5.8	18.8
Harari	14.8	9.3	24.1
Addis Ababa	5.3	5.3	10.6
Dire Dawa	16.4	5.0	21.3
Education			
No education	16.3	10.0	26.3
Primary	18.5	8.2	26.7
Secondary	9.7	3.0	12.7
More than secondary	5.5	1.5	7.0
Wealth quintile			
Lowest	19.6	10.9	30.5
Second	17.6	8.9	26.5
Middle	17.8	10.3	28.1
Fourth	18.5	8.3	26.8
Highest	8.3	6.4	14.7
Total	16.3	9.0	25.3

¹ Unmet need for spacing: Includes women who are fecund and not using family planning and who say they want to wait two or more years for their next birth, or who say they are unsure whether they want another child, or who want another child but are unsure when to have the child.

Example 4: Understanding Sampling Weights in DHS Tables

A sample is a group of people that have been selected for a survey. In DHS surveys, the sample represents the entire national population. Most countries want to collect data and report information both for the entire country and also for a country's regions or provinces.

DHS surveys are designed to provide these national and regional statistics. We want the sample surveyed in each region to resemble the actual population of that region, just as we want the national sample to resemble the actual population of the country. If the regions in a particular country vary in size and especially if some regions have very small populations, then a randomly-drawn sample may not include enough people from each region for analysis.

For example, let's say that you have enough money to interview 16,515 women for a survey that should be representative of both the regions and the entire country (as in the Ethiopia table to the right). In Ethiopia, the regions are not evenly distributed: some regions are more heavily populated (such as Oromiya), while others have smaller populations (such as Gambela).

A sampling statistician can determine how many women should be interviewed in each region in order to get reliable statistics. In the case of Ethiopia, the **blue column (1)** shows the actual number of women selected and interviewed in each region, ranging from 914 in Somali Region to 1,130 in Gambela Region, and 2,135 in Oromiya Region. With these numbers, there are enough interviews to get reliable results in each region.

Background characteristic	Weighted percent	Weighted number	Unweighted number
Region			
Tigray	6.7	1,104	1,728
Affar	0.9	145	1,291
Amhara	26.8	4,433	2,087
Oromiya	36.4	6,011	2,135
Somali	2.0	329	914
Benishangul-Gumuz	1.1	174	1,259
S.N.N.P	19.6	3,236	2,034
Gambela	0.4	69	1,130
Harari	0.3	49	1,101
Addis Ababa	5.4	896	1,741
Dire Dawa	0.4	69	1,095
Total 15-49	100.0	16,515	16,515

With this distribution of interviews, some regions are overrepresented and some regions are underrepresented. For example, according to the 2007 Ethiopian Population and Housing Census households in the Gambela Region made up approximately 0.4% of all Ethiopian households. In contrast, households in the Oromiya Region made up approximately 36.9% of all Ethiopian households. But as the blue column shows, the DHS survey has interviewed almost twice as many women in Oromiya Region than in Gambela Region. This does not accurately represent the population of the country.

In order to get statistics that are representative of the entire country, the distribution of the women in the sample needs to resemble the distribution of the women in the country. Women from a smaller region, like Gambela, should only contribute a small amount to the national total. Likewise, women from a larger region, like Oromiya, should contribute more. Therefore, DHS statisticians mathematically adjust or "weight" the number of women from each region so that each region's contribution to the total is proportionate to the actual population of the country. The numbers in the **purple column (2)** represent the "weighted" values. The total sample size of 16,515 women has not changed, but the distribution of the women in the regions has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They recalculate the categories to reflect the real population of the country. If you were to compare the **light red column (3)** to the actual population distribution of Ethiopia, you would see that women in each region are contributing to the total sample with the same weight that they contribute to the population of the country. The weighted number of women in the survey now accurately represents how many women live in Oromiya and how fewer women live in Gambela.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at both the national and regional level without distorting the overall distribution of the population within the country. Tables in the 2011 Ethiopia DHS present both weighted and unweighted numbers of respondents. Don't be distressed if weighted numbers seem low, simply look one column to the right to see the unweighted number of respondents (the actual number of individuals who answered the question).

