

This chapter presents a descriptive summary of some demographic and socioeconomic characteristics of the population in the sampled households. Also examined are environmental conditions such as housing facilities and physical features of the dwelling units in which the population lives.

All usual residents of each sampled household, plus all visitors who slept in that household the night before the interview, were listed using the household questionnaire. Some basic information was collected for each person, including age, sex, marital status, and education. In addition, information was collected on whether each person is a usual resident of the household or a visitor, and whether the person slept in the household the night prior to the survey interview. This allows the analysis of either de jure (usual residents) or de facto (those who are physically present there at the time of the survey) populations.

2.1 HOUSEHOLD POPULATION BY AGE, SEX, AND RESIDENCE

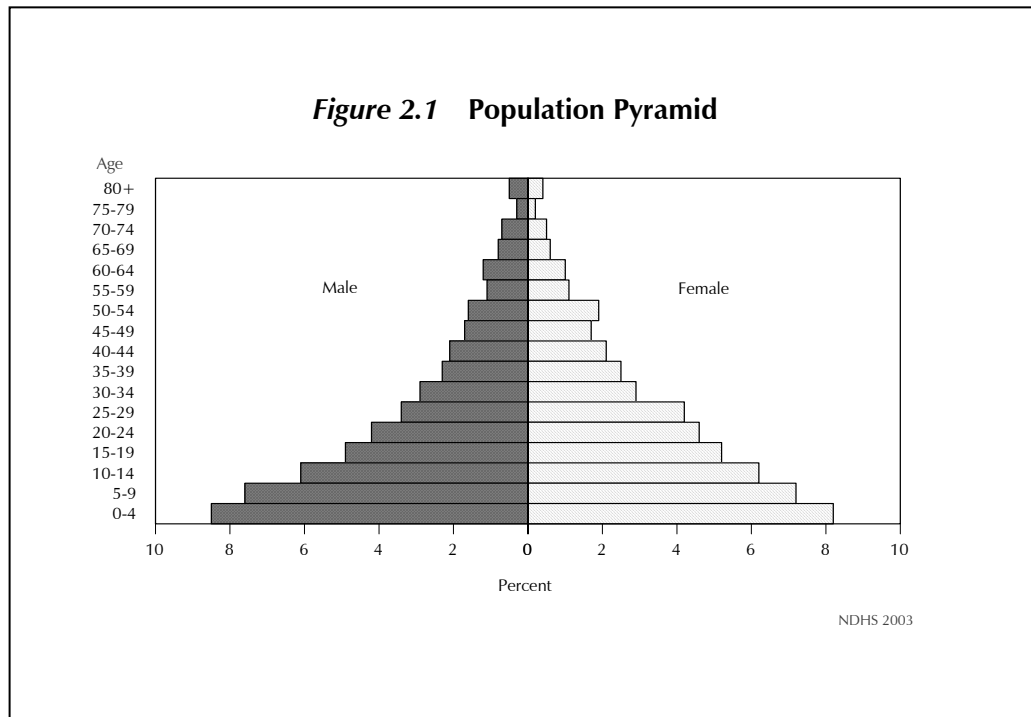
Table 2.1 shows the distribution of the de facto household population in the 2003 Nigeria Demographic and Health Survey (2003 NDHS) by five-year age groups, according to sex and urban-rural residence. The 2003 NDHS households constitute a population of 35,173 persons. The population age structure indicates the history of the population of Nigeria and also its future course (Figure 2.1). About 50 percent of the population is female, and 50 percent is male. The proportion of persons in the younger age groups is substantially larger than the proportion in the older age groups for each sex in both urban and rural areas, which reflects the young age structure of the Nigerian population and is an indication of a population with high fertility. Forty-four percent of the population is below 15 years of age and 4 percent is age 65 or older.

Table 2.1 Household population by age, sex, and residence

Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Nigeria 2003

Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	14.8	15.2	15.0	18.2	16.7	17.4	17.0	16.2	16.6
5-9	14.4	13.1	13.7	15.7	14.9	15.3	15.2	14.3	14.8
10-14	12.4	13.4	12.9	12.2	11.8	12.0	12.3	12.3	12.3
15-19	10.8	10.4	10.6	9.5	10.3	9.9	9.9	10.3	10.1
20-24	9.6	9.4	9.5	7.8	8.9	8.4	8.4	9.1	8.8
25-29	7.7	8.8	8.3	6.4	8.1	7.3	6.8	8.4	7.6
30-34	6.3	5.7	6.0	5.7	5.9	5.8	5.9	5.8	5.9
35-39	4.4	5.7	5.1	4.7	4.5	4.6	4.6	4.9	4.7
40-44	4.4	4.1	4.2	4.0	4.2	4.1	4.1	4.2	4.2
45-49	4.1	3.5	3.8	3.2	3.2	3.2	3.5	3.3	3.4
50-54	3.0	3.5	3.3	3.2	3.8	3.5	3.1	3.7	3.4
55-59	2.2	2.1	2.1	2.1	2.4	2.2	2.1	2.3	2.2
60-64	2.1	1.7	1.9	2.5	2.0	2.3	2.4	1.9	2.1
65-69	1.5	1.1	1.3	1.6	1.1	1.4	1.6	1.1	1.4
70-74	1.0	0.8	0.9	1.5	1.0	1.3	1.3	1.0	1.1
75-79	0.4	0.4	0.4	0.6	0.4	0.5	0.5	0.4	0.5
80 +	0.8	0.9	0.8	1.0	0.9	0.9	0.9	0.9	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	6,017	5,870	11,887	11,441	11,844	23,286	17,459	17,714	35,173

Figure 2.1 Population Pyramid



2.2 HOUSEHOLD COMPOSITION

Information about the composition of households by sex of the head of the household and size of the household is presented in Table 2.2. The data show that households in Nigeria are predominantly headed by men (83 percent) and less than one in five (17 percent) are headed by women. Female-headed households are more common in urban areas (19 percent) than in rural areas (15 percent). There is significant variation by region: the proportion of households headed by a female ranges from a low of 7 percent in the North East to a high of 28 percent in the South South.

The average household size in Nigeria is 5.0 persons. The household size is slightly higher in rural areas than in urban areas (5.1 versus 4.7 persons). It is also higher in the north than the south.

Table 2.2 Household composition

Percent distribution of households by sex of head of household and household size, according to residence, Nigeria 2003

Characteristic	Residence		Region						Total
	Urban	Rural	North Central	North East	North West	South East	South South	South West	
Sex of head of household									
Male	81.0	84.8	84.3	93.5	92.1	73.5	71.8	76.8	83.4
Female	19.0	15.2	15.7	6.5	7.9	26.5	28.2	23.2	16.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of usual members									
0	0.1	0.2	0.3	0.0	0.2	0.4	0.1	0.1	0.2
1	14.9	9.8	10.7	9.1	7.1	16.8	15.1	15.9	11.7
2	12.7	11.5	10.2	9.2	11.1	15.4	13.0	14.8	12.0
3	14.0	14.2	12.3	10.8	15.8	13.8	12.4	18.9	14.1
4	12.8	13.4	13.9	12.8	14.0	11.5	12.9	13.1	13.2
5	12.2	12.0	10.9	11.0	13.3	11.6	10.7	14.0	12.1
6	10.4	11.0	11.1	11.8	9.9	12.2	10.5	10.2	10.8
7	8.4	8.4	9.8	8.8	8.6	9.2	8.6	5.2	8.4
8	4.5	5.5	5.9	6.7	5.6	3.4	5.6	2.5	5.1
9+	10.0	14.0	14.9	19.9	14.4	5.7	11.0	5.3	12.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	2,598	4,627	1,040	1,185	1,911	690	1,315	1,083	7,225
Mean size	4.7	5.1	5.4	5.9	5.2	4.1	4.7	4.0	5.0

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

2.3 EDUCATIONAL ATTAINMENT

Educational attainment is perhaps the most important characteristic of household members. Many phenomena such as reproductive behaviour, use of contraception, children's health, and proper hygienic habits are related to the education of household members. Table 2.3 shows the classification of the household members by educational attainment, according to age group, residence, and geopolitical region for each sex. Although the majority of the household population age 6 and older has some education, 46 percent of females and 31 percent of males have never attended school.

With the exception of the youngest age group, some of whom will begin to attend school in the future, the proportion with no education increases with age. For example, the proportion of women who have never attended any formal schooling increases from 27 percent among those age 10-14 to 89 percent among those age 65 and above. For men, the proportion increases from 18 percent of those age 10-14 to 70 percent of those age 65 and older. Approximately one-quarter of women and one-third of men have attended at least some secondary schooling, however, the median number of years of schooling is 0.2 for females and 3.6 for males.

Educational attainment is higher in urban areas than in rural areas. The proportion of the population that has achieved any education varies among Nigeria's geopolitical regions. The North West and North East have the highest proportion of persons with no education—seven in ten women and half of men—while the South East has the lowest percentage who have never been to school among females (18 percent) and South South among males (9 percent).

Table 2.3 Educational attainment of household population

Percent distribution of the de facto female and male household populations age six and over by highest level of education attended or completed, according to background characteristics, Nigeria 2003

Background characteristic	Highest level of schooling attended or completed							Total	Number	Median number of years
	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary	Don't know/missing			
FEMALE										
Age										
6-9	45.9	51.6	0.0	0.0	0.0	0.0	2.4	100.0	2,041	0.0
10-14	26.8	53.2	4.6	14.0	0.1	0.0	1.3	100.0	2,176	2.3
15-19	30.2	11.2	10.1	39.6	7.3	0.9	0.8	100.0	1,832	5.6
20-24	33.9	5.6	11.9	17.3	23.3	7.1	0.9	100.0	1,609	5.8
25-29	39.7	5.5	14.6	13.0	18.6	8.0	0.6	100.0	1,481	5.3
30-34	47.5	7.4	15.5	13.4	9.1	6.3	0.8	100.0	1,031	2.1
35-39	49.8	7.3	14.9	15.0	3.9	8.7	0.4	100.0	867	0.0
40-44	60.4	8.9	12.4	10.0	2.4	5.5	0.5	100.0	736	0.0
45-49	68.0	11.5	8.7	3.6	1.1	4.4	2.7	100.0	584	0.0
50-54	76.3	6.2	8.1	4.6	0.8	2.9	1.1	100.0	653	0.0
55-59	80.9	6.2	5.1	2.4	0.3	2.1	3.0	100.0	404	0.0
60-64	85.5	6.8	1.5	3.7	0.1	1.0	1.5	100.0	341	0.0
65+	88.7	3.5	2.5	1.0	0.3	1.0	3.1	100.0	594	0.0
Residence										
Urban	31.9	21.3	9.6	18.6	10.8	6.8	1.0	100.0	4,839	3.9
Rural	53.4	20.4	7.9	10.7	4.4	1.7	1.4	100.0	9,521	0.0
Region										
North Central	40.9	27.2	9.7	13.4	5.3	2.5	1.1	100.0	2,248	0.9
North East	68.0	17.1	4.3	5.7	2.7	1.5	0.7	100.0	2,593	0.0
North West	72.2	13.6	4.2	4.1	2.5	1.5	2.0	100.0	3,823	0.0
South East	17.8	25.1	12.1	20.6	16.2	5.6	2.6	100.0	1,314	5.4
South South	20.6	27.5	12.5	23.6	9.4	5.4	0.9	100.0	2,559	5.1
South West	23.2	19.9	13.6	24.3	11.4	7.1	0.5	100.0	1,823	5.4
Total	46.1	20.7	8.5	13.4	6.6	3.4	1.3	100.0	14,360	0.2
MALE										
Age										
6-9	41.1	56.1	0.0	0.0	0.0	0.0	2.8	100.0	2,175	0.0
10-14	18.2	62.1	3.1	15.4	0.1	0.0	1.2	100.0	2,144	2.7
15-19	15.4	15.6	8.9	51.2	7.4	0.8	0.9	100.0	1,736	6.7
20-24	16.2	6.4	13.2	27.9	24.7	10.0	1.5	100.0	1,473	8.7
25-29	20.6	4.3	16.7	15.5	27.4	14.2	1.3	100.0	1,195	8.6
30-34	23.7	5.9	14.4	19.3	18.1	17.5	1.0	100.0	1,029	8.3
35-39	27.2	7.0	15.8	18.3	12.9	17.7	1.0	100.0	796	6.4
40-44	35.7	8.9	15.7	15.5	6.1	17.6	0.5	100.0	724	5.5
45-49	38.7	12.1	15.9	12.6	4.2	15.9	0.6	100.0	613	5.3
50-54	47.0	14.1	16.0	10.0	2.8	8.1	2.1	100.0	550	1.5
55-59	52.8	14.3	12.2	6.8	2.9	9.3	1.8	100.0	372	0.0
60-64	66.0	9.3	11.1	6.6	1.1	4.0	1.8	100.0	411	0.0
65+	70.4	9.9	6.9	5.7	1.2	3.8	2.1	100.0	760	0.0
Residence										
Urban	19.9	24.0	9.3	21.5	12.3	11.9	1.1	100.0	4,971	5.6
Rural	36.3	25.2	9.6	15.9	6.7	4.6	1.6	100.0	9,028	2.0
Region										
North Central	21.9	29.5	9.1	21.1	10.1	7.5	0.7	100.0	2,222	4.9
North East	50.2	22.9	4.6	11.8	4.9	4.9	0.8	100.0	2,626	0.0
North West	50.0	23.1	6.2	9.3	5.0	4.4	2.1	100.0	3,670	0.0
South East	14.0	23.6	16.0	20.2	11.5	10.8	4.0	100.0	1,124	5.6
South South	8.7	28.1	14.1	25.8	13.0	9.2	1.1	100.0	2,557	5.8
South West	13.9	21.0	13.4	27.7	12.5	10.7	0.8	100.0	1,800	5.9
Total	30.5	24.8	9.5	17.9	8.7	7.2	1.4	100.0	13,999	3.6

Note: Totals include 10 women and 20 men with missing information on age.

¹ Completed 6 years at the primary level

² Completed 6 years at the secondary level

School Attendance Rates

Table 2.4 provides net attendance ratios (NAR) and gross attendance ratios (GAR) by sex, residence, geopolitical region, and household economic status according to school level. The NAR for primary school is the percentage of the primary school-age (6-11 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school age (12-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent. The GAR for primary school is the total number of primary school students of any age, expressed as the percentage of the official primary school age population. The GAR for secondary school is the total number of secondary school students up to age 24, expressed as the percentage of the official secondary school age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100 percent. Children are considered to be attending school currently if they attended at any point during the current school year.

Table 2.4 shows that 60 percent of primary school age children in Nigeria are attending primary school. The NAR is higher in urban areas than in rural areas (70 and 56 percent, respectively), as is the GAR (100 and 82 percent, respectively). There is significant variation by region: the NARs in the North East and North West are just over half the ratios in the three southern regions. At the secondary school level, the NAR is 35 percent and the GAR is 61 percent. Regional disparities at the secondary school level are even more pronounced than at the primary school level: the NAR, for example, ranges from a low of 15 percent in the North West, to a high of 61 percent in the South West.

The Gender Parity Index (GPI) represents the ratio of the GAR for females to the GAR for males. It is presented for both the primary and secondary school levels and offers a summary measure to the extent to which there are gender differences in attendance rates. A GPI of less than 1 indicates that a smaller proportion of females than males attends school. The GPI for primary school is 0.86 and for secondary school is 0.77. Although there is little urban-rural differential at the primary school level, there is significant difference at the secondary school level. Once again, regional differentials are significant; the data indicate that girls residing in the North West and North East are particularly disadvantaged. Gender disparities by age in school attendance at any level are shown in Figure 2.2.

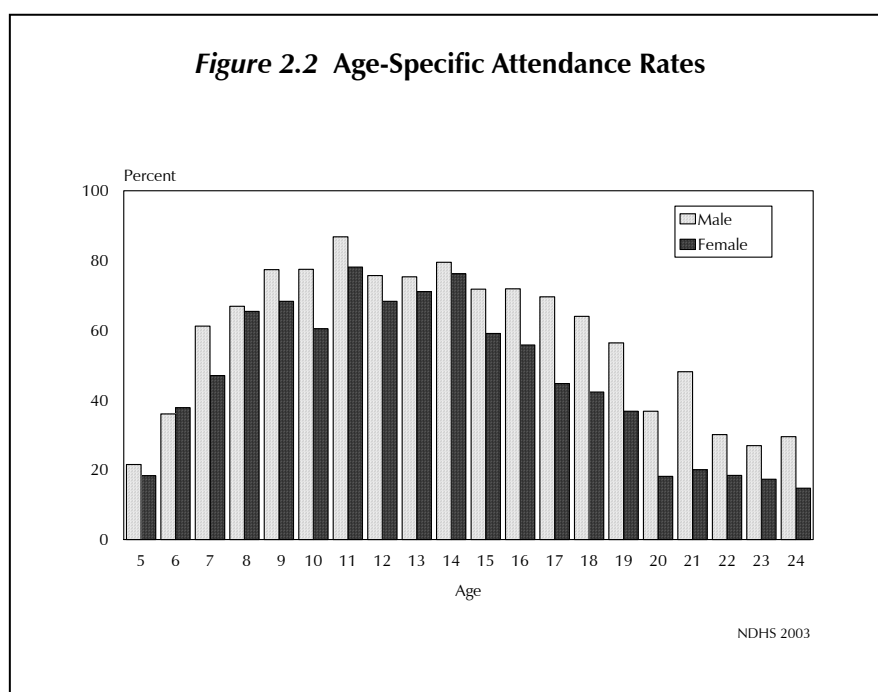


Table 2.4 also shows school attendance ratios and GPIs by wealth quintile, an indicator of the economic status of households. The wealth index is a recently developed measure that has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein, 2004; Rutstein et al., 2000). It is an indicator of the level of wealth that is consistent with expenditure and income measures (Rutstein, 1999). The wealth index was constructed using household asset data and principal components analysis. Asset information was collected in the 2003 NDHS Household Questionnaire and covers information on household ownership of a number of consumer items ranging from a television to a bicycle or car, as well as dwelling characteristics such as source of drinking water, type of sanitation facilities, and type of material used in flooring.

