Reading and Understanding Tables from the 2014 Egypt Demographic and Health Survey (EDHS)

Statistical tables can look intimidating at first glance. This flyer suggests ways to read and understand tables from the 2014 Egypt Demographic and Health Survey report.

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Example 1: Exposure to Broadcast and Print Media
A Question Asked of All Survey Respondents

Table 3.4 Exposure to broadcast and print media

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Percentage of ever-married women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Egypt 2014

Background characteristic 3	2 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 ever-married women
Age						
15-19	2.5	96.5	11.4	0.6	3.0	764
20-24	3.4	97.2	13.6	0.9	2.2	3,055
25-29	5.6	96.8	16.2	2.5	2.6	4,753
30-34	6.0	96.6	16.8	2.3	2.8	4,127
35-39	6.4	96.4	16.0	2.6	3.0	3,495
40-44	7.4	96.9	19.0	3.0	2.5	2,864
45-49	6.8	95.7	19.3	3.3	3.6	2,705
Urban-rural residence						
Urban	9.5	97.2	15.1	3.9	2.3	7,623
Rural	3.8	96.3	17.2	1.5	3.0	14,139
Place of residence						
Urban Governorates	12.3	98.2	16.1	5.5	1.4	2,774
Lower Egypt	6.2	96.6	23.2	2.6	2.5	10,664
Urban	10.1	95.8	21.0	4.1	3.3	2,319
Rural	5.1	96.8	23.8	2.2	2.3	8,346
Upper Egypt	3.1	96.1	8.0	1.0	3.6	8,130
Urban	5.7	97.2	8.7	1.9	2.5	2,421
Rural	2.0	95.6	7.7	0.5	4.0	5,708
Frontier Governorates[1]	4.6	96.1	6.8	1.2	3.5	194
Education						
No education	0.2	95.1	12.1	0.1	4.5	5,232
Some primary	1.1	95.7	15.0	0.3	3.7	1,334
Primary complete/some secondary	3.3	97.2	13.6	1.0	2.4	3,796
Secondary complete/higher	9.7	97.2	19.7	4.1	2.0	11,400
Wealth quintile						
Lowest	1.7	93.8	13.3	0.6	5.4	3,887
Second	2.7	96.8	13.5	0.6	2.8	4,277
Middle	4.3	96.9	19.5	1.8	2.2	4,839
Fourth	6.2	97.3	16.6	2.6	2.2	4,542
Highest	13.9	97.9	18.9	6.0	1.6	4,217
Total 4	5.8	96.6	16.5	2.3	2.8	21,762

5

[1] Does not include North and South Sinai governorates

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 ever-married women age 15-49 and their access to different types of media. All survey respondents were asked these questions.

Step 2: Scan the column headings—highlighted in green in the table above. They describe how the information is categorized. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three media, while the fifth column is women who do not access any of the three types of media at least once a week. The last column lists the number of women interviewed in the survey.

Step 3: Scan the row headings—the first vertical column highlighted in blue in the table above. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents ever-married women's access to media by age, urban-rural residence, place of residence, educational level, and wealth quintile. Most of the tables in the EDHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in red. These percentages represent the totals of all ever-married women age 15-49 and their access to different types of media. In this case, 5.8% of ever-married women age 15-49 read a newspaper at least once a week, 96.6% watch television weekly, and 16.5% listen to the radio weekly.

Step 5: To find out what percentage of married women with secondary education complete or higher education access all three media weekly, draw two imaginary lines, as shown on the table. This shows that 4.1% of ever-married women age 15-49 with secondary education complete or higher education access all three types of media weekly.

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

a) What percentage of ever-married women in Egypt do not access any of the three media at least once a week?

b) What age group of ever-married women are most likely to listen to the radio weekly?

c) Compare ever-married women in urban areas to ever-married women in rural areas—which group is more likely to read a newspaper weekly?

a) 2.8% of ever-married women do not access any of the three media weekly b) Ever-married women age 40-49—19.3%
c) Ever-married women in urban areas—9.5% read a newspaper weekly, compared to 3.8% of ever-married women in rural areas.

Example 2: Caesarean Deliveries
Comparing and Understanding Patterns

Step 1: Read the title and subtitle. In this case, the table presents live births in the five-year period before the survey that were delivered by caesarean section.

Step 2: Identify the information presented in the table—highlighted in green in the table to the right. In this table there is only one indicator: percentage of births that were delivered by caesarean section.

Step 3: Look at the row headings (highlighted in blue) to identify the background characteristics. In this table, caesarean delivery is presented by place of delivery, mother's age at birth, birth order, urban-rural residence, place of residence, educational level, work status and wealth quintile.

Step 4: Look at the bottom of the first column to determine the total percentage of births delivered by caesarean section: 51.8% of deliveries in Egypt in the five-year period before the survey were delivered by caesarean section.