Module 5 Pre-Test

1. Which of the following is NOT a type of table found in the DHS?

- a. Percentages from multiple responses
- b. Medians
- c. Rates
- d. Logistic Regression

2. Match the term to its definition

_____ National coverage

_____ Probability sampling method

_____ Separate household listing

_____ Sampling frame

_____ Clusters

_____ Stratification

- a. A numbered list of every house in a cluster is created before final sampling.
- b. Any method that uses some form of random selection.
- c. Ideally, a complete list of the entire population from which to draw a sample.
- d. DHS surveys cover the entire country.
- e. This process groups members of the population into comparatively homogeneous subgroups (for example, urban and rural, or by geographic region) before sampling.
- f. During the first stage of sampling, a group of areas selected from the entire sampling frame

(Turn over for more questions)

Questions 3 to 8 refer to the table on pages 3-4:

3. What information is presented in the columns? Rows?

4. What is the population covered in this table?

5. What is the most common form of media that women in Tanzania are exposed to? _____

6. What percent of women age 35-39 watches television at least once a week? _____

7. How does exposure to media vary by education? By wealth?

8. What conclusions for programs can we draw from this table?

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	All three media at least once a week	No media at least once a week	Number
Age						
15-19	26.3	31.8	60.3	12.4	29.9	2,172
20-24	19.0	28.4	58.7	9.6	33.1	1,909
25-29	15.2	22.2	56.8	6.7	37.2	1,668
30-34	19.4	22.0	59.6	8.1	35.0	1,422
35-39	13.2	15.5	54.0	5.6	43.0	1,290
40-44	17.0	18.0	57.0	8.4	37.6	938
45-49	14.8	14.0	50.4	5.5	46.1	740
Residence						
Urban	34.4	57.6	72.7	22.5	14.7	2,892
Rural	12.5	10.0	51.5	3.0	44.5	7,247
Mainland/Zanzibar						
Mainland	18.9	23.1	57.1	8.6	36.4	9,813
Urban	35.0	57.4	72.6	22.7	14.7	2,758
Rural	12.6	9.7	51.1	3.0	44.9	7,055
Zanzibar	15.0	37.2	69.7	8.9	22.7	326
Unguja	16.8	46.0	76.4	11.9	16.8	212
Pemba	11.5	21.0	57.4	3.5	33.8	115
Zone						
Western	10.4	16.8	53.4	3.2	40.3	1,728
Northern	15.7	25.8	59.4	8.3	34.8	1,530
Central	15.1	6.7	48.9	3.4	47.2	812
Southern Highlands	25.9	21.8	63.7	10.9	30.1	1,370
Lake	11.7	16.3	47.1	4.3	47.6	1,809
Eastern	36.9	50.1	72.4	22.6	16.2	1,608
Southern	15.8	13.5	51.2	4.3	44.7	955
Region						
Dodoma	11.6	4.9	42.9	1.8	53.8	495
Arusha	21.4	25.2	59.0	10.3	35.7	401
Kilimanjaro	17.8	33.8	72.8	10.2	18.8	411
Tanga	11.8	26.8	55.3	7.3	39.2	498
Morogoro	27.8	25.2	68.1	12.9	27.0	481
Pwani	23.0	23.2	75.4	11.3	22.4	261
Dar es Salaam	46.1	72.0	73.9	31.4	8.4	866
Lindi	15.9	8.5	49.6	3.8	42.9	198
Mtwara	20.3	13.3	48.3	4.4	46.8	407
Ruvuma	10.7	16.5	55.5	4.4	43.1	350
Iringa	13.3	19.7	66.3	6.5	32.0	490
Mbeya	35.7	28.5	66.1	17.0	25.4	623
Singida	20.6	9.5	58.3	5.9	37.0	317
Tabora	8.8	17.3	51.2	2.8	44.2	447
Rukwa	26.1	9.6	52.9	4.3	37.9	257
Kigoma	17.0	18.4	50.9	4.3	37.6	462
Shinyanga	7.5	15.6	55.9	2.8	39.6	819
Kagera	10.4	19.3	57.8	3.6	35.5	590
Mwanza	13.7	16.9	41.1	5.7	54.4	844
Mara	9.6	10.5	43.5	2.3	51.6	376
Manyara	10.1	9.1	44.1	3.0	53.5	220
Unguja North	5.1	11.2	68.1	1.9	30.0	50
Unguja South	17.4	33.1	89.6	5.6	8.6	30
Town West	21.3	62.4	76.6	17.2	13.6	131
Pemba North	6.8	13.6	53.0	1.6	41.4	56
Pemba South	15.9	28.1	61.5	5.3	26.6	59
Education						
No education	0.6	5.6	35.6	0.1	62.3	1,940
Primary incomplete	10.6	12.0	50.3	2.6	43.8	1,482
Primary complete	20.6	23.1	62.1	7.8	31.3	5,071
Secondary+	42.1	56.5	75.9	26.5	12.3	1,646
Wealth quintile						
Lowest	5.8	3.1	27.1	0.5	69.3	1,681