Each asset was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household; individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest)

The data in Table 2.4 show that there is a high correlation between economic status of the household and school attendance. For example, the NAR at the primary school level is 40 percent for the poorest households and 83 percent for the most advantaged households. The data indicate that unless there is an effective policy on free education, many young Nigerians will continue to be denied educational opportunities.

Table 2.4 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de jure household population by level of schooling and sex, according to background characteristics, Nigeria 2003

Background characteristic	Net attendance ratio ¹			Gross attendance ratio ²			Gender parity index ³
	Male	Female	Total	Male	Female	Total	
PRIMARY SCHOOL							
Residence							
Urban	71.0	68.0	69.5	105.5	93.8	99.8	0.89
Rural	60.2	51.1	55.7	89.4	75.3	82.4	0.84
Region							
North Central	71.4	68.9	70.2	109.1	110.0	109.5	1.01
North East	49.5	39.1	44.4	71.1	51.8	61.6	0.73
North West	49.0	34.2	41.7	77.6	48.6	63.3	0.63
South East	82.4	78.3	80.2	124.5	117.0	120.4	0.94
South South	83.2	81.1	82.2	124.5	114.4	119.5	0.92
South West	81.2	84.6	82.8	104.6	114.9	109.4	1.10
Wealth quintile							
Lowest	45.0	35.7	40.4	71.5	57.1	64.4	0.80
Second	55.6	42.2	48.9	88.5	63.4	75.9	0.72
Middle	64.9	56.6	60.9	97.2	83.7	90.7	0.86
Fourth	75.4	72.7	74.1	111.8	106.0	109.0	0.95
Highest	82.9	82.8	82.9	108.4	103.8	106.0	0.96
Total	63.7	56.5	60.1	94.6	81.2	88.0	0.86
SECONDARY SCHOOL							
Residence							
Urban	47.2	45.3	46.3	75.6	67.2	71.6	0.89
Rural	31.7	25.9	28.7	65.0	45.9	55.3	0.71
Region							
North Central	42.7	32.6	37.7	90.7	55.6	73.3	0.61
North East	22.9	14.9	19.1	41.6	23.1	32.9	0.55
North West	19.8	9.5	14.7	41.0	14.6	27.8	0.36
South East	44.9	51.4	48.5	84.7	93.7	89.8	1.11
South South	51.6	51.5	51.5	90.9	90.8	90.9	1.00
South West	62.2	59.9	61.0	94.1	80.2	87.0	0.85
Wealth quintile							
Lowest	17.5	12.0	14.6	40.9	23.8	32.1	0.58
Second	24.8	16.2	20.9	50.1	31.3	41.5	0.63
Middle	37.3	26.7	32.0	71.2	49.8	60.4	0.70
Fourth	43.5	40.1	41.8	84.5	63.1	73.9	0.75
Highest	62.6	64.9	63.8	95.0	94.2	94.6	0.99
Total	37.5	32.6	35.1	69.0	53.3	61.2	0.77

¹ The NAR for primary school is the percentage of the primary-school-age (6-11 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school age (12-17 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.

² The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of over-age and under-age students at a given level of schooling, the GAR can exceed 100 percent.

³ The Gender Parity Index for primary school is the ratio of the primary school GAR for females to the GAR for males. The Gender Parity Index for secondary school is the ratio of the secondary school GAR for females to the GAR for males.

Dropout and Repetition Rates

By asking about the grade or class that children were attending during the previous school year, it is possible to calculate dropout rates and repetition rates. These rates describe the flow of students through the school system. Repetition and dropout rates approach zero where students nearly always progress to the next grade at the end of the school year. Repetition and dropout rates often vary across grades, indicating points in the school system where students are not regularly promoted to the next grade or they decide to drop out of school.

Although an automatic promotion policy does not operate officially in Nigeria, very few primary school students repeat grades. Table 2.5 indicates that apart from first grade, which 4 percent are repeating, the rates for grades 2 to 6 are all below 3 percent. Dropout rates are also low (less than 2 percent) from grades 1 through 5. At the sixth grade, the dropout rate is 17 percent. The reason for the high dropout rate at grade 6 is probably because many of the pupils who attend primary school are unable to move

Table 2.5 Grade repetition and dropout rates						
Repetition and dropout rates for the de jure household population age 5-24 years by school grade, according to background characteristics, Nigeria 2003						
Background characteristic	School grade					
	1	2	3	4	5	6
REPETITION RATE ¹						
Sex						
Male	3.8	2.8	1.7	1.6	2.9	2.4
Female	4.0	1.8	3.5	1.9	1.8	1.9
Residence						
Urban	4.5	0.9	1.7	2.3	4.4	2.9
Rural	3.5	3.2	3.0	1.4	1.2	1.5
Region						
North Central	2.4	1.1	2.2	0.0	2.1	0.0
North East	1.1	0.7	1.1	0.0	0.0	4.0
North West	6.1	4.2	5.6	1.3	5.7	(5.9)
South East	0.8	6.9	2.0	1.3	2.0	3.1
South South	6.6	0.0	1.6	2.2	1.1	1.1
South West	2.4	3.3	0.9	5.1	3.5	2.2
Total	3.9	2.4	2.5	1.7	2.4	2.1
DROPOUT RATE ²						
Sex						
Male	0.0	0.4	0.8	0.0	2.0	15.8
Female	0.1	0.3	0.9	3.3	0.1	17.9
Residence						
Urban	0.0	0.2	0.6	0.3	0.3	7.0
Rural	0.1	0.4	1.1	2.1	1.6	23.7
Region						
North Central	0.0	0.3	1.0	1.1	0.0	24.9
North East	0.0	0.4	0.3	0.0	0.0	14.2
North West	0.0	0.6	0.4	0.0	2.3	(26.8)
South East	0.0	0.4	0.0	0.7	0.6	4.0
South South	0.2	0.0	2.5	4.3	2.5	21.3
South West	0.0	0.0	0.0	0.0	0.0	3.4
Total	0.0	0.3	0.9	1.4	1.1	16.9

Note: Figures in parentheses are based on 25-49 unweighted cases.
¹ The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year.
² The dropout rate is the percentage of students in a given grade in the previous school year who are not attending school.

to the next educational level (i.e., secondary school). There is great variation by residence and region. For example, rural children are more than three times as likely as urban children to drop out of school at grade 6.

2.4 HOUSEHOLD CHARACTERISTICS

The 2003 NDHS gathered information on housing characteristics such as source of water, electricity, cooking fuel, type of toilet facilities, number of sleeping rooms in the house, and housing material. Table 2.6 presents this information by urban–rural residence and region. These characteristics are correlated with health and are also an indication of socioeconomic status.

About half of households in Nigeria have electricity. Electricity is much more common in urban areas than in rural areas (85 and 34 percent, respectively). Indeed, urban dwellers are more advantaged overall in terms of household characteristics than rural dwellers. Nonetheless, living conditions across the entire country are mixed, with a majority of Nigerians having no access to potable water and using traditional pit toilets.

The source of water and availability of sanitary facilities are important determinants of the health status of household members. Sources of water expected to be relatively free of disease are piped water and water drawn from protected wells and deep boreholes. Other sources, like unprotected wells and surface water (rivers, streams, ponds, and lakes), are more likely to carry disease-causing agents. The table shows that 42 percent of Nigerian households have access to clean water sources (17 percent from piped water, 24 percent from a protected well, and 1 percent from spring water).

Sources of drinking water differ considerably by place of residence. Thirty-three percent of urban households obtain water from pipes into dwelling/yard/plot or from public taps, compared with just 9 percent of rural households. It is notable that in rural areas, approximately one-fifth obtain drinking water from open public wells and 27 percent from a river or stream. A majority of Nigerians (56 percent) have access to water within 15 minutes. About two-thirds of urban households obtain water within 15 minutes, compared with about half of rural households. The median time to the source of drinking water is 5 minutes for the urban households and 10 minutes for the rural households.

The lack of availability of sanitary facilities poses a serious public health problem. Only 15 percent of households have a flush toilet, while the majority (57 percent) use traditional pit toilets, and one-quarter have no facility. There are differences in the type of toilet facilities by both residence and region. Urban households are more than four times as likely to have a modern flush toilet as rural areas (29 and 7 percent, respectively). Households in the North West and North East are the least likely to have a flush toilet.

The type of material used for flooring is an indicator of the economic situation of households and therefore the potential exposure of household members to disease-causing agents. Forty-two percent of households live in dwellings with cement floors and 31 percent in dwellings with earth or sand floors. There are substantial differences in the flooring materials by urban-rural residence. Almost half of rural households have a floor made of earth, sand, or dung, compared with 10 percent of urban households.

Firewood and straw is the most common fuel used for cooking, reported by two-thirds of households. An additional 27 percent use kerosene. Rural households are twice as likely as urban households to use firewood or straw (84 and 41 percent, respectively).

Table 2.6 Household characteristics

Percent distribution of households by household characteristics, according to residence and region, Nigeria 2003

Household characteristic	Residence		Region					Total	
	Urban	Rural	North Central	North East	North West	South East	South South		South West
Electricity									
Yes	84.9	33.8	47.2	30.9	42.0	70.2	57.9	79.9	52.2
No	15.0	66.0	52.6	68.9	57.8	29.4	42.1	20.0	47.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source of drinking water									
Piped into dwelling/yard/plot	14.4	2.3	7.8	4.6	10.2	8.3	3.2	4.6	6.6
Public tap	18.5	6.2	8.1	9.7	11.8	11.8	4.6	18.8	10.6
Open well in dwelling/yard/plot	9.4	14.2	12.6	15.1	22.9	1.8	3.3	9.2	12.5
Open public well	6.7	21.2	9.4	30.8	25.0	1.5	5.2	12.7	16.0
Protected well in dwelling/yard/plot	6.7	3.7	5.5	1.8	3.3	10.8	7.0	3.5	4.8
Protected public well	24.4	16.3	11.5	5.3	12.1	33.1	35.8	25.6	19.2
Spring	0.6	1.3	1.5	0.2	0.5	4.8	0.5	1.2	1.1
River/stream	6.7	26.9	34.9	17.3	10.4	10.6	33.0	13.5	19.6
Pond/lake/dam	0.8	1.7	2.0	1.9	0.4	1.3	1.3	2.1	1.4
Rainwater	0.5	2.1	0.1	0.0	0.0	6.7	4.2	0.5	1.5
Tanker truck	5.9	1.9	5.9	4.4	0.6	7.3	1.4	4.2	3.3
Other	5.2	2.0	0.6	8.9	2.9	1.8	0.5	4.1	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Time to water source									
Percentage <15 minutes	64.9	51.4	51.1	58.2	62.1	59.4	45.8	59.4	56.3
Median time to source	4.6	9.9	10.0	9.4	6.5	4.9	14.8	9.2	9.4
Sanitation facility									
Flush toilet	28.7	6.7	9.6	4.5	4.5	41.3	21.2	23.4	14.6
Traditional pit toilet	55.6	56.9	50.1	74.6	74.3	39.8	42.3	39.1	56.5
Ventilated improved pit (vip) latrine	5.5	1.9	1.9	0.5	1.6	0.9	8.5	5.5	3.2
Bush/field	9.7	31.6	38.0	20.1	19.2	17.6	19.7	30.7	23.7
River	0.3	2.7	0.4	0.3	0.3	0.1	8.2	1.2	1.9
Other	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Flooring material									
Earth/sand	9.9	43.6	28.3	57.3	41.8	12.8	21.7	11.8	31.4
Dung	0.4	3.6	1.4	4.5	4.2	0.2	1.1	1.2	2.4
Cement	47.4	39.6	48.5	31.5	45.4	53.1	35.9	44.4	42.4
Carpet	39.0	12.1	20.8	6.2	7.4	27.8	38.4	40.9	21.8
Other	2.0	0.8	0.8	0.1	1.1	1.3	2.7	1.3	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cooking fuel									
Electricity	0.5	0.1	0.5	0.4	0.2	0.1	0.1	0.4	0.3
Kerosene	53.4	12.1	16.1	4.8	10.3	51.0	36.2	64.2	26.9
Firewood, straw	41.1	84.4	79.5	92.6	83.8	45.0	61.1	30.7	68.8
Dung	0.1	0.8	0.5	0.1	1.5	0.0	0.1	0.0	0.5
Other	4.7	2.5	3.4	2.0	3.6	3.7	2.5	4.7	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Persons per sleeping room	2.9	3.6	4.0	3.7	3.3	3.0	3.6	2.2	3.3
Number of households	2,598	4,627	1,040	1,185	1,911	690	1,315	1,083	7,225

Note: Percentages may not add to 100 due to missing cases.

Crowded conditions may affect health as well as the quality of life. The number of persons per sleeping room in the household is used as a measure of household room density. On average, there are 3.3 persons per sleeping room in Nigeria. Rural households have more people per sleeping room than urban households (3.6 and 2.9 percent, respectively).

Household Durable Goods

The availability of durable consumer goods is an indicator of a household's socioeconomic status. Moreover, particular goods have specific advantages. For example, having access to a radio or a television exposes household members to innovative ideas, a refrigerator prolongs the wholesomeness of foods, and a means of transport allows greater access to services away from the local area.

Table 2.7 shows the availability of selected consumer goods by residence. Nationally, almost three-fourths of households own a radio, and almost one-third own a television. Fewer households own a refrigerator—just 18 percent. In each case, urban households are much more likely than rural households to own these goods. Indeed, urban households are more likely than rural households to own each of the items except for bicycles, work animals, and boats, which are more commonly owned in rural areas. Rural households are also disadvantaged in terms of communications. Less than 2 percent of the rural households have telephones or cell phones, compared with 12 percent of urban households.

The data presented in this chapter vividly portray the level of poverty in Nigeria. Less than half of Nigerians have access to potable water and just one-third of rural households have electricity. There is a need for vigorous policies to improve access to the basic necessities of life. Furthermore, the data on education illustrate the need for better schooling of the population, especially females.

Table 2.7 Household durable goods

Percentage of households possessing various durable consumer goods, by residence and region, Nigeria 2003

Durable consumer goods	Residence		Region						Total
	Urban	Rural	North Central	North East	North West	South East	South South	South West	
Radio	85.3	65.8	75.0	60.8	72.5	87.7	69.4	79.1	72.8
Television	58.6	15.4	23.6	14.0	19.9	52.9	37.3	54.4	31.0
Telephone/cell phone	11.8	1.9	1.6	1.1	2.3	14.0	6.5	12.8	5.5
Refrigerator	36.1	7.9	13.6	9.2	8.9	35.4	24.8	28.8	18.0
Gas cooker	7.5	2.1	2.7	1.1	1.7	12.2	6.3	4.9	4.0
Iron	57.3	16.8	24.6	13.2	20.6	51.4	40.7	52.5	31.3
Fan	69.2	19.6	32.9	17.9	23.1	58.3	47.0	63.6	37.4
Bicycle	17.9	41.0	36.5	44.9	40.8	24.7	33.2	5.8	32.7
Motorcycle/scooter	17.5	13.8	23.3	13.9	14.9	14.2	14.4	10.4	15.1
Car/truck	17.8	4.9	8.4	6.3	4.9	21.3	9.7	15.0	9.6
Donkey/horse/camel	1.5	8.0	0.8	4.8	18.0	0.1	0.0	0.0	5.7
Canoe/boat/ship	1.2	7.1	3.9	1.2	7.5	0.1	12.2	0.2	5.0
None of the above	7.0	19.9	14.7	22.6	14.3	7.8	15.4	14.0	15.2
Number of households	2,598	4,627	1,040	1,185	1,911	690	1,315	1,083	7,225

The purpose of this chapter is to provide a demographic and socioeconomic profile of individual female and male respondents. This information is essential for the interpretation of the findings presented later in the report and can provide an approximate indication of the representativeness of the survey.

The chapter begins by describing basic background characteristics, including age, marital status, residence, education, religion, ethnicity, and economic status of respondents' households. The chapter also includes more detailed information on education, employment, and indicators of women's status.

3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 shows the distribution of women age 15-49 and men age 15-59 by background characteristics. The proportions of women and men decline with increasing age, which reflects the young age structure of the Nigerian population.

A little more than two-thirds (68 percent) of all women are currently married, and an additional 2 percent are in informal unions ("living together"). One-quarter of women age 15-49 have never been married, while negligible proportions of women are divorced or separated (3 percent) or widowed (2 percent). Slightly more than half of men are currently married or living together, 45 percent have never been married, 2 percent are divorced or separated, and 1 percent widowed.