Step 5:

Just over half of births in Egypt are delivered by caesarean section, but a closer look at the table shows how births by caesarean section varies throughout Egypt. To gain a better understanding of differences in delivery by caesarean section consider the following questions:

- Is delivery by caesarean section more common in urban areas or rural areas? Delivery by caesarean section is more common in urban areas (60.1%) than in rural areas (48.1%).
- Now, compare delivery by caesarean section among women working for cash and those not working for cash. Delivery by caesarean section is slightly higher among women working for cash (55.9%) than among women not working for cash (51.3%). However, the difference is very small between these two groups.
- What are the lowest and the highest percentages (range) of delivery by caesarean section within the places of residence? Just 35.9% of births in Rural Upper Egypt are delivered by caesarean section, compared to a high of 70.6% in Urban Lower Egypt.
- Look for patterns: Does delivery by caesarean section vary by background characteristics? For example, is there a clear pattern of delivery by caesarean section by mother's age at birth? By birth order? By level of education? By wealth quintile?
- Answers: Women under age 20 are least likely to deliver by caesarean section (45.3%) and women age 35-49 are most likely to deliver by caesarean section (52.7%), but the differences are not large. Delivery by caesarean section decreases as birth order increases. In other words, first-born children are more likely to be delivered by caesarean section (60%) than children who are born sixth or later (33%). There are also clear patterns by women's level of education and household wealth quintile. Delivery by caesarean section increases as women's level education increases; 37% of deliveries to women with no education are caesarean sections, compared to 58.5% of deliveries to women with secondary complete or higher education. Similarly, delivery by caesarean section increases with household wealth; caesarean deliveries are nearly twice as high among women living in households in the highest wealth quintile (67.2%) than among women in households in the lowest wealth quintile (38%).

Table 9.8 Caesarean deliveries **1**

Percentage of live births in the five-year period before the survey that were delivered by caesarean section, according to selected background characteristics, Egypt 2014

Background characteristic **3**	**2** Caesarean delivery	Number of births
Place of delivery		
Public health facility	45.3	4,007
Private health facility	65.7	9,576
At home/other	na	2,085
Mother's age at birth		
<20	45.7	1,468
20-34	52.4	12,868
35-49	52.7	1,332
Birth order		
1	60.0	4,962
2-3	51.9	7,731
4-5	38.8	2,452
6+	33.0	524
Urban-rural residence		
Urban	60.1	4,845
Rural	48.1	10,823
Place of residence		
Urban Governorates	62.0	1,599
Lower Egypt	60.3	7,431
Urban	70.6	1,430
Rural	57.8	6,001
Upper Egypt	39.7	6,484
Urban	50.2	1,733
Rural	35.9	4,751
Frontier Governorates[1]	41.1	154
Education		
No education	37.0	2,798
Some primary	43.5	734
Primary complete/some secondary	46.4	2,847
Secondary complete/ higher	58.5	9,289
Work status		
Working for cash	55.9	1,681
Not working for cash	51.3	13,987
Wealth quintile		
Lowest	38.0	2,820
Second	41.8	3,074
Middle	52.9	3,906
Fourth	59.4	3,279
Highest	67.2	2,588
Total **4**	51.8	15,668

na = Not applicable
[1] Does not include North or South Sinai governorates

Example 3: Prevalence and Treatment of Fever
A Question Asked of a Subgroup of Survey Respondents

Table 11.8 Prevalence and treatment of fever

Among children under age five, the percentage who had a fever in the two weeks preceding the survey and, among children with fever, 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, Egypt 2014

1

Background characteristic	Among children under age five: Percentage with fever	Among children under age five: Number of children	Among children under age five with fever: Percentage for whom advice or treatment was sought from a health facility or provider[1]	Among children under age five with fever: Percentage who took antibiotic drugs	Among children under age five with fever: Number of children
Age in months					
<6	26.2	1,982	69.0	64.3	520
6-11	26.5	2,434	69.6	68.3	644
12-23	25.5	4,040	68.2	66.0	1,029
24-35	25.8	3,052	68.7	62.4	788
36-47	26.0	2,257	65.9	66.1	587
48-59	26.5	1,528	64.7	63.5	406
Sex					
Male	26.3	8,038	71.3	67.5	2,111
Female	25.7	7,255	64.1	62.6	1,862
Urban-rural residence					
Urban	23.2	4,755	67.6	64.4	1,105
Rural	27.2	10,538	68.1	65.5	2,868
Place of residence					
Urban Governorates	19.3	1,571	69.7	64.1	304
Lower Egypt	26.5	7,278	71.8	71.2	1,929
Urban	26.8	1,408	69.8	65.8	378
Rural	26.4	5,870	72.2	72.5	1,551
Upper Egypt	27.3	6,292	63.5	58.8	1,717
Urban	24.0	1,693	64.2	63.8	406
Rural	28.5	4,599	63.2	57.3	1,311
Frontier Governorates[2]	15.5	151	57.5	50.6	24
Mother's education					
No education	28.1	2,710	65.1	60.9	762
Some primary	27.7	716	61.3	53.3	198
Primary complete/some secondary	28.2	2,760	66.2	63.5	779
Secondary complete/ higher	24.5	9,107	70.1	68.3	2,234
Work status					
Working for cash	24.3	1,646	66.8	72.6	400
Not working for cash	26.2	13,647	68.1	64.4	3,573
Wealth quintile					
Lowest	30.3	2,732	61.6	58.0	829
Second	26.5	2,994	68.4	68.0	794
Middle	26.2	3,808	70.7	66.7	998
Fourth	26.4	3,207	72.8	68.6	847
Highest	19.8	2,552	63.9	64.1	506
Total	26.0 3	15,293	67.9	65.2	3,973 3