Second	8.2	4.1	42.9	0.8	53.8	1,947
Middle	14.3	9.0	56.7	3.1	39.3	1,997
Fourth	21.4	17.0	70.1	6.4	23.6	2,112
Highest	37.8	71.4	80.2	27.0	6.4	2,403
Total	18.8	23.6	57.5	8.6	36.0	10,139

Module 5 Post-Test

1. Which of the following is NOT a type of table found in the DHS?

- a. Percentages from multiple responses
- b. Medians
- c. Rates
- d. Logistic Regression

2. Match the term to its definition

_____ National coverage

_____ Probability sampling method

_____ Separate household listing

_____ Sampling frame

_____ Clusters

_____ Stratification

- a. A numbered list of every house in a cluster is created before final sampling.
- b. Any method that uses some form of random selection.
- c. Ideally, a complete list of the entire population from which to draw a sample.
- d. DHS surveys cover the entire country.
- e. This process groups members of the population into comparatively homogeneous subgroups (for example, urban and rural, or by geographic region) before sampling.
- f. During the first stage of sampling, a group of areas selected from the entire sampling frame

(Turn over for more questions)

Questions 3 to 8 refer to the table on pages 3-4:

3. What information is presented in the columns? Rows?

4. What is the population covered in this table?

5. What is the most common form of media that women in Tanzania are exposed to? _____

6. What percent of women age 35-39 watches television at least once a week? _____

7. How does exposure to media vary by education? By wealth?

8. What conclusions for programs can we draw from this table?

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	All three media at least once a week	No media at least once a week	Number
Age						
15-19	26.3	31.8	60.3	12.4	29.9	2,172
20-24	19.0	28.4	58.7	9.6	33.1	1,909
25-29	15.2	22.2	56.8	6.7	37.2	1,668
30-34	19.4	22.0	59.6	8.1	35.0	1,422
35-39	13.2	15.5	54.0	5.6	43.0	1,290
40-44	17.0	18.0	57.0	8.4	37.6	938
45-49	14.8	14.0	50.4	5.5	46.1	740
Residence						
Urban	34.4	57.6	72.7	22.5	14.7	2,892
Rural	12.5	10.0	51.5	3.0	44.5	7,247
Mainland/Zanzibar						
Mainland	18.9	23.1	57.1	8.6	36.4	9,813
Urban	35.0	57.4	72.6	22.7	14.7	2,758
Rural	12.6	9.7	51.1	3.0	44.9	7,055
Zanzibar	15.0	37.2	69.7	8.9	22.7	326
Unguja	16.8	46.0	76.4	11.9	16.8	212
Pemba	11.5	21.0	57.4	3.5	33.8	115
Zone						
Western	10.4	16.8	53.4	3.2	40.3	1,728
Northern	15.7	25.8	59.4	8.3	34.8	1,530
Central	15.1	6.7	48.9	3.4	47.2	812
Southern Highlands	25.9	21.8	63.7	10.9	30.1	1,370
Lake	11.7	16.3	47.1	4.3	47.6	1,809
Eastern	36.9	50.1	72.4	22.6	16.2	1,608
Southern	15.8	13.5	51.2	4.3	44.7	955
Region						
Dodoma	11.6	4.9	42.9	1.8	53.8	495
Arusha	21.4	25.2	59.0	10.3	35.7	401
Kilimanjaro	17.8	33.8	72.8	10.2	18.8	411
Tanga	11.8	26.8	55.3	7.3	39.2	498
Morogoro	27.8	25.2	68.1	12.9	27.0	481
Pwani	23.0	23.2	75.4	11.3	22.4	261
Dar es Salaam	46.1	72.0	73.9	31.4	8.4	866
Lindi	15.9	8.5	49.6	3.8	42.9	198
Mtwara	20.3	13.3	48.3	4.4	46.8	407
