

Reading and Understanding NHFS Tables: 2015 Nepal Health Facility Survey (NHFS)

Example I: Availability of Basic Client Services

Table 3.2 Availability of basic client services

Among all facilities, the percentages offering indicated basic client services and all basic client services, by background characteristics, Nepal Health Facility Survey 2015

Background characteristic	Child curative care	Child growth monitoring	Child vaccination ¹	Any modern methods of family planning ²	Antenatal care	Services for STIs	All basic client services ³	Number of facilities excluding HTCs ⁴
Facility type								
Zonal and above hospitals	100.0	85.1	84.6	88.3	96.3	100.0	80.9	6
District-level hospitals	98.7	96.1	89.5	100.0	98.7	98.7	85.5	16
Private hospitals	92.7	54.4	29.1	70.1	86.4	93.0	24.5	70
PHCCs	100.0	96.1	95.2	100.0	100.0	97.6	90.8	42
HPs	100.0	96.7	91.7	100.0	98.8	70.7	64.4	775
UHCs	98.1	76.5	81.8	100.0	96.8	51.0	33.4	32
Managing authority								
Public	99.9	95.8	91.4	99.9	98.7	72.0	65.0	871
Private	92.7	54.4	29.1	70.1	86.4	93.0	24.5	70
Ecological region								
Mountain	99.8	98.6	88.6	100.0	100.0	62.3	53.0	118
Hill	99.8	96.5	89.3	98.5	99.5	79.5	70.0	482
Terai	98.6	85.4	82.7	95.8	94.7	69.1	53.8	340
Earthquake-affected districts (14)	99.4	93.9	89.6	96.6	99.4	78.0	68.2	195
National average	99.4	92.7	86.8	97.7	97.8	73.5	62.0	940

¹ Facility routinely provides BCG, pentavalent, polio, and measles-rubella (MR) vaccinations at the facility.
² Facility provides, prescribes, or counsels clients on any of the following methods of family planning: combined oral contraceptive pills, progestin-only injectables (Depo), implants, intrauterine contraceptive devices (IUCDs), the male condom, male sterilization, or female sterilization.
³ Includes outpatient curative care for sick children, child growth monitoring, child vaccination services, any modern method of family planning, antenatal care, and services for STIs. These services also constitute the basic health care package of the Nepal Health Sector Strategy (NHSS).
⁴ This denominator applies only to the indicator "services for STIs." For the "child curative care," "child vaccination," and "antenatal care" indicators, Sukra Raj and Bir hospitals were also excluded from the denominator; for the indicator "child growth monitoring" services, Sukra Raj hospital was excluded from the denominator, and for the "any modern methods of family planning" indicator, Sukra Raj and Kanti hospitals were also excluded from the denominator.

Step 1: Read the title and subtitle. They provide a brief description of the information contained in the table. In this case, the table is about the provision of basic client services in health facilities in Nepal from the 2015 Nepal Health Facility Survey (NHFS).

Step 2: Scan the column headings—highlighted in green in the table above. They describe how the information is categorized. In this table, there are eight columns. Each column represents one basic client service—child curative care, child growth monitoring, child vaccination, any modern methods of family planning, antenatal care, and services for sexually transmitted infections (STIs). The seventh column shows what percent of facilities have ALL six basic client services. Note that the very last column, in gray, lists the number of facilities in each category excluding HIV testing and counseling (HTCs) sites. These numbers are the denominators, that is, the total number of facilities surveyed for each topic and each background characteristic. In this case, 940 facilities were surveyed. Of these 940 surveyed facilities, 6 are zonal and above hospitals, 16 are district-level hospitals, 70 are private hospitals, 42 are primary health care centers (PHCCs), 775 are health posts (HPs), and 32 are urban health centers (UHCs).

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 background characteristics. In this case, the table presents availability of basic client services by facility type, managing authority, ecological region, and earthquake-affected districts. Most of the tables in the 2015 NHFS will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in red. These figures represent the total percentages. That is, the percent of facilities that offer each of the six services, and the percent that offer ALL six services. This table shows that services for child curative care (99.4%) are widely available in Nepal. Overall, 62% of all facilities provide ALL six basic client services.