2

a

b

[1] Refers to first source consulted and excludes pharmacy or nonmedical providers
[2] Does not include North and South Sinai governorates

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: all children under age five (a) and children under age five who had fever in the two weeks before the survey (b).

Step 2: Identify the two panels. First identify the columns that refer to all children under five (a), and then isolate the columns that refer only to those children who had fever in the two weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under five had fever in the 2 weeks before the survey? It's 26%. Now look at the second panel. How many children are there who had fever in the 2 weeks before the survey? It's 3,973 or 26% of the 15,293 children under age five (with rounding). The second panel is a subset of the first panel.

Step 4: When reading 2014 EDHS tables, be sure to identify which population the table is discussing. For example, look at the first column in panel b. It is NOT correct to say that advice or treatment from a health facility or provider was sought for 67.9% of children under age five. It IS correct to say that advice or treatment from a health facility or provider was sought for 67.9% of children under age five with fever in the two weeks before the survey.

Example 4: Understanding Sampling Weights in EDHS Tables

A sample is a group of people who have been selected for a survey. In EDHS surveys, the sample is designed to represent the national population of ever-married women age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a minimum sample size per area (e.g., about 800 women per area). For the 2014 EDHS, the survey sample is representative of the country as a whole and for six major subdivisions (Urban Governorates, urban Lower Egypt, rural Lower Egypt, urban Upper Egypt, rural Upper Egypt, and the Frontier Governorates). The sample was also designed to allow for separate estimates for many indicators for 25 of Egypt's 27 governorates. At the time of the survey, data could not be collected in North and South Sinai governorates. Because the populations of those governorates comprise less than 1% of Egypt's total population, their exclusion does not affect national estimates. However, because they comprise two of the five Frontier Governorates, information that is presented in the 2014 EDHS report for the Frontier Governorates is not comparable to results in prior EDHS surveys in which all five Frontier Governorates were surveyed.

Table 3.1 Background characteristics of respondents

Percent distribution of ever-married women age 15-49 by selected background characteristics, Egypt 2014

Background characteristic	Weighted percent	Weighted number	Unweighted number
Place of residence			
Urban Governorates	12.7	2,774	3,667
Lower Egypt	49.0	10,664	8,384
Urban	10.7	2,319	2,492
Rural	38.3	8,346	5,892
Upper Egypt	37.4	8,130	8,376
Urban	11.1	2,421	2,593
Rural	26.2	5,708	5,783
Frontier Governorates[1]	0.9	194	1,335
Total 15-49	100.0	21,762	21,762

[1]Does not include North and South Sinai governorates

To generate statistics that are representative of the country as a whole and the subdivisions, the number of women surveyed in each subdivision should contribute to the size of the total (national) sample in proportion to size of the subdivision. However, if some subdivisions have small populations, then a sample allocated in proportion to each subdivision's population may not include sufficient women from each subdivision for analysis. To solve this problem, subdivisions with small populations are oversampled. For example, let's say that you have enough money to interview 21,762 women and want to produce results that are representative of Egypt as a whole and its subdivisions (as in Table 3.1). However, the total population of Egypt is not evenly distributed among the subdivisions: some subdivisions, such as Rural Lower Egypt, are heavily populated while others, such as the Urban Governorates are not. Thus, the Urban Governorates must be oversampled.

A sampling statistician determines how many women should be interviewed in each subdivision in order to get reliable statistics. The blue column (1) in the table at the right shows the actual number of women interviewed in each subdivision. Within the subdivisions, the number of women interviewed ranges from 1,335 in the Frontier Governorates to 5,892 in Rural Lower Egypt. The number of interviews is sufficient to get reliable results in each subdivision.