With regard to residence, the majority of women and men live in rural areas (approximately two-thirds). Sixty percent of women and 58 percent of men are from the north, while 40 percent of women and 42 percent of men are from the south.

The majority of respondents have had some education, however, 42 percent of women and 22 percent of men have never attended school. One-fifth of women and one-quarter of men have attained primary education only, while 37 percent of women and 53 percent of men have attended secondary school or higher.

The table also shows that half of all respondents are Muslims, approximately one in seven respondents are Catholics, an additional one in seven are Protestants, and one in five say that they follow another Christian church. A negligible proportion belongs to other religions.

The ethnic composition of the sample indicates that the Hausa, Igbo, and Yoruba are the major ethnic groups in Nigeria. However, other ethnic groups constitute almost half of the total sample, underscoring the multiplicity of ethnic groups in Nigeria.

3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Table 3.2 provides an overview of the relationship between respondents' level of education and other background characteristics. The data show that younger respondents are more likely than older respondents to have some education. For example, more than twice as many of the oldest women than the youngest women report that they have no education (68 and 29 percent, respectively).

Table 3.1 Background characteristics of respondents

Percent distribution of women and men by background characteristics, Nigeria 2003

Background characteristic	Weighted percent	Number of women		Weighted percent	Number of men	
		Weighted	Un-weighted		Weighted	Un-weighted
Age						
15-19	22.5	1,716	1,749	19.3	453	453
20-24	19.6	1,494	1,464	18.2	426	441
25-29	18.1	1,382	1,356	14.0	328	336
30-34	12.4	941	940	12.8	299	280
35-39	10.7	816	798	9.4	220	203
40-44	9.0	688	695	8.8	208	206
45-49	7.7	583	618	6.8	159	167
50-54	na	na	na	5.7	133	134
55-59	na	na	na	5.1	120	126
Marital status						
Never married	25.3	1,926	2,087	44.7	1,048	1,090
Married	68.0	5,182	4,991	50.8	1,191	1,141
Living together	2.0	154	166	2.3	54	55
Divorced/separated	2.9	219	209	1.8	42	47
Widowed	1.8	139	167	0.5	11	13
Residence						
Urban	34.5	2,629	3,057	37.2	872	986
Rural	65.5	4,991	4,563	62.8	1,474	1,360
Region						
North Central	14.7	1,121	1,256	14.9	348	416
North East	17.9	1,368	1,413	17.9	421	423
North West	27.5	2,095	1,791	25.7	602	547
South East	9.7	737	1,081	8.8	207	265
South South	17.6	1,342	938	19.0	445	313
South West	12.6	958	1,141	13.7	322	382
Education						
No education	41.6	3,171	3,005	21.6	507	493
Primary	21.4	1,628	1,666	25.7	603	604
Secondary	31.1	2,370	2,462	40.9	960	966
Higher	5.9	451	487	11.8	276	283
Religion						
Catholic	13.1	998	1,161	14.3	335	373
Protestant	15.2	1,162	1,300	14.7	345	373
Other Christian	19.6	1,494	1,423	19.5	457	436
Muslim	50.7	3,862	3,601	50.2	1,177	1,125
Other	1.4	104	135	1.3	32	39
Ethnic group						
Fulani	6.1	463	484	5.9	139	132
Hausa	27.0	2,055	1,735	25.0	586	542
Igbo	13.6	1,037	1,390	13.4	315	382
Kanuri	3.0	232	187	2.5	59	47
Tiv	2.2	170	201	2.2	52	66
Yoruba	11.4	865	1,042	12.0	281	340
Other	36.7	2,797	2,581	38.9	914	837
Wealth quintile						
Lowest	18.6	1,414	1,479	18.0	423	423
Second	18.9	1,439	1,399	17.8	418	393
Middle	19.9	1,513	1,510	18.6	436	445
Fourth	20.0	1,526	1,544	21.6	507	527
Highest	22.7	1,728	1,688	24.0	563	558
Total	100.0	7,620	7,620	100.0	2,346	2,346

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. The ethnic groups are the six largest in the sample and are listed in alphabetical order.
na = Not applicable

Table 3.2 Educational attainment by background characteristics

Percent distribution of women and men by highest level of schooling attended or completed, and median number of years of schooling, according to background characteristics, Nigeria 2003

Background characteristic	Highest level of schooling attended or completed						Total	Number of respondents	Median years of schooling
	No education	Some primary	Completed primary ¹	Some secondary	Completed secondary ²	More than secondary			
WOMEN									
Age									
15-19	29.2	11.1	9.9	39.6	8.9	1.4	100.0	1,716	5.8
20-24	33.9	6.6	11.2	17.9	23.0	7.4	100.0	1,494	5.8
25-29	37.8	6.2	14.7	13.4	19.6	8.3	100.0	1,382	5.4
30-34	45.9	8.5	15.3	14.2	9.0	7.2	100.0	941	3.0
35-39	49.9	9.4	15.0	14.2	3.7	7.8	100.0	816	0.0
40-44	58.7	9.9	13.9	9.3	2.5	5.7	100.0	688	0.0
45-49	68.0	13.5	8.4	3.5	1.3	5.2	100.0	583	0.0
Residence									
Urban	24.9	7.6	12.0	24.3	19.1	12.1	100.0	2,629	7.7
Rural	50.4	9.6	12.7	16.5	8.1	2.7	100.0	4,991	0.0
Region									
North Central	35.9	12.9	17.1	20.5	9.4	4.2	100.0	1,121	5.1
North East	67.8	8.9	7.6	8.3	5.0	2.4	100.0	1,368	0.0
North West	75.0	5.7	6.1	6.1	4.8	2.2	100.0	2,095	0.0
South East	7.7	10.5	14.3	27.9	27.6	12.1	100.0	737	9.2
South South	8.1	12.5	17.8	34.5	17.5	9.7	100.0	1,342	7.6
South West	10.8	5.0	19.0	33.9	20.3	11.0	100.0	958	8.9
Wealth quintile									
Lowest	68.7	10.8	10.1	8.7	1.7	0.1	100.0	1,414	0.0
Second	63.3	10.2	11.3	11.5	2.7	1.0	100.0	1,439	0.0
Middle	49.2	10.7	13.4	18.7	6.4	1.6	100.0	1,513	0.9
Fourth	29.2	10.3	15.9	24.2	16.3	4.1	100.0	1,526	5.7
Highest	5.8	3.4	11.5	30.4	28.8	20.1	100.0	1,728	10.9
Total	41.6	8.9	12.5	19.2	11.9	5.9	100.0	7,620	5.0
MEN									
Age									
15-19	10.4	18.2	6.9	56.3	7.8	0.5	100.0	453	7.0
20-24	12.4	7.6	12.1	30.0	27.6	10.3	100.0	426	8.9
25-29	15.6	7.1	18.0	18.0	22.8	18.5	100.0	328	8.4
30-34	15.3	8.0	18.5	24.4	16.9	17.0	100.0	299	8.3
35-39	23.9	12.2	18.2	17.7	11.7	16.4	100.0	220	6.2
40-44	34.9	9.5	13.3	19.0	4.9	18.4	100.0	208	5.7
45-49	39.7	19.3	9.9	12.4	3.2	15.5	100.0	159	4.8
50-54	44.3	17.0	16.1	8.6	6.6	7.4	100.0	133	2.3
55-59	52.8	12.9	19.9	4.9	1.2	8.2	100.0	120	0.0
Residence									
Urban	11.2	9.7	13.3	29.7	17.6	18.5	100.0	872	9.1
Rural	27.8	13.1	14.2	25.2	12.0	7.8	100.0	1,474	5.7
Region									
North Central	13.4	10.0	13.4	36.4	13.8	12.9	100.0	348	6.9
North East	41.9	12.2	10.2	17.6	7.8	10.2	100.0	421	4.7
North West	41.5	16.7	9.7	16.7	6.7	8.9	100.0	602	3.3
South East	2.5	8.4	17.7	33.4	20.7	17.3	100.0	207	9.2
South South	3.0	12.7	18.7	31.7	22.4	11.4	100.0	445	8.6
South West	4.8	5.2	17.9	36.8	20.5	14.9	100.0	322	10.1
Wealth quintile									
Lowest	42.6	17.8	14.6	16.5	7.9	0.6	100.0	423	2.8
Second	36.2	14.2	13.9	24.1	7.3	4.2	100.0	418	5.1
Middle	24.7	14.4	12.9	28.2	11.7	8.0	100.0	436	5.8
Fourth	11.0	12.6	16.3	29.4	17.0	13.7	100.0	507	8.0
Highest	2.2	2.8	11.8	33.4	22.8	27.0	100.0	563	11.0
Total	21.6	11.8	13.9	26.9	14.1	11.8	100.0	2,346	6.6

¹ Completed 6th grade at the primary level

² Completed 6th grade at the secondary level

Table 3.2 also shows that the level of education varies by residence. Women in rural areas are disadvantaged and far less likely to be educated than their urban counterparts. One-half of rural women have not attended school, which is twice the proportion of urban women (50 and 25 percent, respectively). The urban-rural difference is more pronounced at the level of secondary school or higher. For example, only 11 percent of women in rural areas have completed secondary school or gone on to post-secondary study, compared with 31 percent of women in urban areas. Among male respondents, those in urban areas also have higher levels of educational attainment. Only 11 percent of urban males compared with 28 percent of their rural counterparts have no formal education. While 36 percent of urban males have completed secondary or higher levels of education, only 20 percent of their rural counterparts have done so. Among both male and female respondents, the level of educational attainment is higher in the south relative to the north. For example, women in the North West are 10 times as likely as women in the South East and South West to say that they have no education.

Educational attainment increases as the economic status of the household increases. For example, 69 percent of the women in the poorest households have no formal education compared with just 6 percent of women in the most advantaged households. Half of women in the highest wealth quintile have completed secondary or higher levels of education, compared with just 2 percent of women in the lowest quintile. The pattern of men's educational attainment by economic status is similar.

Literacy

The ability to read is an important personal asset allowing women and men increased opportunities in life. Knowing the distribution of the literate population can help programme planners know how best to reach women and men with their messages. In the 2003 NDHS, literacy was established by a respondent's ability to read all or part of a simple sentence in any of the major language groups of Nigeria. The test on literacy was only applied to respondents who had less than secondary education, and those with secondary or higher are assumed to be literate.

Table 3.3 shows that almost half (48 percent) of women are literate. The level of literacy is much higher for younger women than older women, ranging from a high of 61 percent for women age 15-19 to a low of 22 percent for women age 45-49. Urban women have a higher level of literacy than rural women (68 and 38 percent, respectively). Literacy levels also vary widely among the regions. Patterns of men's literacy are similar to women's, although a greater proportion of men are literate (73 percent compared with 48 percent).

Table 3.3 Literacy

Percent distribution of women and men by level of schooling attended and by level of literacy, and percent literate, according to background characteristics, Nigeria 2003

Background characteristic	No schooling or primary school						Total	Number of respondents	Percent literate ¹
	Secondary school or higher	Can read whole sentence	Can read part of sentence	Cannot read at all	No card with required language	Missing			
WOMEN									
Age									
15-19	49.8	5.4	6.1	37.7	0.8	0.2	100.0	1,716	61.3
20-24	48.3	3.6	4.5	42.4	0.7	0.5	100.0	1,494	56.4
25-29	41.3	5.4	5.2	46.9	1.0	0.2	100.0	1,382	51.9
30-34	30.4	5.2	5.7	58.3	0.3	0.1	100.0	941	41.3
35-39	25.7	7.8	6.4	58.9	1.2	0.1	100.0	816	39.8
40-44	17.5	6.2	7.4	67.8	0.5	0.5	100.0	688	31.1
45-49	10.0	7.9	4.5	75.8	1.2	0.6	100.0	583	22.4
Residence									
Urban	55.6	6.1	5.9	31.6	0.7	0.2	100.0	2,629	67.5
Rural	27.3	5.2	5.5	60.8	0.9	0.4	100.0	4,991	38.0
Region									
North Central	34.1	4.9	4.4	55.2	1.1	0.3	100.0	1,121	43.4
North East	15.7	4.2	5.7	72.9	1.3	0.2	100.0	1,368	25.6
North West	13.1	3.1	4.7	78.6	0.1	0.5	100.0	2,095	20.9
South East	67.5	10.6	7.5	14.1	0.1	0.2	100.0	737	85.6
South South	61.7	7.3	6.0	22.6	1.9	0.6	100.0	1,342	75.0
South West	65.2	7.1	6.8	20.5	0.4	0.0	100.0	958	79.1
Total	37.0	5.5	5.6	50.7	0.8	0.3	100.0	7,620	48.2
MEN									
Age									
15-19	64.6	4.4	10.2	18.6	2.3	0.0	100.0	453	79.2
20-24	67.9	6.0	6.4	15.0	4.7	0.0	100.0	426	80.3
25-29	59.4	11.0	8.6	16.8	4.3	0.0	100.0	328	78.9
30-34	58.3	8.7	8.7	20.7	3.7	0.0	100.0	299	75.6
35-39	45.7	12.8	11.8	23.7	5.9	0.0	100.0	220	70.4
40-44	42.3	12.0	10.3	27.3	8.1	0.0	100.0	208	64.6
45-49	31.1	14.7	14.2	30.1	9.7	0.2	100.0	159	60.0
50-54	22.6	15.4	17.2	37.9	6.9	0.0	100.0	133	55.2
55-59	14.3	20.5	12.4	42.1	10.7	0.0	100.0	120	47.2
Residence									
Urban	65.8	11.3	9.7	9.3	3.9	0.0	100.0	872	86.8
Rural	45.0	8.8	10.2	30.0	6.0	0.0	100.0	1,474	64.0
Region									
North Central	63.1	6.9	5.2	24.6	0.2	0.0	100.0	348	75.2
North East	35.7	13.9	10.4	37.8	2.2	0.0	100.0	421	59.9
North West	32.2	8.0	15.5	27.2	17.1	0.0	100.0	602	55.7
South East	71.4	5.7	15.8	7.0	0.0	0.2	100.0	207	92.9
South South	65.6	6.7	8.2	18.1	1.4	0.0	100.0	445	80.5
South West	72.1	17.4	3.5	5.9	1.1	0.0	100.0	322	93.0
Total	52.7	9.7	10.0	22.3	5.2	0.0	100.0	2,346	72.5

¹ Refers to respondents who attended secondary school or higher and respondents who can read a whole sentence or part of a sentence

3.3 ACCESS TO MASS MEDIA

The 2003 NDHS collected information on the exposure of respondents to common print and electronic media. Respondents were asked how often they read a newspaper, listen to the radio, or watch television. These data are important because they provide an indication of the extent to which Nigerians are regularly exposed to the mass media, which are often used to disseminate messages on family planning and other health topics.

Tables 3.4.1 and 3.4.2 show that slightly more than one-third of both women and men are not exposed to any media. However, a majority of all respondents listen to the radio at least once a week, and more than one-third watch television at least once a week. About one in ten respondents reads a newspaper weekly. As expected, women and men living in urban areas are much more likely to be exposed to mass media. The proportion of women who are exposed to any media at least once a week declines with age. Urban respondents are more likely than rural respondents to be exposed to all three types of media.

Among the regions, exposure to all three types of media is highest among those who live in the south compared with their northern counterparts. There is a positive relationship between the level of education and exposure to mass media. Similarly, wealth quintile is positively related to exposure to mass media. For instance, whereas 65 percent of women in the lowest quintile have no weekly exposure to any media source, just 6 percent of those in the highest quintile have no exposure. The corresponding figures for the male respondents are 59 and 13 percent, respectively.