Ruvuma	10.7	16.5	55.5	4.4	43.1	350
Iringa	13.3	19.7	66.3	6.5	32.0	490
Mbeya	35.7	28.5	66.1	17.0	25.4	623
Singida	20.6	9.5	58.3	5.9	37.0	317
Tabora	8.8	17.3	51.2	2.8	44.2	447
Rukwa	26.1	9.6	52.9	4.3	37.9	257
Kigoma	17.0	18.4	50.9	4.3	37.6	462
Shinyanga	7.5	15.6	55.9	2.8	39.6	819
Kagera	10.4	19.3	57.8	3.6	35.5	590
Mwanza	13.7	16.9	41.1	5.7	54.4	844
Mara	9.6	10.5	43.5	2.3	51.6	376
Manyara	10.1	9.1	44.1	3.0	53.5	220
Unguja North	5.1	11.2	68.1	1.9	30.0	50
Unguja South	17.4	33.1	89.6	5.6	8.6	30
Town West	21.3	62.4	76.6	17.2	13.6	131
Pemba North	6.8	13.6	53.0	1.6	41.4	56
Pemba South	15.9	28.1	61.5	5.3	26.6	59
Education						
No education	0.6	5.6	35.6	0.1	62.3	1,940
Primary incomplete	10.6	12.0	50.3	2.6	43.8	1,482
Primary complete	20.6	23.1	62.1	7.8	31.3	5,071
Secondary+	42.1	56.5	75.9	26.5	12.3	1,646
Wealth quintile						
Lowest	5.8	3.1	27.1	0.5	69.3	1,681

Second	8.2	4.1	42.9	0.8	53.8	1,947
Middle	14.3	9.0	56.7	3.1	39.3	1,997
Fourth	21.4	17.0	70.1	6.4	23.6	2,112
Highest	37.8	71.4	80.2	27.0	6.4	2,403
Total	18.8	23.6	57.5	8.6	36.0	10,139

Module 5 Answer Key

1. Which of the following is NOT a type of table found in the DHS?

- a. Percentages from multiple responses
- b. Medians
- c. Rates
- d. **Logistic Regression**

2. Match the term to its definition

D National coverage

B Probability sampling method

A Separate household listing

C Sampling frame

F Clusters

E Stratification

- a. A numbered list of every house in a cluster is created before final sampling.
- b. Any method that uses some form of random selection.
- c. Ideally, a complete list of the entire population from which to draw a sample.
- d. DHS surveys cover the entire country.
- e. This process groups members of the population into comparatively homogeneous subgroups (for example, urban and rural, or by geographic region) before sampling.
- f. During the first stage of sampling, a group of areas selected from the entire sampling frame

(Turn over for more questions)

Questions 3 to 8 refer to the table on pages 3-4:

3. What information is presented in the columns? Rows?

Columns are type of media exposure. Rows are background characteristics.

4. What is the population covered in this table?

Women age 15-49 who are exposed to specific media

5. What is the most common form of media that women in Tanzania are exposed to?

Radio

6. What percent of women age 35-39 watches television at least once a week?

16%

7. How does exposure to media vary by education? By wealth?

Exposure to all forms of media increases with both increases in education and wealth.

8. What conclusions for programs can we draw from this table?

Radio is the type of media that women are most frequently exposed to, so it would be a good choice for a large national education campaign. However, about seven in ten women in the lowest wealth quintile (69%) and 62% of women with no education are not exposed to media on a weekly basis.