Step 5: To find out what percentage of health facilities in Terai ecological region offer child vaccination services, draw two imaginary lines, as shown on the table. This shows that 82.7% of health facilities in Terai region offer child vaccination services.

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

- Are services for any modern methods of family planning more likely to be offered by public or private facilities?
- In which ecological region are services for STIs least likely available?
- Which facility type is least likely to offer all six basic client services?

(a) Public—99.9% of public facilities offer services for any modern methods of family planning compared to 70.1% of private facilities.
 (b) Mountain ecological region—62.3%.
 (c) Private hospitals—24.5%.

Example 2: Availability of Antenatal Care (ANC) Services (Based on all health facilities and a subset of health facilities)

Table 6.1 Availability of antenatal care services						
Among all facilities, the percentage offering antenatal care (ANC) services and, among facilities offering ANC services, the percentage offering the service on the indicated number of days per week, by background characteristics, Nepal Health Facility Survey 2015						
Background characteristic	Percentage of facilities that offer ANC	Number of facilities	Percentage of facilities offering ANC where ANC services are offered the indicated number of days per week ¹			Number of facilities offering ANC services
			1-2 days per week	3-4 days per week	5 or more days per week	
Facility type						
Zonal and above hospitals	100.0	6	25.7	11.0	63.3	6
District-level hospitals	96.1	16	34.2	0.0	64.4	15
Private hospitals	86.4	70	3.9	0.0	96.1	60
PHCCs	100.0	42	19.4	1.0	78.2	42
HPs	98.8	775	12.0	0.2	84.8	765
UHCs	96.8	32	0.0	0.0	100.0	31
Managing authority						
Public	98.7	870	12.4	0.3	84.5	859
Private	86.4	70	3.9	0.0	96.1	60
Ecological region						
Mountain	100.0	118	5.6	0.0	91.7	118
Hill	99.4	482	7.4	0.3	89.6	479
Terai	94.7	340	20.6	0.3	76.6	322
Earthquake-affected districts (14)	99.5	194	5.9	0.7	92.6	193
National average	97.8	940	11.8	0.2	85.3	919

Note: Stand-alone HTC sites and Sukraaj and Kanti hospitals are excluded from this and other tables in this chapter.
¹ Some facilities offer ANC services less often than one day per week, and so the total percentage may be less than 100 percent.

Step 1: Read the title and subtitle. In this case, the table is about two separate groups: a) all health facilities, and b) facilities that offer antenatal care (ANC) services.

Step 2: Identify the two panels. First, identify the columns that refer to all facilities (a). Then, isolate the columns that refer to facilities that offer ANC services (b).

Step 3: Scan the row headings to identify the background characteristics. In this table, availability of ANC services is presented by facility type, managing authority, ecological region, and earthquake-affected districts.

Step 4: Find the national average and denominators for each subgroup in the table. What percent of health facilities in Nepal offer ANC services? It's 97.8%. Now look at second panel. How many health facilities offer ANC services in Nepal? It's 919, or 97.8% of the 940 health facilities in the survey sample. The second panel is a subset of the first panel.

When reading and using the 2015 NHFS tables, be sure to identify which group of facilities is being displayed. For example, look at the first column in panel b. It is NOT correct to say that 11.8% of health facilities offer ANC services 1-2 days per week. It IS correct to say that 11.8% of facilities offering ANC services offer these services 1-2 days per week.

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

- What type of facility is most likely to offer ANC services?
- What percentage of health facilities offering ANC services offer ANC services 3-4 days per week?
- How many public facilities offer ANC services? (Hint: the gray column shows the denominators, or the number of health facilities in the sample or subsample.)
- What percentage of health posts (HPs) offering ANC services offer ANC services 5 or more days per week?
- In which ecological region are ANC services least likely to be provided five or more days per week by facilities offering ANC services?

(a) Both zonal and above hospitals and PHCCs are most likely to offer ANC services (both 100%).
 (b) 0.2% of facilities offering ANC services offer these services 3-4 days per week.
 (c) 859 public facilities offer ANC services.
 (d) 84.8% of HPs offering ANC services offer these services 5 or more days per week.
 (e) ANC services are least likely to be offered 5 or more days per week by facilities offering ANC services in Terai ecological region (76.6%).