Table 3.4.1 Exposure to mass media: women

Percentage of women who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Nigeria 2003

Background characteristic	Type of mass media exposure					Number of women
	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three specified media	No exposure to specified media	
Age						
15-19	12.2	41.3	58.4	10.3	34.4	1,716
20-24	17.7	40.9	65.0	14.7	28.9	1,494
25-29	12.8	39.4	61.5	10.3	30.8	1,382
30-34	10.6	31.2	57.7	9.5	38.3	941
35-39	9.8	33.2	59.7	7.7	37.5	816
40-44	7.6	24.8	51.7	6.1	45.0	688
45-49	6.2	23.8	51.1	5.3	45.4	583
Residence						
Urban	21.1	63.1	73.0	18.6	18.4	2,629
Rural	7.3	21.6	51.8	5.5	44.2	4,991
Region						
North Central	7.7	28.0	44.7	6.4	48.6	1,121
North East	4.8	15.9	34.1	3.0	61.0	1,368
North West	6.7	23.8	70.9	5.6	27.1	2,095
South East	25.9	50.9	69.4	21.4	24.2	737
South South	19.2	53.9	59.2	16.1	30.9	1,342
South West	18.5	63.5	78.3	16.5	15.6	958
Education						
No education	0.1	12.0	47.2	0.1	50.2	3,171
Primary	3.7	32.0	54.5	2.7	39.2	1,628
Secondary	24.8	62.0	72.9	20.5	18.3	2,370
Higher	59.0	81.2	88.0	51.3	5.6	451
Wealth quintile						
Lowest	1.0	3.6	33.5	0.4	64.8	1,414
Second	3.2	8.0	45.0	2.1	53.0	1,439
Middle	5.2	17.8	57.7	2.9	39.7	1,513
Fourth	13.4	52.6	70.6	10.4	19.8	1,526
Highest	33.2	86.8	83.1	30.3	6.2	1,728
Total	12.1	35.9	59.2	10.0	35.3	7,620

Table 3.4.2 Exposure to mass media: men

Percentage of men who usually read a newspaper at least once a week, watch television at least once a week, and listen to the radio at least once a week, by background characteristics, Nigeria 2003

Background characteristic	Type of mass media exposure					Number of men
	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three specified media	No exposure to specified media	
Age						
15-19	10.6	39.6	61.4	6.9	32.0	453
20-24	12.8	37.7	60.9	8.9	33.8	426
25-29	14.6	35.8	57.7	12.2	37.9	328
30-34	11.7	42.3	63.1	10.5	33.0	299
35-39	6.1	29.6	51.7	5.7	45.7	220
40-44	13.3	32.9	53.4	12.2	39.8	208
45-49	13.3	37.1	56.8	9.2	37.4	159
50-54	6.0	41.4	58.3	5.2	33.1	133
55-59	10.4	30.0	51.9	8.7	42.6	120
Residence						
Urban	19.8	59.0	72.1	15.4	20.3	872
Rural	6.5	24.0	50.3	5.2	45.6	1,474
Region						
North Central	8.4	34.8	50.0	6.6	44.2	348
North East	3.1	13.5	31.8	1.8	65.6	421
North West	7.7	27.5	70.4	5.9	26.8	602
South East	22.3	46.6	72.5	19.3	25.0	207
South South	14.3	51.4	53.6	11.4	35.1	445
South West	21.5	61.7	77.5	16.7	15.8	322
Education						
No education	4.9	16.3	48.9	4.0	48.5	507
Primary	9.1	32.1	54.1	6.9	39.6	603
Secondary	14.0	45.1	63.7	10.4	30.7	960
Higher	19.7	57.6	67.0	17.4	25.3	276
Wealth quintile						
Lowest	2.1	11.0	38.6	1.5	59.4	423
Second	3.8	13.0	43.2	1.7	53.1	418
Middle	6.1	23.2	56.7	4.3	39.5	436
Fourth	14.8	50.6	64.2	11.4	26.5	507
Highest	25.2	72.7	80.7	21.3	12.5	563
Total	11.4	37.0	58.4	9.0	36.2	2,346

3.4 EMPLOYMENT

Like education, employment can also be a source of empowerment for women, especially if it puts them in control of income. The measurement of women's employment, however, is difficult. The difficulty arises largely because some of the work that women do, especially work on family farms, family businesses, or in the informal sector, is often not perceived by women themselves as employment, and hence not reported as such. To avoid underestimating women's employment, the NDHS survey asked women several questions to probe for their employment status and to ensure complete coverage of employment in any sector, formal or informal. Employed women are those who say that they are currently working and those who worked at any time during the 12 months preceding the survey. Additional information was also obtained on the type of work women were doing, whether they worked continuously throughout the year, whom they worked for, and the form in which they received their earnings. Men were also asked about employment.

Tables 3.5.1 and 3.5.2 show the percent distribution of women and men by employment status, according to background characteristics. Fifty-six percent of women reported being currently employed and additional 2 percent worked during the 12 months prior to the survey. About two in five women (42 percent) did not work at all in the 12 months preceding the survey. Seventy percent of men are currently employed, while an additional 3 percent were employed in the 12 months preceding the survey. Figure 3.1 shows the distribution of women and men by current employment status.

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing	Total	Number of women
	Currently employed	Not currently employed				
Age						
15-19	24.8	2.0	73.1	0.1	100.0	1,716
20-24	47.0	2.8	50.1	0.1	100.0	1,494
25-29	63.4	2.0	34.7	0.0	100.0	1,382
30-34	70.7	2.4	26.9	0.1	100.0	941
35-39	78.2	1.8	20.0	0.0	100.0	816
40-44	75.4	1.5	23.0	0.0	100.0	688
45-49	77.4	2.5	20.1	0.0	100.0	583
Marital status						
Never married	30.6	2.4	67.0	0.0	100.0	1,926
Married or living together	64.4	2.1	33.4	0.1	100.0	5,336
Divorced/separated/widowed	70.7	1.7	27.6	0.0	100.0	358
Number of living children						
0	34.4	2.8	62.8	0.0	100.0	2,499
1-2	57.3	1.7	40.8	0.1	100.0	2,009
3-4	69.0	1.9	29.0	0.1	100.0	1,526
5+	76.5	2.0	21.5	0.0	100.0	1,586
Residence						
Urban	57.8	2.2	40.0	0.0	100.0	2,629
Rural	55.3	2.2	42.5	0.1	100.0	4,991
Region						
North Central	63.2	1.8	35.0	0.0	100.0	1,121
North East	50.0	4.7	45.1	0.2	100.0	1,368
North West	51.5	1.4	47.1	0.0	100.0	2,095
South East	57.0	1.9	41.0	0.0	100.0	737
South South	55.0	1.8	43.2	0.0	100.0	1,342
South West	67.8	1.5	30.8	0.0	100.0	958
Education						
No education	56.4	2.2	41.2	0.1	100.0	3,171
Primary	65.9	2.1	32.0	0.0	100.0	1,628
Secondary	48.0	2.1	49.9	0.0	100.0	2,370
Higher	61.7	2.0	36.3	0.0	100.0	451
Total	56.1	2.2	41.6	0.1	100.0	7,620

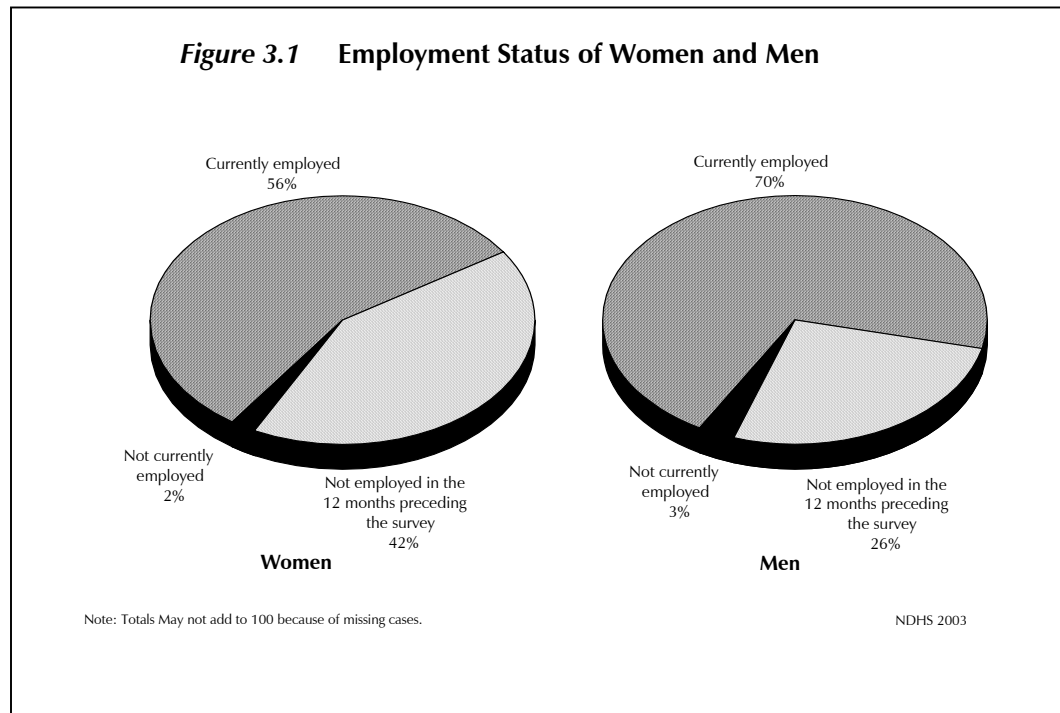
Tables 3.5.1 and 3.5.2 show that current employment increases with age of respondents for both men and women, although the percentage of men employed declines among the oldest age group. Women who are divorced, separated, or widowed are most likely to be employed (71 percent), followed by those who are married or living together (64 percent), while never-married women are the least likely to be employed (31 percent). Also, 94 percent of men who are currently or formerly married are employed, compared with 40 percent of never-married men. Table 3.5.1 shows that as the number of living children a woman has increases, the proportion who work also increases. Women with no living children are the least likely to be employed (34 percent). Similarly, twice as many men with one or more living children are employed than men with no children.

Table 3.5.2 Employment status: men

Percent distribution of men by employment status, according to background characteristics, Nigeria 2003

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Missing	Total	Number of men
	Currently employed	Not currently employed				
Age						
15-19	25.4	2.6	68.3	3.7	100.0	453
20-24	49.6	6.6	43.4	0.5	100.0	426
25-29	73.4	4.3	21.8	0.5	100.0	328
30-34	90.6	2.5	6.9	0.0	100.0	299
35-39	95.1	2.4	1.6	0.9	100.0	220
40-44	96.9	1.9	1.2	0.0	100.0	208
45-49	97.0	0.9	2.1	0.0	100.0	159
50-54	96.6	0.0	3.4	0.0	100.0	133
55-59	88.4	0.0	11.4	0.2	100.0	120
Marital status						
Never married	39.9	4.6	53.6	1.9	100.0	1,048
Married or living together	94.0	1.9	4.0	0.2	100.0	1,245
Divorced/separated/widowed	93.8	1.8	4.4	0.0	100.0	53
Number of living children						
0	46.0	4.2	48.1	1.7	100.0	1,168
1-2	90.7	3.0	6.3	0.0	100.0	379
3-4	93.4	2.4	3.5	0.6	100.0	316
5+	95.5	1.0	3.4	0.1	100.0	482
Residence						
Urban	64.8	2.8	31.6	0.8	100.0	872
Rural	72.7	3.2	22.9	1.1	100.0	1,474
Region						
North Central	61.8	2.0	36.0	0.2	100.0	348
North East	84.9	3.6	11.1	0.5	100.0	421
North West	80.6	4.5	13.6	1.3	100.0	602
South East	67.9	3.2	28.0	0.9	100.0	207
South South	51.8	2.9	42.8	2.4	100.0	445
South West	64.4	1.2	34.5	0.0	100.0	322
Education						
No education	96.3	1.2	2.1	0.4	100.0	507
Primary	80.2	2.1	16.8	0.9	100.0	603
Secondary	51.1	4.1	43.3	1.5	100.0	960
Higher	63.3	5.1	31.2	0.4	100.0	276
Total	69.8	3.1	26.2	1.0	100.0	2,346

Figure 3.1 Employment Status of Women and Men



The percentage of men currently employed is significantly higher in rural areas than in urban areas (73 and 65 percent, respectively). Women's employment does not vary greatly by urban-rural residence. There is significant difference, however, in levels of employment by region of residence. For example, employment among women ranges from a low of 50 percent in the North East to a high of 68 percent in the South West. Among men, employment ranges from a low of 52 percent in the South South to a high of 85 percent in the North East. There is no uniform pattern of employment status by level of education.

Occupation

Respondents who are currently employed or worked within the year before the survey were asked to state their occupation.

Table 3.6.1 shows that the sales and services sector employs more than half (56 percent) of working women. In addition, 21 percent of working women are in agriculture, 10 percent work at skilled manual jobs, and 8 percent are engaged in professional, technical, and managerial work. Negligible proportions of working women are engaged in unskilled manual labour (3 percent), clerical jobs (2 percent), or domestic service (1 percent). Table 3.6.2 shows that the highest proportion of men work in agriculture (38 percent), followed by skilled manual occupations (21 percent) and sales and services (19 percent). Twice as many men as women are employed in the professional, technical, or managerial sector (16 and 8 percent, respectively).

The majority of women are employed in sales and services regardless of urban-rural residence. Urban women, however, are more likely than rural women to be employed in either the skilled manual or professional sectors, while rural women are more likely to be in agriculture. More than half of rural men work in agriculture; eight in ten urban men are working in the professional, sales and services, or skilled manual sectors. There is considerable variation by geopolitical region. For example, men in the north are more likely to be in agriculture compared with those in the south. In general, southern women and men are more likely to be in professional/technical/managerial occupations than their northern counterparts, perhaps reflecting differential levels of education.

Table 3.6.1 Occupation: women

Percent distribution of women employed in the 12 months preceding the survey by occupation, according to background characteristics, Nigeria 2003

Background characteristic	Professional/technical/managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Total	Number of women
Age									
15-19	2.5	1.7	53.3	9.6	5.5	4.6	22.8	100.0	459
20-24	7.3	2.1	53.8	13.9	3.8	1.5	17.5	100.0	744
25-29	7.7	1.8	57.3	14.6	2.0	0.5	16.1	100.0	903
30-34	7.8	1.7	56.6	11.2	2.1	1.1	19.6	100.0	688
35-39	9.9	2.0	60.7	6.5	2.0	1.1	17.8	100.0	653
40-44	11.2	1.3	54.4	3.0	1.7	1.3	26.7	100.0	530
45-49	9.0	0.5	55.4	2.0	1.8	0.3	30.9	100.0	466
Marital status									
Never married	11.8	4.8	44.2	13.0	5.6	3.3	17.2	100.0	635
Married or living together	7.2	1.0	58.7	9.2	2.2	1.0	20.7	100.0	3,548
Divorced/separated/widowed	10.0	2.7	49.5	6.4	1.4	2.0	28.0	100.0	259
Number of living children									
0	9.8	3.7	49.7	12.2	4.9	3.1	16.6	100.0	930
1-2	8.0	1.3	54.8	13.8	2.4	1.0	18.7	100.0	1,186
3-4	6.5	1.0	61.4	8.0	1.9	0.9	20.4	100.0	1,082
5+	8.0	1.1	57.6	4.9	1.8	0.8	25.6	100.0	1,245
Residence									
Urban	13.2	3.4	58.0	13.3	3.5	1.6	7.0	100.0	1,576
Rural	5.1	0.7	55.1	7.5	2.1	1.2	28.1	100.0	2,867
Region									
North Central	7.0	0.6	45.2	6.5	2.2	1.8	36.7	100.0	728
North East	4.6	1.2	63.5	11.4	1.1	2.0	16.2	100.0	749
North West	3.3	0.4	68.3	12.9	4.3	1.4	9.4	100.0	1,107
South East	15.2	3.7	45.1	8.1	2.1	0.3	25.5	100.0	434
South South	12.0	2.9	42.8	8.1	3.3	0.7	30.0	100.0	761
South West	11.5	2.7	61.9	7.8	1.7	1.6	12.7	100.0	663
Education									
No education	0.7	0.1	64.3	8.6	2.4	1.6	22.4	100.0	1,860
Primary	3.3	0.8	53.7	8.3	2.4	1.2	30.1	100.0	1,108
Secondary	11.3	3.5	54.2	12.6	3.6	1.2	13.6	100.0	1,188
Higher	59.9	8.0	20.1	8.0	1.4	1.1	1.6	100.0	287
Total	8.0	1.7	56.1	9.5	2.6	1.4	20.6	100.0	4,443

Note: Percentages may not add to 100 due to missing cases (no more than 0.3 percent of cases in any category).

Table 3.6.2 Occupation: men

Percent distribution of men employed in the 12 months preceding the survey by occupation, according to background characteristics, Nigeria 2003

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Un- skilled manual	Domestic service	Agri- culture	Total	Number of men
Age									
15-19	0.0	0.0	12.1	29.9	7.7	0.3	50.0	100.0	127
20-24	5.0	0.5	22.9	26.7	11.4	0.0	33.4	100.0	239
25-29	13.3	1.5	26.7	22.3	3.2	0.9	32.0	100.0	255
30-34	18.6	0.7	20.9	22.3	5.0	0.2	32.4	100.0	279
35-39	25.2	0.0	20.5	12.9	5.1	0.0	36.3	100.0	215
40-44	23.3	3.4	15.0	18.0	2.8	0.0	37.4	100.0	205
45-49	23.5	2.4	8.8	23.1	3.0	0.0	39.2	100.0	156
50-54	15.4	2.7	13.9	16.5	4.0	0.0	47.4	100.0	128
55-59	14.5	0.4	12.7	12.0	3.5	0.0	56.9	100.0	106
Marital status									
Never married	9.5	0.9	21.2	29.1	7.7	0.6	31.0	100.0	466
Married or living together	18.4	1.4	17.4	17.4	4.2	0.0	41.1	100.0	1,193
Divorced/separated/ widowed	14.5	0.0	19.9	23.3	7.1	0.0	35.2	100.0	50
Number of living children									
0	12.6	0.7	22.5	24.8	7.8	0.5	31.1	100.0	586
1-2	14.5	1.0	21.4	20.0	6.4	0.1	36.6	100.0	355
3-4	19.0	2.2	15.0	21.1	3.3	0.0	39.3	100.0	303
5+	19.1	1.4	13.5	16.2	2.4	0.0	47.5	100.0	465
Residence									
Urban	23.3	2.0	26.5	32.0	6.3	0.5	9.4	100.0	590
Rural	12.0	0.9	14.3	14.9	4.7	0.0	53.3	100.0	1,120
Region									
North Central	17.3	1.2	14.1	21.2	3.8	0.2	42.1	100.0	222
North East	15.9	1.0	19.0	18.4	2.8	0.0	43.0	100.0	372
North West	8.3	0.5	17.5	13.1	7.9	0.0	52.7	100.0	513
South East	22.4	0.3	30.4	25.2	10.2	0.0	11.5	100.0	147
South South	21.1	4.3	18.6	23.7	1.6	1.1	29.5	100.0	244
South West	22.4	0.7	16.0	36.9	5.3	0.0	18.7	100.0	211
Education									
No education	3.8	0.0	11.8	13.8	3.0	0.0	67.6	100.0	494
Primary	6.7	1.3	16.5	31.8	4.1	0.0	39.7	100.0	496
Secondary	13.3	2.5	29.7	23.4	8.9	0.6	21.7	100.0	530
Higher	79.0	1.0	9.9	3.1	3.8	0.0	3.3	100.0	189
Total	15.9	1.3	18.5	20.8	5.2	0.2	38.1	100.0	1,709

Earnings, Employers, and Continuity of Employment

Table 3.7.1 presents information on women's employment status, the form of earnings, and the continuity of employment. The table takes into account whether women are involved in agricultural or nonagricultural occupations, since all of the employment variables shown in the table are strongly influenced by the sector in which a woman is employed.