With this distribution of interviews, some subdivisions are overrepresented and some subdivisions are underrepresented. For example, the population in the Urban Governorates is about 13% of the population in Egypt, while Rural Lower Egypt is about 38% of the population in Egypt. But as the blue column shows, the number of women interviewed in the Urban Governorates accounts for about 17% of the total sample of women interviewed (3,667/21,762) and the number of women interviewed in Rural Lower Egypt accounts for 27% of the total sample of women interviewed (5,892/21,762). This unweighted distribution of Egyptian women does not accurately represent the population.

In order to get statistics that are representative of Egypt, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the country. Women from a small subdivision, like the Urban Governorates, should only contribute a small amount to the national total. Women from a large subdivision, like Rural Lower Egypt, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" which is used to adjust the number of women from each subdivision so that each subdivision's contribution to the total is proportional

to the actual population of the subdivision. The numbers in the purple column (2) represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at subdivision level. The total national sample size of 21,762 women has not changed after weighting, but the distribution of the women in the subdivisions has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the red column (3) to the actual population distribution of Egypt, you would see that women in each subdivision are contributing to the total sample with the same weight that they contribute to the population of Egypt. The weighted number of women in the survey now accurately represents the proportion of women who live in Rural Lower Egypt and the proportion of women who live in the Urban Governorates.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and subdivisional levels. In general, only the weighted numbers are shown in each of the EDHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed. Additionally, tables use parentheses and asterisks to warn you if there are too few unweighted cases in any category. For example, look at Table 12.4 (below). All of the data in the row that shows non-breastfeeding children age 2-3 months (highlighted in yellow) is in parentheses. The footnote at the bottom of the table (highlighted in blue) explains that this data is based on 25-49 unweighted cases. Readers should use this number with caution—it may not be accurate. Now look at the row for non-breastfeeding children age 0-1 month (highlighted in purple). There are no numbers in this cell—only asterisks. Again, the footnote (highlighted in blue) explains that there are less than 25 unweighted cases and this data has been suppressed. The subgroup is too small, and therefore the data are not reliable.

Table 12.4 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under two years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Egypt 2014

	Liquids			Solid or semi-solid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Number of children
BREASTFEEDING CHILDREN														
0-1	9.4	1.7	11.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	383
2-3	14.6	6.3	14.2	0.0	0.6	0.3	0.4	0.6	0.2	0.3	0.6	2.4	4.2	502
4-5	11.8	7.1	28.8	6.6	11.4	3.4	4.1	6.1	0.8	1.7	1.8	23.6	35.6	476
6-8	6.8	13.3	46.5	10.9	40.4	13.1	20.2	28.4	8.5	8.8	16.0	50.1	74.9	873
9-11	3.4	16.5	59.8	6.2	60.8	22.0	35.6	43.0	16.9	24.9	24.1	59.1	90.8	723
12-17	1.7	20.2	70.8	3.8	78.5	32.3	43.9	54.0	26.0	39.1	33.3	58.5	94.4	1,087
18-23	0.8	24.4	73.1	1.7	84.8	34.5	56.3	62.5	35.7	47.3	39.7	58.7	97.9	400
6-23	3.4	18.0	61.6	6.1	64.4	24.8	36.9	45.3	20.2	28.3	27.1	56.3	88.5	3,083
Total	6.1	14.1	48.4	4.9	45.9	17.6	26.0	32.1	14.1	19.8	19.0	41.9	65.7	4,445
NON-BREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	13
2-3	(60.1)	(24.0)	(15.9)	(9.8)	(9.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(10.5)	(10.5)	30
4-5	67.7	20.1	25.0	11.2	16.1	3.5	4.5	11.1	2.6	6.3	10.6	21.4	42.9	55
6-8	45.2	37.5	42.3	20.5	36.4	7.2	20.9	18.6	5.4	10.5	12.4	51.0	77.9	87
9-11	31.3	46.8	65.7	10.8	65.3	21.2	28.6	54.9	20.9	23.4	31.3	63.2	87.6	113
12-17	7.5	34.2	76.7	7.5	85.4	38.0	53.0	59.3	26.7	49.9	33.9	62.4	97.5	413
18-23	0.9	34.1	81.0	2.2	89.8	48.0	61.9	63.8	34.5	58.3	41.0	64.8	99.6	1,047
6-23	6.9	35.2	76.9	5.1	84.2	41.5	55.3	59.7	30.1	51.3	37.1	63.3	97.1	1,661
Total	10.1	34.2	73.7	5.3	80.2	39.3	52.3	56.7	28.5	48.7	35.3	60.7	93.2	1,759

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Other milk includes fresh, tinned and powdered cow or other animal milk.

[2] Doesn't include plain water

[3] Includes fortified baby food

[4] Includes pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside, ripe mangoes, papayas, and apricots.