Example 3: Observed Consultations in the 2015 NHFS

Table 5.10.1 Components of counseling and discussions during consultations for all female family planning clients

Among all female family planning clients whose consultations were observed, the percentages whose consultation included the indicated components and the indicated discussions, by facility type, Nepal Health Facility Survey 2015

3 Components of consultation	Facility type						5 National average
	Zonal and above hospitals	District-level hospitals	Private hospitals	PHCCs 2	HPs	UHCs	
Privacy and confidentiality							
Visual privacy assured	75.8	60.0	80.6	61.1	41.8	42.1	47.8
Auditory privacy assured	69.8	46.4	67.8	54.9	34.8	27.1	39.9
Confidentiality assured	4.3	8.1	3.9	7.7	7.7	1.7	7.3
All three counseling conditions on privacy and confidentiality met ¹	3.6	7.4	3.9	6.5	6.2	1.7	6.0
Discussion related to STIs and condoms							
Use of condoms to prevent STIs	0.0	0.8	0.0	0.0	0.1	0.0	0.1
Use of condoms as dual method ²	0.0	0.8	0.0	0.9	1.5	0.0	1.2
Any discussion related to STIs ³	0.0	0.8	0.0	0.9	1.6	0.0	1.3
Concerns, side effects, and individual client cards							
Concerns about methods discussed ⁴	31.4	35.8	30.2	36.5	31.6	32.4	32.4
Side effects discussed ⁵	20.2	26.3	30.2	25.8	22.3	26.9	23.2
Individual client card reviewed during consultation	54.8	74.5	46.8	74.8	66.1	54.2	66.3
Individual client card written on after consultation	94.4	92.5	91.5	91.9	80.6	79.3	83.6
Visual aid and return visit							
Visual aids were used during consultation	10.9	4.9	6.6	10.0	5.0	3.7	5.8
Return visit discussed	37.3	64.1	48.2	67.6	61.2	85.3	61.6
Number of observed female FP clients	36	62	17	81	542	29	768

¹ Visual and auditory privacy and confidentiality assured during consultation
² Use of condoms to prevent both pregnancy and sexually transmitted infections (STIs)
³ Discussed risks of STIs, using condoms to prevent STIs, or using condoms as dual method
⁴ Provider asked client about concerns with family planning method.
⁵ Method-specific side effect discussed with client, if client was provided or prescribed a method

Step 1: In the 2015 NHFS, consultations with family planning (FP) clients were observed by interviewers. We can use the same steps to read and understand tables about observed consultations. Read the title and subtitle. In this case, the table is about the components and discussions that were observed during FP client consultations.

Step 2: Scan the column headings—highlighted in green in the table above. In this case, each column represents the background characteristics of six facility types. In this example, background characteristics are presented as columns and not as rows.

Step 3: Scan the row headings—the first vertical column highlighted in blue in the table above. For this table, the rows represent the components of the consultations: privacy and confidentiality; discussion related to STIs and condoms; concerns, side effects, and individual client cards; and visual aid and return visit. These categories allow you to compare components of the consultations by facility type.

Step 4: Note that the very last row, in gray, lists the number of observed female FP clients in each category. These numbers are the denominators, that is, the total number of FP clients observed for each background characteristic. In this case, a total of 768 female FP client consultations were observed. Among the 768 consultations, 36 were performed in zonal and above hospitals, 62 in district-level hospitals, 17 in private hospitals, 81 in PHCCs, 542 in HPs, and 29 in UHCs.

Step 5: Look at the last column of the table. It represents the total percentage of each component observed during FP consultations. For example, among observed FP consultations, 47.8% took place in an area where visual privacy was assured and 1.3% had any discussion related to STIs—the risk of STIs, using condoms to prevent STIs, or using condoms as dual method.

Example 4: Understanding Sampling Weights in 2015 NHFS Tables

In the HFS, the sample is a group of facilities that have been selected from a list of all facilities in the country. The sample represents the entire population, that is, all health facilities in Nepal. Most countries want to collect data and report information that represent facilities in the entire country as well as facilities in regions or provinces.