Table 3.7.1 Type of employment: women

Percent distribution of women employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Nigeria 2003

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	24.5	88.5	75.3
Cash and in-kind	21.6	5.7	9.0
In-kind only	8.8	0.7	2.4
Not paid	45.0	4.4	12.8
Missing	0.2	0.7	0.6
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	25.6	8.5	12.0
Employed by nonfamily member	2.0	15.1	12.4
Self-employed	72.4	75.7	75.0
Missing	0.0	0.8	0.6
Total	100.0	100.0	100.0
Continuity of employment			
All year	38.3	77.0	69.0
Seasonal	59.3	14.3	23.6
Occasional	2.1	7.9	6.7
Missing	0.3	0.8	0.7
Total	100.0	100.0	100.0
Number of women	916	3,525	4,443

Note: Total includes 2 women with missing information on type of employment who are not shown separately

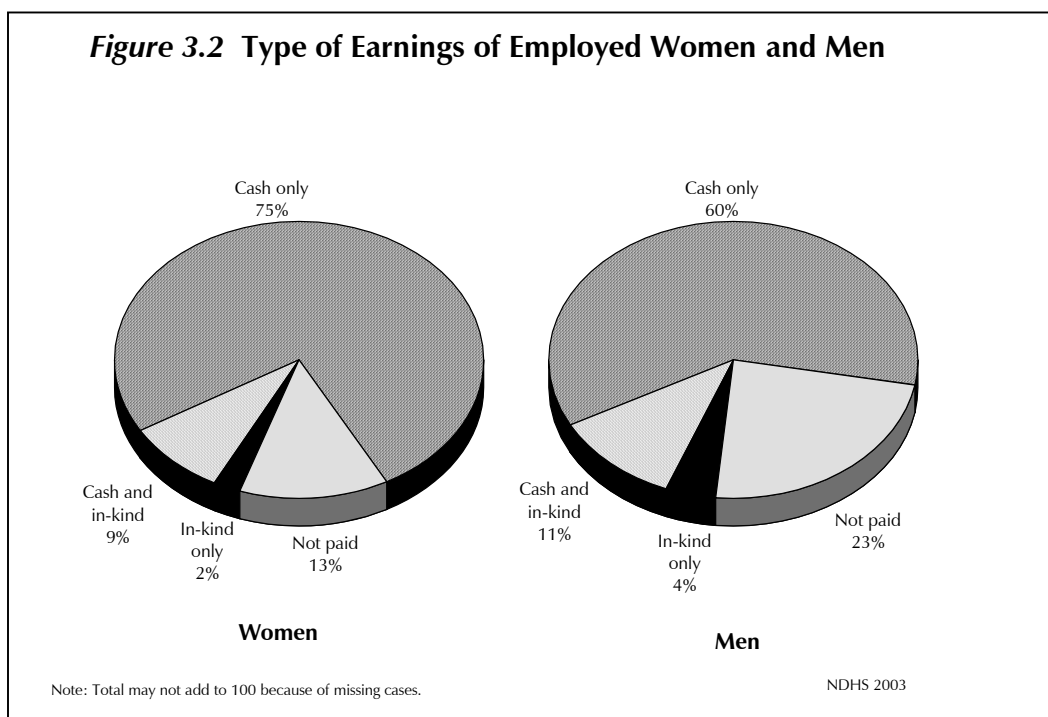
The data show that almost half of women employed in agricultural work are not paid (45 percent). A majority of women in this sector report that they are self-employed (72 percent) and that they work seasonally (59 percent). Among women employed in nonagricultural work, most earn cash only (89 percent), say that they are self-employed (76 percent) and work all year (77 percent).

Information was also collected on men's earnings (Table 3.7.2 and Figure 3.2). Similar to women, the majority of men in agriculture (53 percent) state that they are not paid for their work, while 85 percent of those in nonagricultural jobs state they earn cash only.

Table 3.7.2 Type of employment: men

Percent distribution of men employed in the 12 months preceding the survey by type of earnings, according to type of employment (agricultural or nonagricultural), Nigeria 2003

Employment characteristic	Agricultural work	Nonagricultural work	Total
Type of earnings			
Cash only	18.6	84.9	59.6
Cash and in-kind	19.5	6.2	11.3
In-kind only	8.6	1.7	4.3
Not paid	53.3	4.7	23.3
Missing	0.0	2.5	1.5
Total	100.0	100.0	100.0
Number of men	652	1,057	1,709



3.5 MEASURES OF WOMEN'S EMPOWERMENT

Decision on Use of Earnings

As means of assessing women's autonomy, respondents in the 2003 NDHS who had received cash earnings for work in the 12 months before the survey were asked who mainly decides how these earnings will be used. This information allows the assessment of women's control over their own earnings. In addition, they were asked about the proportion of household expenditures supported by their earnings. This information not only allows an evaluation of the relative importance of women's earnings in the household economy, but has implications for the empowerment of women. It is expected that employment and earnings are more likely to empower women if their earnings are important for meeting the needs of their households.

Table 3.8 shows women's degree of control over the use of their earnings and the extent to which the earnings of women meet household expenditures by background characteristics. Almost three-quarters of women who receive cash earnings report that they alone decide how their earnings are used, and an additional 16 percent say that they decide jointly with their husband or someone else. Only 10 percent of women report that someone else decides how their earnings will be used.

Women age 15-19 are more likely than older women to report that someone else decides how their earnings are to be used. Almost all women who are divorced, separated, or widowed say that they alone are responsible for deciding how to use their earnings. Among currently married women, seven out of ten report that they alone decide how their earnings are used, while one-fifth say that such decisions are made jointly with their husbands or someone else. More than three-quarters of never-married women make independent decisions on how to use their earnings. The data suggest that the proportion of women who make joint decisions with their husbands or someone else increases with parity.

More urban women than rural women report that they alone decide how to spend their earnings, although the difference is not great (78 and 71 percent, respectively). Among the geopolitical regions, women in North West and South West are most likely to decide on how to use their earnings relative to women in other regions. Surprisingly, there is no difference by level of education.

Table 3.8 Decision on use of earnings and contribution of earnings to household expenditures

Percent distribution of women employed in the 12 months preceding the survey receiving cash earnings by person who decides how earnings are to be used and by proportion of household expenditures met by earnings, according to background characteristics, Nigeria 2003

Background characteristic	Person who decides how earnings are used					Proportion of household expenditures met by earnings						Number of women
	Self only	Jointly ¹	Someone else only ²	Missing	Total	Almost none/ none	Less than half	Half or more	All	Missing	Total	
Age												
15-19	62.8	14.7	22.1	0.4	100.0	41.2	31.2	23.3	2.7	1.6	100.0	330
20-24	77.7	10.4	11.9	0.0	100.0	32.9	31.9	28.6	6.4	0.2	100.0	591
25-29	74.1	17.1	8.5	0.3	100.0	27.5	36.1	28.8	7.6	0.0	100.0	801
30-34	75.1	16.2	8.6	0.1	100.0	19.4	33.7	38.2	8.6	0.1	100.0	605
35-39	72.5	18.2	9.3	0.0	100.0	17.8	38.1	36.8	7.3	0.0	100.0	589
40-44	69.8	21.5	8.7	0.0	100.0	13.9	26.5	42.9	16.3	0.4	100.0	441
45-49	77.0	17.8	5.1	0.1	100.0	15.9	32.2	37.7	13.8	0.4	100.0	388
Marital status												
Never married	78.0	7.2	14.8	0.0	100.0	33.8	22.5	31.9	11.5	0.3	100.0	462
Married or living together	71.0	19.0	9.9	0.1	100.0	23.1	36.7	34.2	5.8	0.3	100.0	3,062
Divorced/separated/widowed	97.4	0.4	2.1	0.2	100.0	14.3	11.1	30.0	44.2	0.4	100.0	220
Number of living children												
0	73.8	11.2	14.8	0.2	100.0	37.9	26.0	28.1	7.8	0.2	100.0	704
1-2	75.0	15.4	9.6	0.0	100.0	23.6	34.8	32.7	8.2	0.6	100.0	1,015
3-4	75.2	16.4	8.0	0.3	100.0	22.0	36.0	32.9	9.0	0.1	100.0	966
5+	69.9	20.9	9.2	0.0	100.0	16.7	34.7	38.9	9.6	0.1	100.0	1,059
Residence												
Urban	77.8	14.2	8.0	0.0	100.0	22.2	31.9	35.5	10.4	0.0	100.0	1,414
Rural	70.7	17.8	11.3	0.2	100.0	24.9	34.4	32.6	7.8	0.4	100.0	2,331
Region												
North Central	64.9	14.9	19.8	0.5	100.0	23.6	31.2	39.1	6.1	0.0	100.0	515
North East	71.0	18.8	10.1	0.1	100.0	43.7	31.2	22.0	2.9	0.3	100.0	656
North West	80.6	14.0	5.3	0.1	100.0	25.6	44.4	26.7	2.7	0.7	100.0	1,053
South East	74.5	18.4	7.1	0.1	100.0	17.9	38.3	33.8	9.8	0.3	100.0	296
South South	63.5	23.3	13.2	0.0	100.0	8.3	23.0	43.6	25.0	0.0	100.0	617
South West	80.2	11.6	8.2	0.0	100.0	18.8	26.9	43.4	11.0	0.0	100.0	607
Education												
No education	74.9	16.2	8.6	0.3	100.0	29.9	37.1	27.4	5.1	0.5	100.0	1,612
Primary	71.1	17.3	11.6	0.0	100.0	18.0	31.5	38.1	12.3	0.1	100.0	886
Secondary	72.6	15.8	11.6	0.0	100.0	21.2	31.6	37.1	9.9	0.1	100.0	972
Higher	74.6	17.0	8.4	0.0	100.0	17.5	24.1	44.0	14.4	0.0	100.0	274
Total	73.4	16.4	10.1	0.1	100.0	23.9	33.4	33.7	8.7	0.3	100.0	3,744

¹ With husband or someone else

² Includes husband

Table 3.8 also shows the proportion of household expenditures met by earnings. More than half of women who receive cash earnings say that less than half or none of their household expenditures are met by their earnings. One-third of the women say their earnings contribute to half or more of their household expenditures. Only 9 percent of the women say that their earnings meet all household expenditures. Younger women are more likely to contribute nothing or almost nothing, while older women are more likely to meet all household expenditures. Divorced, separated, and widowed women are more

likely to meet all household expenditures with their earnings, compared with never married or currently married women.

Table 3.9 shows the relationship between women's control over earnings and their contribution to household expenditures based on marital status. Seventy-one percent of women who are currently married or living together with their partner, decide by themselves how their earnings are used, while almost one-fifth decide jointly with their husband or partner. One in ten women says that her husband alone decides. Eighty-four percent of unmarried women report that they alone decide how their earnings are used, while 11 percent report that someone else only makes the decision. The greater a woman's contribution to household expenditures, the more likely she is to decide jointly with her husband how earnings are used. It is notable that one in ten women who contribute at least half of the money used for household expenditures say that their husband alone decides how their money is used.

In addition to information on women's education, employment status, and earnings control, the 2003 NDHS also obtained information from both women and men on other measures of women's empowerment and status. Specifically, questions were asked on women's participation in household decisionmaking, on acceptance of wife-beating, and on opinions about when a wife should be able to refuse to have sex with her husband. These data provide insights into women's control over their environment and their attitudes toward gender roles; both factors are relevant to understanding women's health behaviours and outcomes.

Table 3.9 Women's control over earnings

Percent distribution of women who received cash earnings for work in the past 12 months by person who decides how earnings are used, according to marital status, and the proportion of household expenditures met by earnings, Nigeria 2003

Contribution to household expenditures	Currently married or living together						Number of women	Not married ¹				
	Self only	Jointly with husband	Jointly with someone else	Husband only	Someone else only	Total		Self only	Jointly with someone else	Someone else only	Total	Number of women
Almost none/none	84.3	8.5	0.5	5.7	0.6	100.0	708	83.2	4.2	12.6	100.0	188
Less than half	73.2	16.0	1.2	9.1	0.4	100.0	1,122	77.8	6.0	16.3	100.0	129
Half or more	63.2	23.5	0.6	11.5	1.1	100.0	1,047	83.7	6.5	9.7	100.0	213
All	49.4	39.7	0.3	10.4	0.3	100.0	177	92.6	2.2	5.2	100.0	150
Total	71.0	18.2	0.8	9.2	0.7	100.0	3,062	84.2	5.0	10.7	100.0	682

Note: Totals include 8 currently married women and 2 unmarried women with missing information on contribution to household expenditures. Percentages for currently married women may not add to 100 due to missing cases (no more than 0.3 percent of cases in any category).

¹ Never-married, divorced, separated, or widowed women

Household Decisionmaking

To assess women's decisionmaking autonomy, information was collected on women's participation in seven different types of decisions: the respondent's own health care, making large household purchases, making household purchases for daily needs, visits to family or friends, what food should be cooked each day, and children's health care and education. The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. Table 3.10 shows the percent distribution of women according to who in the household usually has the final say on each one of the different types of decisions.

Among married women, decisionmaking is highly dominated by husbands. For each specified decision, the majority of women state that their husband has the final say. At least two-thirds of women state that their husband alone makes decisions regarding the children’s health care and education, large household purchases, and even the respondent’s own health care. Women are most likely to have a final say in what food to cook each day—46 percent state that they alone or jointly decide what to cook—followed by visits to friends and relatives (38 percent), and daily household purchases (33 percent). Among unmarried women, the majority also report that, when applicable, someone else has the final say in each of the specified decisions.

Table 3.10 Women’s participation in decisionmaking

Percent distribution of women by person who has the final say in making specific decisions, according to current marital status and type of decision, Nigeria 2003

Decision	Currently married or living together							Not married ¹						
	Self only	Jointly with hus-band	Jointly with someone else	Hus-band only	Some-one else only	Decision made/not applicable	Total	Number of women	Self only	Jointly with someone else	Some-one else only	Decision made/not applicable	Total	Number of women
Own health care	12.8	10.3	0.1	73.4	3.1	0.1	100.0	5,336	22.5	4.7	67.0	5.7	100.0	2,284
Large household purchases	7.1	12.4	0.1	77.5	2.6	0.2	100.0	5,336	16.4	5.4	65.2	13.0	100.0	2,284
Daily household purchases	19.0	13.9	0.2	64.5	2.4	0.0	100.0	5,336	18.4	5.3	64.0	12.1	100.0	2,284
Visits to family or relatives	17.7	20.4	0.2	59.7	1.7	0.2	100.0	5,336	23.1	6.1	62.1	8.6	100.0	2,284
What food to cook each day	33.5	11.7	0.8	51.0	2.9	0.0	100.0	5,336	19.8	6.0	62.8	11.3	100.0	2,284
Children's health care	9.3	17.3	0.3	66.8	2.1	4.1	100.0	5,336	13.8	4.3	36.2	45.6	100.0	2,284
Children's education	4.8	16.5	0.3	67.7	2.0	8.6	100.0	5,336	13.3	4.6	35.3	46.7	100.0	2,284

¹ Never-married, divorced, separated, or widowed women

Table 3.11.1 and Figure 3.3 show how participation in decisionmaking varies by background characteristics. Women are considered to participate in a decision if they alone or jointly with a husband or someone else have the final say in that decision. The results indicate that just 14 percent of women participate in all of the five specified decisions, while 46 percent of women report that they do not participate in any of the decisions. The table shows that women’s involvement in all the specified decisions increases with age, from a low of 5 percent among women age 15-19 to a high of 31 percent among women age 45-49. Divorced, separated, or widowed women are much more likely to be involved in all types of decisions than currently married women and never-married women (56, 13, and 11 percent, respectively). Women who have no living children, no education, those living in rural areas and in the north, and those who are not employed are the least likely to participate in all the specified decisions.