Table 3.4.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Tanzania 2010

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	All three media at least once a week	No media at least once a week	Number
Age						
15-19	26.3	31.8	60.3	12.4	29.9	2,172
20-24	19.0	28.4	58.7	9.6	33.1	1,909
25-29	15.2	22.2	56.8	6.7	37.2	1,668
30-34	19.4	22.0	59.6	8.1	35.0	1,422
35-39	13.2	15.5	54.0	5.6	43.0	1,290
40-44	17.0	18.0	57.0	8.4	37.6	938
45-49	14.8	14.0	50.4	5.5	46.1	740
Residence						
Urban	34.4	57.6	72.7	22.5	14.7	2,892
Rural	12.5	10.0	51.5	3.0	44.5	7,247
Mainland/Zanzibar						
Mainland	18.9	23.1	57.1	8.6	36.4	9,813
Urban	35.0	57.4	72.6	22.7	14.7	2,758
Rural	12.6	9.7	51.1	3.0	44.9	7,055
Zanzibar	15.0	37.2	69.7	8.9	22.7	326
Unguja	16.8	46.0	76.4	11.9	16.8	212
Pemba	11.5	21.0	57.4	3.5	33.8	115
Zone						
Western	10.4	16.8	53.4	3.2	40.3	1,728
Northern	15.7	25.8	59.4	8.3	34.8	1,530
Central	15.1	6.7	48.9	3.4	47.2	812
Southern Highlands	25.9	21.8	63.7	10.9	30.1	1,370
Lake	11.7	16.3	47.1	4.3	47.6	1,809
Eastern	36.9	50.1	72.4	22.6	16.2	1,608
Southern	15.8	13.5	51.2	4.3	44.7	955
Region						
Dodoma	11.6	4.9	42.9	1.8	53.8	495
Arusha	21.4	25.2	59.0	10.3	35.7	401
Kilimanjaro	17.8	33.8	72.8	10.2	18.8	411
Tanga	11.8	26.8	55.3	7.3	39.2	498
Morogoro	27.8	25.2	68.1	12.9	27.0	481
Pwani	23.0	23.2	75.4	11.3	22.4	261
Dar es Salaam	46.1	72.0	73.9	31.4	8.4	866
Lindi	15.9	8.5	49.6	3.8	42.9	198
Mtwara	20.3	13.3	48.3	4.4	46.8	407
Ruvuma	10.7	16.5	55.5	4.4	43.1	350
Iringa	13.3	19.7	66.3	6.5	32.0	490
Mbeya	35.7	28.5	66.1	17.0	25.4	623
Singida	20.6	9.5	58.3	5.9	37.0	317
Tabora	8.8	17.3	51.2	2.8	44.2	447
Rukwa	26.1	9.6	52.9	4.3	37.9	257
Kigoma	17.0	18.4	50.9	4.3	37.6	462
Shinyanga	7.5	15.6	55.9	2.8	39.6	819
Kagera	10.4	19.3	57.8	3.6	35.5	590
Mwanza	13.7	16.9	41.1	5.7	54.4	844
Mara	9.6	10.5	43.5	2.3	51.6	376
Manyara	10.1	9.1	44.1	3.0	53.5	220
Unguja North	5.1	11.2	68.1	1.9	30.0	50
Unguja South	17.4	33.1	89.6	5.6	8.6	30
Town West	21.3	62.4	76.6	17.2	13.6	131
Pemba North	6.8	13.6	53.0	1.6	41.4	56
Pemba South	15.9	28.1	61.5	5.3	26.6	59
Education						
No education	0.6	5.6	35.6	0.1	62.3	1,940
Primary incomplete	10.6	12.0	50.3	2.6	43.8	1,482
Primary complete	20.6	23.1	62.1	7.8	31.3	5,071
Secondary+	42.1	56.5	75.9	26.5	12.3	1,646
Wealth quintile						
Lowest	5.8	3.1	27.1	0.5	69.3	1,681

Second	8.2	4.1	42.9	0.8	53.8	1,947
Middle	14.3	9.0	56.7	3.1	39.3	1,997
Fourth	21.4	17.0	70.1	6.4	23.6	2,112
Highest	37.8	71.4	80.2	27.0	6.4	2,403
Total	18.8	23.6	57.5	8.6	36.0	10,139