In the case of the HFS, researchers also want to know about health facilities of different types, as well as facilities run by different managing authorities (public or private). We want the sample of district-level hospitals surveyed to resemble the actual district-level hospitals in the country, and we want the health posts (HPs) sampled to resemble all HPs. However, there are many more HPs than district-level hospitals in Nepal. If we chose only a random sample of health facilities, we will only get a few district-level hospitals, but hundreds of HPs. Just a few district-level hospitals in our sample would not be enough for any meaningful analysis.

For example, let's say that we have enough money to visit 963 facilities for a survey that should be representative of all facility types (as in the Nepal table below). In Nepal, zonal and above hospitals, district-level hospitals, private hospitals, PHCCs, HPs, UHCs, and HTC are not evenly spread out; there are many more HPs than zonal and above or district-level hospitals.

A sampling statistician can determine how many facilities of each type should be surveyed in order to get reliable statistics for the specific indicators the country is interested in. In the case of Nepal, the **blue column (1)** shows the actual number of facilities selected and interviewed in each type, ranging from 27 zonal and above hospitals to 423 HPs. The sampling statistician assures us that these are enough facilities to get reliable results for each type of facility.

But now there is a new challenge. With this distribution of facilities by type, some types are overrepresented and some types are underrepresented. For example, the unweighted column tells us that 76 district-level hospitals were surveyed, which equals 8% of all facilities in the sample (963). But in reality, district-level hospitals only comprise about 2% of all the health facilities in Nepal. On the other hand, 423 HPs were surveyed, which equals 44% of the facilities in the sample. In actuality, about 81% of health facilities in Nepal are HPs. Would our survey show the true state of health facilities in Nepal if we used this sample distribution?

In order to get statistics that are representative of the entire country, the distribution of the facilities in our sample needs to resemble the distribution of the facilities in the country. District-level hospitals, for example, should only contribute a very small amount to the total. Likewise, HPs should contribute more. The numbers of facilities of each type are weighted or adjusted so that each type's contribution to the total is proportionate to the actual distribution of health facilities in the country. The numbers in the **purple column (2)** represent the "weighted" numbers. The total sample size of 963 facilities has not changed, but the distribution of the facilities by facility type has been adjusted to represent their contribution to the total number of facilities in the country.

How do statisticians weight each category? They recalculate the categories to reflect the real distribution of facilities in the country. If you were to compare the **red column (3)** to the actual distribution of facilities in Nepal, you would see that facilities of each type surveyed are contributing to the total sample with the same weight that they contribute to the total number of facilities in the country. The weighted number of facilities in the survey now accurately represents how many facilities are HPs—81% of the facilities in Nepal—and how few facilities are district-level hospitals—only 2% of the facilities.

With sampling and weighting, it is possible to survey enough facilities to provide reliable statistics at both the national and ecological regional level, without distorting the overall distribution of facilities within the country. In general, only the weighted numbers are shown in each of the HFS tables, so don't be distressed if these numbers seem low—they may actually represent a larger number of facilities.

Note: Data from the actual, unweighted number of facilities are used for analysis. For example, even though the weighted number of PHCCs is only 42, the data collected from all 200 PHCCs is used for analysis. The only difference is that the results are weighted after analysis to represent information from PHCCs in the proportion that they exist in the country.

Table 2.3.1 Distribution of surveyed facilities, by background characteristics

Percent distribution and number of surveyed facilities, by background characteristics, Nepal Health Facility Survey 2015

Background characteristic	Weighted percent distribution of surveyed facilities	Number of facilities surveyed	
		Weighted	Unweighted
Facility type			
Zonal and above hospitals	0.6	6	27
District-level hospitals	1.6	16	76
Private hospitals	7.2	70	144
PHCCs	4.4	42	200
HPs	80.5	775	423
UHCs	3.3	32	45
Stand-alone HTCs	2.3	23	48
Managing authority			
Public	90.4	871	771
Private	9.6	92	192
Ecological region			
Mountain	12.3	118	135
Hill	51.1	492	457
Terai	36.6	353	371
Earthquake-affected districts (14)			
	20.7	200	210
National average	100.0	963	963