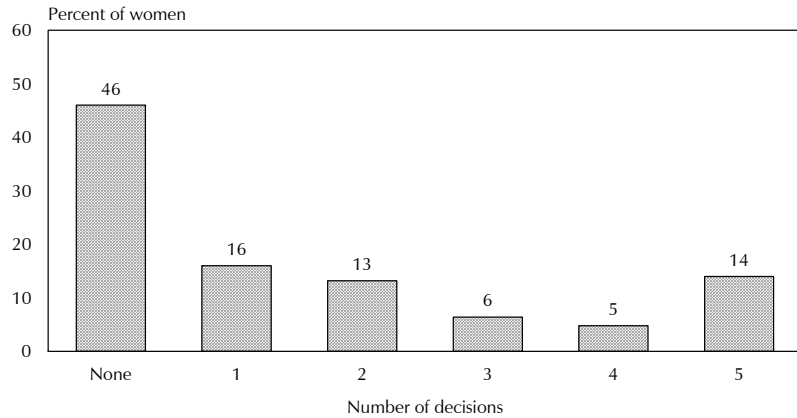
Table 3.11.1 Women's participation in decisionmaking by background characteristics: women

Percentage of women who say that they alone or jointly have the final say in specific decisions, by background characteristics, Nigeria 2003

Background characteristic	Alone or jointly has final say in:							Number of women
	Own health care	Making large purchases	Making daily purchases	Visits to family or relatives	What food to cook each day	All specified decisions	None of the specified decisions	
Age								
15-19	9.7	6.3	8.3	16.1	15.5	4.6	73.8	1,716
20-24	19.7	13.3	21.0	27.1	31.2	8.8	53.4	1,494
25-29	25.2	20.6	35.8	39.6	45.5	13.7	37.7	1,382
30-34	29.9	25.9	38.6	45.4	50.6	19.0	34.3	941
35-39	33.1	31.2	44.1	47.4	55.2	22.6	32.3	816
40-44	34.6	32.9	46.9	46.3	54.3	22.8	33.2	688
45-49	45.8	39.3	52.5	59.4	65.0	30.8	22.9	583
Marital status								
Never married	20.1	14.2	16.4	21.2	18.2	10.8	68.8	1,926
Married or living together	23.3	19.6	33.0	38.3	46.0	13.0	40.0	5,336
Divorced/separated/widowed	65.7	62.8	63.6	72.1	66.3	56.0	20.6	358
Number of living children								
0	17.2	12.7	16.3	22.8	21.2	9.0	65.6	2,499
1-2	25.0	19.9	31.2	36.4	43.5	14.7	41.8	2,009
3-4	27.5	23.1	37.2	42.8	49.0	16.1	36.8	1,526
5+	32.4	30.1	44.2	47.7	56.1	21.1	31.1	1,586
Residence								
Urban	30.3	24.4	36.3	40.3	44.6	17.9	41.1	2,629
Rural	21.4	18.1	27.0	33.0	37.4	12.6	49.1	4,991
Region								
North Central	21.3	12.7	26.1	23.2	39.5	8.8	50.6	1,121
North East	12.4	11.4	15.3	39.8	38.8	6.8	46.9	1,368
North West	13.1	11.7	16.8	28.0	26.4	8.4	57.5	2,095
South East	48.9	42.9	59.0	57.1	57.6	34.9	30.9	737
South South	32.7	31.2	44.4	36.7	47.6	21.4	41.2	1,342
South West	39.8	28.0	43.8	42.3	47.2	19.7	35.4	958
Education								
No education	17.5	14.6	20.7	32.7	34.8	10.2	50.5	3,171
Primary	30.1	28.4	41.8	40.7	49.7	19.7	39.1	1,628
Secondary	26.1	19.9	31.2	32.4	37.1	14.2	49.4	2,370
Higher	44.7	33.3	50.1	53.5	55.4	26.8	28.0	451
Employment								
Not employed	12.4	8.6	12.3	21.3	22.2	6.2	66.5	3,326
Employed for cash	35.4	30.6	44.8	48.1	53.7	22.0	30.0	3,630
Employed, not for cash	25.5	22.9	41.9	37.3	54.3	15.4	34.8	622
Total	24.5	20.3	30.2	35.5	39.9	14.4	46.4	7,620

Note: Total includes 42 cases with missing information on employment.

Figure 3.3 Number of Decisions in Which Women Participate in the Final Say



NDHS 2003

The 2003 NDHS also sought men's opinions concerning women's participation in decisionmaking in five specified areas. Table 3.11.2 shows that only 5 percent of men said a wife should participate in all decisions either alone or jointly, while 42 percent said that she should not participate in any decision. Among the five specified decisions, men were most likely to think that women should participate in the decision on how many children to have (44 percent), followed by visits to family or relatives and how to spend her money (31 and 26 percent, respectively).

More rural men (46 percent) disapprove of wives' participation in any of the specified decisions than urban men (36 percent). There is significant variation by region with the South West, South East, and North Central having lower proportions of men who believe wives should not participate in any decisions. The data indicate that men with higher education are more likely to support their wives participation in all specified decisions than men with no education (11 and 2 percent, respectively).

Table 3.11.2 Women's participation in decisionmaking by background characteristics: men

Percentage of men who say that the wife alone or jointly should have the final say in specific decisions, by background characteristics, Nigeria 2003

Background characteristic	Wife alone or jointly should have final say in:							Number of men
	Making large purchases	Making daily purchases	Visits to family or relatives	What to do with the money she earns	How many children to have	All specified decisions	None of the specified decisions	
Age								
15-19	13.8	51.5	32.8	52.5	42.7	8.1	23.8	453
20-24	16.7	48.0	34.8	59.8	53.3	8.9	19.4	426
25-29	14.5	52.9	32.0	43.3	43.7	5.4	25.0	328
30-34	21.1	49.8	36.6	58.3	54.9	11.4	23.7	299
35-39	13.5	40.9	30.7	59.6	45.3	8.7	21.7	220
40-44	21.0	42.6	31.7	58.9	47.5	7.5	21.9	208
45-49	13.2	44.4	33.9	53.7	45.0	5.7	25.5	159
50-54	11.4	50.9	33.8	60.1	45.2	5.4	18.9	133
55-59	10.8	38.9	34.1	54.4	38.8	3.8	25.1	120
Marital status								
Never married	16.1	57.2	37.8	57.2	50.0	9.2	17.5	1,048
Married or living together	15.6	40.7	30.0	52.8	44.4	6.6	27.2	1,245
Divorced/separated/ widowed	7.1	33.7	26.9	70.5	51.1	6.6	19.9	53
Number of living children								
0	17.5	53.6	37.1	56.5	49.0	9.7	19.3	1,168
1-2	13.1	40.0	31.6	56.0	49.8	5.5	25.1	379
3-4	15.1	43.3	30.5	52.7	43.1	6.2	27.5	316
5+	13.5	43.5	28.1	52.8	43.0	5.8	25.9	482
Residence								
Urban	18.0	50.5	38.9	65.0	51.8	9.0	14.9	872
Rural	14.2	46.4	30.2	49.3	44.3	7.0	27.4	1,474
Region								
North Central	20.3	75.1	46.4	63.2	52.3	10.6	11.8	348
North East	1.9	15.2	12.2	32.2	36.0	0.5	51.1	421
North West	5.2	12.3	16.8	58.2	42.8	0.5	32.5	602
South East	39.0	62.3	56.7	55.3	57.4	13.2	10.1	207
South South	17.3	83.9	37.5	49.3	45.4	10.6	10.9	445
South West	30.6	68.8	57.8	78.7	59.6	20.3	3.6	322
Education								
No education	4.8	17.4	15.8	44.7	33.6	1.5	43.1	507
Primary	14.6	46.1	31.5	51.4	41.7	7.2	27.1	603
Secondary	18.8	61.9	40.3	58.9	53.7	9.1	12.8	960
Higher	26.7	58.9	46.3	69.5	60.7	16.0	10.2	276
Employment								
Not employed	18.8	61.5	37.0	57.1	48.5	11.0	15.0	703
Employed for cash	17.4	52.0	39.5	61.0	52.7	8.3	16.6	1,179
Employed, not for cash	5.1	16.9	11.3	36.3	29.6	1.5	50.8	450
Missing	48.1	15.3	51.2	71.9	60.2	0.0	24.5	14
Total	15.6	47.9	33.4	55.1	47.1	7.8	22.7	2,346

Note: Total includes 14 cases with missing information on employment.

Women's Agreement with Reasons for Wife Beating

The 2003 NDHS gathered information on women's attitudes toward wife beating, a proxy for women's perception of their status. Women who believe that a husband is justified in hitting or beating his wife for any reason at all may also believe themselves to be of low status both absolutely and relative to men. Such perceptions by women could act as a barrier to accessing health care for themselves and their children, could affect their attitude toward contraceptive use, and could impact their general well-being. Women were asked whether a husband is justified in beating his wife under a series of circumstances. Possible reasons that justified a man beating his wife included her burning the food, her not having the food prepared on time, her arguing with him, her going out without telling him, her neglecting the children, and her refusing sexual relations. The results are summarized in Table 3.12.1.

Approximately two-thirds (65 percent) of women believe that a husband is justified in beating his wife for at least one of the specified reasons. More than half of women believe that a husband is justified in beating his wife if she goes out without telling him, and about half agree that she should be beaten if she neglects the children. Slightly smaller percentages agree if a woman argues with her husband (44 percent) or refuses to have sex with her husband (38 percent). Approximately one-third feel that a husband is justified in beating his wife if the food is not cooked on time or if she burns the food.

There is little variation in these beliefs by age. Women who are married, have at least one child, or who reside in rural areas are the most likely to agree with at least one of these reasons. There are large variations by geopolitical region. Almost all women in the North East agree with at least one reason for wife-beating (90 percent), compared with less than one-third of women in the South East (31 percent). Differences are also notable by level of education. Agreement with at least one reason ranges from a high of 78 percent among women with no education to a low of 31 percent among women with higher education. Women who participate in more household decisions are less likely to feel that wife beating is justified for any reason.

Table 3.12.2 presents the percentage of men who agree that a husband is justified in beating his wife for specific reasons by background characteristics. Sixty-one percent of men agree with at least one specified reason for wife beating, a proportion similar to women (65 percent). The most prevalent reasons given for wife beating include, going out without telling the husband (50 percent), neglecting the children (47 percent), arguing with the husband (40 percent), and refusing to have sex with him (34 percent).

Men who are divorced, separated, or widowed are more likely than currently married or never married men to agree with at least one specified reason for wife beating (75 percent compared with 63 percent and 59 percent). Men in rural areas are more likely to agree with at least one specified reason for wife beating than those in urban areas (66 and 54 percent, respectively). Similar to women, men's beliefs vary greatly by region. Men who have no education and who are employed but do not earn cash are also more likely to agree with at least one specified reason. The table shows that men who support women's participation in decisionmaking are less likely to agree with any of the reasons justifying wife beating.

Table 3.12.1 Women's attitude toward wife beating

Percentage of women who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number of women
	Burns the food	Doesn't cook food on time	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sex with him		
Age								
15-19	29.6	33.8	42.5	51.1	49.3	33.3	63.4	1,716
20-24	29.6	32.1	43.4	51.6	48.0	36.1	63.0	1,494
25-29	27.6	31.0	40.1	51.5	47.8	36.6	63.3	1,382
30-34	30.7	32.2	42.6	53.9	51.4	37.3	67.5	941
35-39	33.0	36.6	45.6	54.1	48.2	40.5	65.7	816
40-44	33.1	33.3	45.5	56.1	51.0	43.8	66.2	688
45-49	38.4	38.1	51.0	56.4	53.8	44.9	66.6	583
Marital status								
Never married	21.0	25.9	32.4	35.3	40.5	20.8	51.4	1,926
Married or living together	34.3	36.0	47.3	59.2	52.7	43.4	69.4	5,336
Divorced/separated/widowed	30.4	34.2	46.3	51.3	48.6	39.6	62.2	358
Number of living children								
0	24.2	27.9	36.8	42.1	43.2	27.6	56.4	2,499
1-2	34.0	36.1	47.2	58.6	52.7	41.2	68.7	2,009
3-4	32.3	35.3	45.3	57.9	51.6	42.1	68.0	1,526
5+	35.3	36.5	47.5	57.5	53.0	44.2	68.7	1,586
Residence								
Urban	22.7	24.9	35.4	42.2	41.1	28.1	56.6	2,629
Rural	35.0	37.8	47.8	58.4	53.8	42.5	68.7	4,991
Region								
North Central	27.4	31.8	34.0	39.7	44.2	28.8	52.9	1,121
North East	65.7	67.5	80.3	83.2	81.4	73.5	90.2	1,368
North West	29.8	28.9	41.4	71.8	49.4	47.7	75.3	2,095
South East	8.8	13.2	16.4	17.4	20.9	9.3	31.3	737
South South	25.9	30.5	39.8	43.5	46.8	26.1	62.0	1,342
South West	10.5	15.6	32.7	23.4	35.6	12.0	46.9	958
Education								
No education	42.7	43.1	55.8	71.1	60.6	54.2	77.9	3,171
Primary	30.3	33.9	43.6	51.0	49.9	35.5	64.3	1,628
Secondary	19.6	24.5	32.6	36.5	39.8	21.9	53.1	2,370
Higher	7.0	8.9	14.1	15.7	19.5	10.0	30.6	451
Employment								
Not employed	31.4	33.6	43.4	54.7	49.8	39.1	65.0	3,326
Employed for cash	29.4	31.9	43.2	51.3	48.4	36.6	63.3	3,630
Employed, not for cash	33.4	39.1	44.3	50.7	52.5	33.1	68.3	622
Number of decisions in which woman has final say¹								
0	32.7	35.3	44.9	57.2	49.9	39.3	67.5	3,534
1-2	35.2	37.3	48.7	58.6	57.4	42.8	70.2	2,160
3-4	23.1	27.4	38.3	40.7	43.7	31.4	58.8	825
5	21.5	23.6	32.4	36.3	36.5	26.3	48.1	1,100
Total	30.7	33.3	43.5	52.8	49.4	37.5	64.5	7,620

Note: Total includes 42 cases with missing information on employment.

¹ Either by herself or jointly with others

Table 3.12.2 Men's attitude toward wife beating

Percentage of men who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Husband is justified in hitting or beating his wife if she:						Percentage who agree with at least one specified reason	Number of men
	Burns the food	Doesn't cook food on time	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sex with him		
Age								
15-19	21.9	23.3	35.4	50.0	43.6	31.9	60.1	453
20-24	17.7	21.7	40.9	49.2	47.9	33.8	59.4	426
25-29	14.9	15.9	42.1	45.5	46.9	31.4	60.2	328
30-34	10.2	12.0	39.6	51.3	47.4	31.1	62.5	299
35-39	13.8	12.5	45.1	54.5	48.9	36.1	68.8	220
40-44	13.3	14.3	37.4	49.0	44.6	31.5	58.0	208
45-49	12.9	16.2	43.0	50.8	47.4	38.9	61.5	159
50-54	13.3	14.8	49.8	53.4	50.5	44.4	69.2	133
55-59	10.3	11.7	30.6	48.3	41.6	29.7	55.1	120
Marital status								
Never married	17.4	19.9	37.2	46.3	44.1	29.3	58.7	1,048
Married or living together	13.6	14.4	41.9	52.8	47.8	36.7	62.8	1,245
Divorced/separated/widowed	19.5	27.8	52.0	51.9	62.4	41.7	75.2	53
Number of living children								
0	17.3	19.4	38.0	47.3	44.3	29.7	59.0	1,168
1-2	13.3	14.3	39.3	52.5	46.0	35.8	61.7	379
3-4	13.2	14.3	43.0	50.0	47.5	35.4	64.8	316
5+	14.3	15.9	43.6	53.9	51.5	39.6	64.2	482
Residence								
Urban	8.9	10.7	29.8	38.9	36.9	24.4	53.7	872
Rural	19.3	21.0	46.1	56.3	52.1	38.9	65.8	1,474
Region								
North Central	13.8	21.5	33.2	37.1	42.4	22.4	50.7	348
North East	30.2	28.9	74.9	74.5	74.7	69.3	82.0	421
North West	14.0	14.6	35.2	66.3	45.1	43.9	70.8	602
South East	9.0	9.0	15.0	28.3	25.3	4.2	36.6	207
South South	12.9	13.7	40.8	45.6	45.0	25.6	60.5	445
South West	8.4	11.9	26.0	20.4	32.2	9.1	44.8	322
Education								
No education	21.1	20.8	49.9	65.4	55.5	51.8	73.5	507
Primary	15.2	18.6	41.2	51.6	46.7	31.7	61.0	603
Secondary	14.8	17.3	35.9	42.4	41.8	26.7	56.0	960
Higher	8.0	6.9	34.0	43.6	45.6	27.6	57.8	276
Employment								
Not employed	16.6	19.2	34.1	43.9	44.8	28.1	57.8	703
Employed for cash	11.4	13.0	41.8	48.6	46.2	31.4	59.9	1,179
Employed, not for cash	24.2	24.9	45.7	62.9	51.1	48.1	71.0	450
Number of decisions in which woman should have final say¹								
0	28.9	25.8	50.8	60.9	55.4	47.4	69.3	533
1-2	15.5	18.2	38.5	53.9	45.9	35.0	62.4	979
3-4	7.9	12.3	35.7	38.0	40.3	24.0	54.2	652
5	3.3	3.6	32.3	38.5	45.4	18.7	56.9	182
Total	15.5	17.2	40.0	49.9	46.5	33.5	61.3	2,346

Note: Total includes 14 cases with missing information on employment.

¹ Either by herself or jointly with others

Women's Attitude Toward Refusing Sex with Husband

The extent of control women have over when and with whom they have sex has important implications for demographic and health outcomes. The 2003 NDHS asked respondents if a woman would be justified in refusing sex with her husband in each of the following four situations: if she knows husband has a sexually transmitted infection; if she knows her husband has sex with women other than herself (or his wives); if she has recently given birth; and if she is tired or not in the mood.

Table 3.13.1 shows that a majority of women agree with each specified reason for refusing to have sex. Women are most likely to agree that a woman can refuse to have sex with her husband if she knows he has a sexually transmitted infection (84 percent), although more than two-thirds believe that a woman can refuse sex if she has recently given birth or if she knows her husband has sex with other women. Less than half of women (44 percent) agree with all of the specified reasons for refusing sex and 12 percent agree with none of the specified reasons.

Although there is little difference by urban-rural residence in the reasons women agree justify refusing to have sex with their husbands, there are substantial variations by region. Interestingly, never-married women are twice as likely as currently or formerly married women to agree that there is no reason for refusing sex with a husband. Table 3.13.2 shows that male respondents are more likely to agree with each specified reason. Approximately half of men agree with all reasons.

Table 3.13.1 Women's attitude toward refusing sex with husband

Percentage of women who believe that a wife is justified in refusing to have sex with her husband for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Wife is justified in refusing sex with her husband if she:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of women
	Knows husband has a sexually transmitted infection	Knows husband has sex with women other than wife/wives	Has recently given birth	Is tired or not in the mood			
Age							
15-19	73.5	61.4	60.1	50.7	40.8	21.2	1,716
20-24	84.1	70.1	71.3	56.7	44.5	11.2	1,494
25-29	88.3	69.7	74.3	57.7	45.3	7.4	1,382
30-34	87.2	72.0	72.2	54.7	45.1	7.8	941
35-39	86.8	70.5	68.5	54.9	44.4	9.7	816
40-44	86.0	70.3	69.0	53.9	44.0	11.4	688
45-49	85.8	68.3	72.1	54.2	44.6	11.5	583
Marital status							
Never married	75.3	61.1	65.4	59.8	45.4	20.3	1,926
Married or living together	86.0	70.5	69.6	52.7	43.4	9.5	5,336
Divorced/separated/widowed	89.1	72.6	78.3	55.6	42.5	9.7	358
Number of living children							
0	77.2	62.5	64.5	55.1	42.4	18.1	2,499
1-2	87.4	72.4	72.9	56.9	46.1	8.2	2,009
3-4	85.7	68.4	69.8	51.1	41.4	9.8	1,526
5+	86.1	71.8	70.2	54.4	45.8	10.4	1,586
Residence							
Urban	86.3	68.4	71.2	58.5	44.7	10.1	2,629
Rural	82.0	68.1	67.8	52.6	43.4	13.3	4,991
Region							
North Central	77.1	62.4	68.4	58.2	49.2	19.5	1,121
North East	90.1	78.0	73.3	55.0	49.1	7.6	1,368
North West	83.6	71.4	58.0	35.2	32.1	11.5	2,095
South East	71.5	54.3	58.6	52.1	40.5	24.7	737
South South	86.2	66.9	81.2	67.9	47.0	7.2	1,342
South West	86.3	66.8	78.2	75.6	54.2	9.3	958
Education							
No education	83.1	69.4	65.9	44.6	38.8	12.2	3,171
Primary	81.5	66.9	68.4	59.4	48.1	14.8	1,628
Secondary	83.3	66.9	71.7	63.0	47.4	11.9	2,370
Higher	93.9	71.9	77.8	64.1	45.7	4.4	451
Employment							
Not employed	79.3	62.7	62.5	48.3	38.1	16.2	3,326
Employed for cash	87.3	73.2	73.8	59.0	47.8	8.8	3,630
Employed, not for cash	85.2	69.5	75.9	64.5	52.9	10.9	622
Number of decisions in which woman has final say¹							
0	80.0	65.5	65.4	52.0	42.8	15.7	3,534
1-2	87.9	73.3	69.8	53.5	42.8	7.1	2,160
3-4	88.1	66.4	75.0	60.8	43.7	7.3	825
5	82.5	68.6	74.4	60.7	49.3	14.9	1,100
Number of reasons wife beating is justified							
0	74.4	58.1	61.0	51.3	40.1	22.3	2,704
1-2	89.4	65.8	69.1	48.1	37.4	6.7	1,563
3-4	89.2	74.0	74.4	57.4	43.3	5.5	1,250
5-6	87.2	79.6	75.9	62.1	53.8	7.4	2,104
Total	83.5	68.2	69.0	54.6	43.9	12.2	7,620

Note: Total includes 42 cases with missing information on employment.

¹ Either by herself or jointly with others

Table 3.13.2 Men's attitude toward wife refusing sex with husband

Percentage of men who believe that a wife is justified in refusing to have sex with her husband for specific reasons, according to background characteristics, Nigeria 2003

Background characteristic	Wife is justified in refusing sex with her husband if she:				Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of men
	Knows husband has a sexually transmitted infection	Knows husband has sex with women other than wife/wives	Has recently given birth	Is tired or not in the mood			
Age							
15-19	80.9	62.8	73.5	51.5	39.7	14.9	453
20-24	90.8	69.8	79.8	61.4	49.2	7.2	426
25-29	93.5	74.4	85.3	65.8	53.2	3.5	328
30-34	97.4	82.2	87.4	75.1	62.2	0.5	299
35-39	96.1	79.6	86.3	66.4	52.1	1.2	220
40-44	92.9	74.8	84.0	58.2	43.9	1.6	208
45-49	96.0	79.4	86.1	64.3	50.6	1.0	159
50-54	91.6	76.3	82.3	70.4	51.1	4.0	133
55-59	91.9	67.2	84.2	60.9	45.1	3.0	120
Marital status							
Never married	86.9	68.4	78.9	60.5	48.5	9.9	1,048
Married or living together	94.8	77.2	84.3	64.8	50.8	1.8	1,245
Divorced/separated/widowed	94.1	60.0	94.3	58.0	33.1	2.5	53
Number of living children							
0	88.1	69.2	80.4	61.2	48.6	8.9	1,168
1-2	94.8	72.7	84.3	63.6	49.6	2.3	379
3-4	95.0	79.8	85.5	60.6	49.1	1.4	316
5+	93.6	77.6	82.3	67.1	51.3	2.2	482
Residence							
Urban	93.2	70.0	82.0	64.8	48.8	4.9	872
Rural	90.1	74.7	82.2	61.5	49.7	5.8	1,474
Region							
North Central	93.4	84.2	93.1	79.6	70.4	3.0	348
North East	96.3	74.0	83.5	55.6	40.0	1.4	421
North West	93.1	70.7	69.9	42.6	32.1	3.5	602
South East	94.1	77.1	84.8	76.3	61.7	5.1	207
South South	78.9	66.8	78.4	59.3	50.1	16.2	445
South West	94.1	69.2	94.7	87.4	62.3	2.3	322
Education							
No education	92.2	74.4	76.6	50.8	37.5	2.9	507
Primary	88.5	71.4	78.6	59.9	46.3	7.3	603
Secondary	91.6	71.6	84.9	67.1	53.4	6.1	960
Higher	94.3	78.1	90.0	75.6	63.8	3.8	276
Employment							
Not employed	84.3	68.5	77.0	61.8	50.2	12.2	703
Employed for cash	95.2	74.0	88.2	68.1	52.2	1.8	1,179
Employed, not for cash	91.7	76.5	74.1	49.9	40.2	4.6	450
Number of decisions in which woman has final say¹							
0	85.3	73.2	71.9	52.1	41.2	10.8	533
1-2	92.5	69.2	80.4	57.0	41.7	3.5	979
3-4	93.8	75.9	90.4	73.6	60.3	3.9	652
5	93.1	81.4	91.4	85.4	75.6	5.8	182
Number of reasons wife beating is justified							
0	91.1	69.3	80.4	61.3	49.5	6.7	1,353
1-2	92.5	76.2	86.1	64.0	47.8	2.7	469
3-4	89.6	79.4	85.0	68.3	50.6	5.1	304
5-6	91.7	79.1	79.8	61.2	50.3	4.1	220
Total	91.2	72.9	82.1	62.7	49.4	5.5	2,346

Note: Total includes 14 cases with missing information on employment.

¹ Either by herself or jointly with others

FERTILITY

This chapter looks at a number of fertility indicators, including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate child-bearing. Data on fertility were collected in the 2003 NDHS in several ways. First, each woman was asked a series of questions on the number of sons and daughters who were living with her, the number living elsewhere, and the number who had died. Next, a complete history of all of the women's births was obtained, including the month and year each child was born; the name and sex; if deceased, the age at death; and if alive, the current age and whether the child was living with the mother. The information from those questions was used to calculate measures of current and completed fertility, i.e., the number of children ever born.

4.1 CURRENT FERTILITY

Measures of current fertility presented in this chapter include age-specific fertility rates (ASFRs), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). These rates are generally presented for the three-year period preceding the survey. The three-year period was chosen as a compromise among three criteria: to get the most current information, to reduce sampling error, and to avoid problems noted in the 1999 NDHS of the displacement of births from five to six years before the survey.

ASFRs are useful in understanding the age pattern of fertility. Table 4.1 shows that Nigerian women experience their prime reproductive years during their twenties and early thirties. At every age, rural women bear more children than urban women. The rural ASFRs rise sharply from age 15-19 years to age 20-24, peak at age 25-29 and then decline. On the other hand, the urban ASFRs assume a more gradual pattern, an indication both of delayed marriage and some deliberate attempt to postpone or terminate births by urban women. Figure 4.1 shows that whereas the urban ASFR pattern depicts a narrow peak at age 25-29, the rural ASFR depicts a broad peak that extends from age 20-24 to 30-34.

The total fertility rate is a useful measure for examining the overall level of fertility. It is interpreted as the number of children the average woman would bear in her lifetime if she experienced the currently-observed age-specific fertility rates throughout her reproductive years. According to the results of the 2003 NDHS, the total fertility rate for Nigeria is 5.7. As expected, the TFR for rural women is significantly higher than that of urban women. On average, rural women will give birth to one more child during their reproductive years than urban women (6.1 and 4.9, respectively).

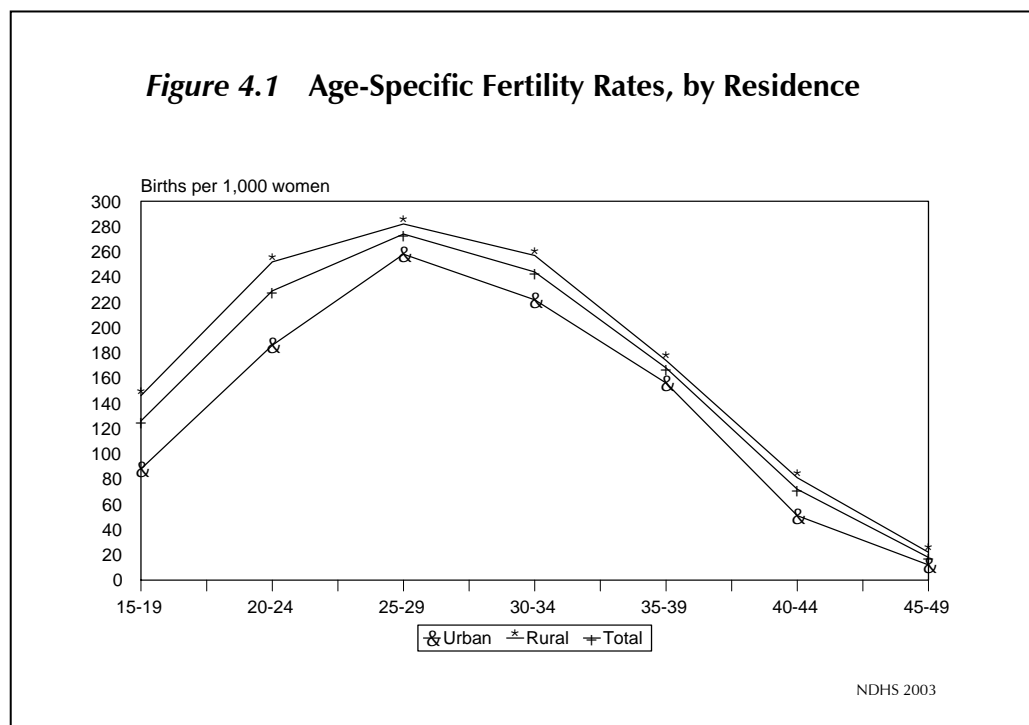
Table 4.1 Current fertility

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Nigeria 2003

Age group	Residence		
	Urban	Rural	Total
15-19	88	146	126
20-24	186	252	229
25-29	258	282	274
30-34	222	257	244
35-39	156	174	168
40-44	51	81	72
45-49	12	22	18
TFR	4.9	6.1	5.7
GFR	164	204	190
CBR	36.3	44.5	41.7

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation. TFR: Total fertility rate for ages 15-49, expressed per woman
GFR: General fertility rate (births divided by number of women age 15-44) expressed per 1,000 women
CBR: Crude birth rate expressed per 1,000 population

Figure 4.1 Age-Specific Fertility Rates, by Residence



The TFR of 5.7 computed in the 2003 NDHS is significantly higher than the 1999 NDHS rate of 5.2. This confirms the analysis in the Data Quality Chapter of the 1999 NDHS final report that detailed evidence of an underreporting of births during the five years preceding the survey. Indeed, the results of that analysis indicated that the TFR was closer to 6.0 (NPC, 2000). On the other hand, there is no evidence of omission or transference of births in the 2003 NDHS (see Table C.4).

The crude birth rate in Nigeria is 42 births per 1,000 population. As with the TFR, there is a clear differential in this rate by residence: 45 births per 1,000 in rural areas versus 36 births per 1,000 in urban areas. The GFR of 190 indicates that 1,000 women age 15-44 would have 190 live births per year and also indicates a significant urban-rural difference. Higher rural than urban fertility has been explained with respect to the underlying socioeconomic differences and the changing proximate determinants of fertility, especially delayed marriage and higher use of modern contraceptives in urban areas (Isiugo Abanihe, 1996).

4.2 FERTILITY DIFFERENTIALS

Table 4.2 shows total fertility rates, the percentage of women who are currently pregnant, and the mean number of children ever born (CEB) to women age 40-49, by residence, region, education, and wealth quintile.

The large urban-rural differentials in fertility have already been noted. Region of residence also shows considerable variation in fertility. Table 4.2 shows a pattern of lower rates in the south and higher rates in the north. The TFR is lowest in the South West and South East (4.1), followed closely by the South South (4.6). The North Central shows a rate corresponding to the national average of 5.7. The rates for the North West and North East are significantly higher at 6.7 and 7.0, respectively (Figure 4.2).

Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Nigeria 2003

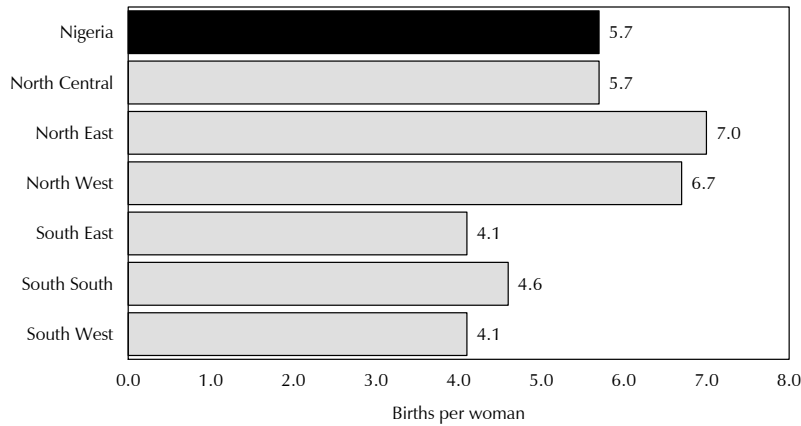
Background characteristic	Total fertility rate ¹	Percentage currently pregnant ¹	Mean number of children ever born to women age 40-49
Residence			
Urban	4.9	9.4	6.2
Rural	6.1	12.4	7.1
Region			
North Central	5.7	9.4	7.4
North East	7.0	14.2	7.4
North West	6.7	16.2	6.7
South East	4.1	6.8	6.6
South South	4.6	9.0	6.9
South West	4.1	6.0	5.5
Education			
No education	6.7	14.8	7.1
Primary	6.3	11.0	7.1
Secondary	4.7	8.1	5.5
Higher	2.8	6.2	4.3
Wealth quintile			
Lowest	6.5	12.8	7.2
Second	6.3	13.8	7.2
Middle	5.7	13.2	6.7
Fourth	5.9	10.2	7.0
Highest	4.2	7.8	5.5
Total	5.7	11.4	6.8

¹ Rate for women age 15-49 years

Fertility is also strongly correlated with education and wealth quintile. The higher a woman's educational attainment and the more economically advantaged her household, the lower her fertility. There is a monotonic decline in fertility with educational attainment. Eleven percent of the women interviewed reported that they were pregnant at the time of the interview. Variations in this proportion follow the same general patterns as the TFRs.

Table 4.2 also shows the mean number of live births for women age 40-49. This figure is an indicator of completed fertility or cumulative fertility of women approaching the end of their childbearing years. A comparison of the TFR (5.7) and cumulative fertility (6.8) gives an indication of fertility over time. The data indicate fertility decline among women in all groups, with the exception of women in the North West region.

Figure 4.2 Total Fertility Rates by Region



NDHS 2003

4.3 FERTILITY TRENDS

One method of understanding fertility trends is to examine the ASFRs over time. Because women age 50 and older were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases. The ASFR data shown in Table 4.3 indicate that over the last 20 years there has been a steady decline in fertility among women of all ages in Nigeria. As has been alluded to previously, the declining fertility observed here can be interpreted in light of rising age at marriage and increasing contraceptive use.

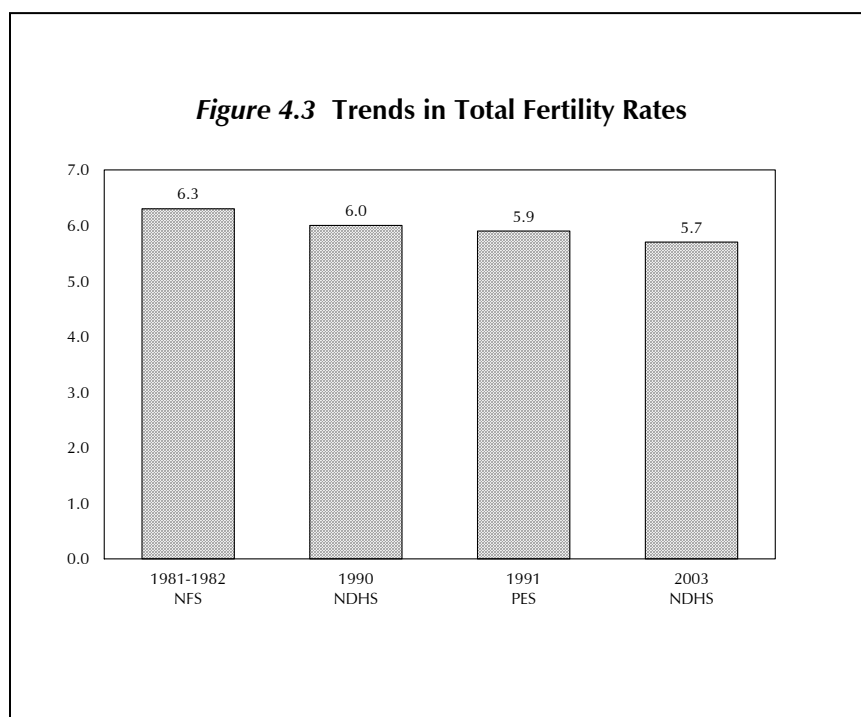
Table 4.3 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Nigeria 2003

Mother's age at birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	126	147	167	197
20-24	246	265	285	307
25-29	272	315	305	312
30-34	237	254	270	[282]
35-39	171	173	[200]	-
40-44	69	[89]	-	-
45-49	[25]	-	-	-

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated.

Figure 4.3 presents the trend in the TFR over the years from different Nigerian data sets. Overall, these data indicate a modest decline in fertility at the national level over the years, from a TFR of 6.3 in the 1981-82 National Fertility Survey (NFS) to 5.7 in the 2003 NDHS.



4.4 CHILDREN EVER BORN AND LIVING

Table 4.4 shows all women and currently married women by number of children ever born. Data on the number of children ever born reflect the accumulation of births over the past 30 years and therefore have limited relevance to current fertility levels, particularly when the country has experienced a decline in fertility.

Approximately seven in ten women reported having given birth. As expected, currently married women have had more births than all women in all age groups; 90 percent of married women report that they have given birth. The reason is undoubtedly that currently married women are more consistently exposed to the risk of pregnancy.

The percentage of women in their forties who have never had children provides an indicator of the level of primary infertility—the proportion of women who are unable to bear children at all. Since voluntary childlessness is rare in Nigeria, it is likely that married women with no births are unable to bear children. The 2003 NDHS results suggest that primary infertility is low: less than 3 percent of married women age 45-49 report that they have had no children. It should be noted that this estimate of primary infertility does not include women who may have had one or more births but who are unable to have more (secondary infertility).

The mean number of children ever born (CEB) for all women is 3.1 and for currently married women is 4.1. As expected the mean CEB increases with age. Comparing the CEB column with that of the mean number of living children reveals substantial experience of child loss among Nigerian women.

Table 4.4 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Nigeria 2003

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	79.0	16.7	3.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,716	0.26	0.22
20-24	41.6	24.0	17.6	10.6	4.9	1.1	0.2	0.0	0.0	0.0	0.0	100.0	1,494	1.18	0.97
25-29	16.8	13.5	16.0	17.6	17.0	10.7	5.2	2.1	0.5	0.2	0.2	100.0	1,382	2.74	2.23
30-34	8.0	6.6	9.8	11.5	14.9	15.7	12.8	11.2	5.8	2.4	1.2	100.0	941	4.35	3.41
35-39	2.5	4.1	5.6	8.8	12.2	10.2	12.4	12.4	12.2	9.8	9.8	100.0	816	5.93	4.54
40-44	5.5	3.3	3.7	4.2	6.7	10.9	11.8	12.0	11.1	11.9	18.9	100.0	688	6.62	4.91
45-49	3.3	3.4	4.3	2.6	8.8	9.9	10.4	9.2	11.1	10.9	26.1	100.0	583	7.03	5.05
Total	31.0	12.7	9.6	8.4	8.5	6.9	5.8	4.9	4.0	3.3	4.9	100.0	7,620	3.09	2.38
CURRENTLY MARRIED WOMEN															
15-19	44.8	41.9	10.0	3.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	545	0.72	0.61
20-24	13.5	32.3	27.4	16.6	8.0	1.8	0.4	0.0	0.0	0.0	0.0	100.0	911	1.80	1.48
25-29	7.1	12.9	17.8	20.2	19.4	12.8	6.1	2.6	0.6	0.2	0.3	100.0	1,146	3.15	2.56
30-34	3.9	6.3	9.2	11.9	15.5	16.8	13.8	12.2	6.4	2.7	1.4	100.0	848	4.63	3.63
35-39	1.5	3.3	5.7	8.6	12.7	10.5	12.1	12.2	12.6	10.4	10.3	100.0	763	6.07	4.63
40-44	5.1	2.8	3.5	3.7	6.9	11.1	12.0	11.3	10.8	12.6	20.2	100.0	619	6.76	5.00
45-49	2.5	2.7	4.2	2.6	8.6	10.3	9.9	9.2	11.4	11.3	27.1	100.0	504	7.17	5.13
Total	10.1	14.6	12.6	11.3	11.4	9.5	7.6	6.4	5.3	4.5	6.7	100.0	5,336	4.12	3.17

4.5 BIRTH INTERVALS

A birth interval is defined as the length of time between two successive live births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as infant and childhood mortality. Research has shown that children born too soon after the previous birth are at increased risk of dying at an early age.

Table 4.5 presents the percent distribution of non-first births in the five years preceding the survey, by number of months since preceding birth. The median birth interval in Nigeria is 31 months. The median number of months since preceding birth increases significantly with age, from a low of 26 among mothers age 15-19 to a high of 39 among mothers age 40-49.

Studies have shown that the death of a preceding birth should lead to a shorter birth interval compared with when a child survives. Indeed, the table indicates that the death of a preceding birth shortens the birth interval by about six months.

According to the 2003 NDHS data, living in a rural or an urban area does not make any difference in birth intervals in Nigeria. There is a ten-month difference between women in the South West, who have the longest birth interval, and those in the South East, who have the shortest birth interval (37 months and 27 months, respectively).

Table 4.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, according to background characteristics, Nigeria 2003

Background characteristic	Number of months since preceding birth					Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48+			
Age								
15-19	21.1	22.8	44.1	9.5	2.6	100.0	91	26.1
20-29	10.4	17.8	43.9	18.1	9.8	100.0	2,302	29.1
30-39	7.9	12.7	37.2	20.8	21.4	100.0	1,979	33.3
40-49	8.0	9.0	28.8	19.1	35.0	100.0	564	38.7
Birth order								
2-3	9.5	15.6	42.0	18.0	14.9	100.0	1,904	30.5
4-6	8.4	14.7	40.5	19.4	17.0	100.0	1,837	31.3
7+	10.6	13.8	34.0	20.6	21.0	100.0	1,195	32.4
Sex of preceding birth								
Male	10.1	15.5	39.7	18.5	16.2	100.0	2,468	30.7
Female	8.6	14.2	39.2	19.8	18.2	100.0	2,468	31.9
Survival of preceding birth								
Living	5.8	13.9	41.5	20.0	18.8	100.0	3,900	32.3
Dead	22.7	18.5	31.7	16.0	11.1	100.0	1,036	26.4
Residence								
Urban	7.8	14.9	38.1	19.4	19.8	100.0	1,383	31.7
Rural	10.0	14.8	40.0	19.0	16.2	100.0	3,554	31.1
Region								
North Central	7.4	12.9	37.9	20.4	21.4	100.0	704	33.2
North East	11.0	17.1	42.2	19.1	10.6	100.0	1,220	29.4
North West	9.3	15.2	39.7	20.1	15.7	100.0	1,757	31.3
South East	11.5	23.2	35.5	14.5	15.2	100.0	282	27.2
South South	10.2	10.5	40.9	15.5	23.0	100.0	591	30.9
South West	5.2	9.8	33.8	21.4	29.9	100.0	383	36.5
Education								
No education	10.2	15.3	38.9	19.5	16.0	100.0	2,678	31.1
Primary	8.5	13.3	38.9	19.5	19.9	100.0	1,212	32.0
Secondary	8.8	14.7	42.6	18.0	15.9	100.0	888	30.6
Higher	5.9	19.4	36.0	15.8	22.9	100.0	158	32.2
Wealth quintile								
Lowest	9.8	16.2	38.9	19.4	15.7	100.0	1,163	30.8
Second	11.2	14.0	39.1	19.5	16.3	100.0	1,131	31.1
Middle	10.2	14.3	38.3	21.2	15.9	100.0	991	31.6
Fourth	6.8	13.8	42.7	18.3	18.4	100.0	902	31.2
Highest	7.9	15.8	38.7	16.6	21.0	100.0	749	31.4
Total	9.4	14.8	39.5	19.1	17.2	100.0	4,936	31.2

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

4.6 AGE AT FIRST BIRTH

The age at which childbearing begins influences the number of children a woman bears throughout her reproductive period in the absence of any active control. Table 4.6 shows the percent distribution of women by age at first birth, according to age at the time of the survey. For women age 25 and older, the median age at first birth is presented in the last column of the table.

The data indicate that the age at first birth in Nigeria is increasing. For example, the median age at first birth is 20.3 years for women age 25-29, whereas it is less than 19 years among women 35 years and older. Also the percentage of women who gave birth before age 15 and 18 generally shows some postponement of first births by younger cohorts of mothers. For example, only 3 percent of women 15-19 had given birth by age 15 compared with at least 15 percent of those age 30 or older.

Table 4.6 Age at first birth

Percentage of women who gave birth by specific exact ages, and median age at first birth, by current age, Nigeria 2003

Current age	Percentage who gave birth by exact age:					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	3.4	na	na	na	na	79.0	1,716	a
20-24	6.6	28.0	45.7	na	na	41.6	1,494	a
25-29	8.3	31.5	47.4	61.9	77.0	16.8	1,382	20.3
30-34	15.1	39.2	57.5	70.9	82.2	8.0	941	19.2
35-39	15.6	46.6	61.6	74.3	86.3	2.5	816	18.4
40-44	16.2	43.1	59.1	71.2	82.1	5.5	688	18.8
45-49	15.0	46.7	62.0	73.6	83.7	3.3	583	18.5

na = Not applicable

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

Table 4.7 shows the median age at first birth among women age 25-49 by background characteristics. Women in urban areas initiate childbearing almost 2 years later than their counterparts in rural areas. Among the six geopolitical regions, childbearing is started several years later in South East and South West than in the North East and North West. Median age at first birth increases steadily with educational attainment from 18 among women with no education to 25 among women with higher education—a five-year difference. There is also a positive correlation by wealth quintile.

Table 4.7 Median age at first birth by background characteristics

Median age at first birth among women age 20-49, by current age and background characteristics, Nigeria 2003

Background characteristic	Current age						Women age 20-49	Women age 25-49
	20-24	25-29	30-34	35-39	40-44	45-49		
Residence								
Urban	a	22.1	20.2	18.9	20.0	18.8	a	20.4
Rural	19.6	19.3	18.8	18.3	18.4	18.1	19.0	18.7
Region								
North Central	a	20.4	19.8	18.9	18.9	18.9	20.0	19.7
North East	18.3	18.1	17.3	18.0	17.2	18.2	18.0	17.8
North West	18.0	18.3	17.5	16.9	18.1	17.8	17.9	17.8
South East	a	a	22.5	22.0	20.8	19.5	a	22.7
South South	a	22.2	20.2	17.9	18.4	17.2	a	19.8
South West	a	23.7	22.4	21.4	21.0	20.5	a	22.1
Education								
No education	17.7	18.0	17.4	17.4	17.7	18.3	17.7	17.8
Primary	19.2	19.5	19.0	18.6	19.1	17.6	19.0	18.9
Secondary	a	22.9	21.7	21.2	21.3	23.4	a	22.3
Higher	a	a	26.1	22.7	23.3	20.4	a	24.9
Wealth quintile								
Lowest	18.4	17.7	18.5	17.6	17.1	18.8	18.0	17.9
Second	19.0	18.5	17.5	18.0	18.5	17.9	18.4	18.2
Middle	19.4	18.8	18.4	18.1	19.0	17.8	18.7	18.5
Fourth	a	21.2	19.7	17.3	19.2	18.6	19.9	19.5
Highest	a	24.4	22.1	21.9	20.5	19.6	a	22.5
Total	a	20.3	19.2	18.4	18.8	18.5	19.6	19.3

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

4.7 TEENAGE PREGNANCY AND MOTHERHOOD

Early childbearing, particularly among teenagers (those under 20 years of age) has negative demographic, socioeconomic, and sociocultural consequences. Teenage mothers are more likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for both themselves and their children. In addition, the socioeconomic advancement of teenage mothers in the areas of educational attainment and accessibility to job opportunities may be curtailed.

Table 4.8 shows the percentage of women age 15-19 who are mothers or pregnant with their first child by background characteristics. One in five teenage women in Nigeria is a mother and another 4 percent are pregnant with their first child. Thus, 25 percent of teenage women have begun childbearing. As expected, the percentage who have begun childbearing increases with age from 8 percent of women age 15 to 40 percent of women age 19.

Clearly, early childbearing is more of a rural phenomenon, with 30 percent of rural women age 15-19 having begun childbearing compared with 17 percent of urban women. Adolescent fertility is lowest in the South West and South East, high in the South South and North Central, and highest in the North East and North West. This pattern follows the educational attainment gradient among the regions, with regions having the lowest levels of schooling among adolescents also having the highest levels of childbearing among them.

Table 4.8 shows that whereas more than half of women age 15-19 who have no formal education have begun childbearing (54 percent), 9 percent of those with secondary education have done so. Thus, initiation of childbearing is delayed among those who stay in school.

The wealth index shows that as the socioeconomic status of households increases, the likelihood of teenage childbearing decreases. That is, women living in less advantaged households are more likely to initiate childbearing before age 20 than those living in relatively more advantaged households.

Table 4.8 Teenage pregnancy and motherhood				
Percentage of women age 15-19 who are mothers or pregnant with their first child, by background characteristics, Nigeria 2003				
Background characteristic	Percentage who are:		Percentage who have begun child-bearing	Number of women
	Mothers	Pregnant with first child		
Age				
15	3.8	3.7	7.5	391
16	9.4	4.6	13.9	273
17	26.9	4.2	31.1	324
18	29.2	5.0	34.2	429
19	35.8	3.7	39.5	299
Residence				
Urban	13.6	3.1	16.7	580
Rural	24.8	4.8	29.6	1,136
Region				
North Central	13.8	2.6	16.4	242
North East	38.1	6.3	44.4	294
North West	36.9	8.3	45.2	420
South East	5.3	0.8	6.2	180
South South	11.3	3.0	14.3	362
South West	4.1	0.6	4.7	218
Education				
No education	44.5	9.5	53.9	501
Primary	20.5	3.0	23.5	360
Secondary	7.6	1.8	9.4	831
Higher	*	*	*	23
Wealth quintile				
Lowest	27.4	4.8	32.2	270
Second	30.2	5.4	35.6	299
Middle	22.8	5.6	28.4	375
Fourth	18.0	4.7	22.8	404
Highest	10.1	1.0	11.2	367
Total	21.0	4.3	25.2	1,716

Note: An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.

FAMILY PLANNING

This chapter presents the 2003 NDHS results on contraceptive knowledge, use, sources, and attitudes. Although the focus is on women of reproductive age (15-49 years), some results from the men's survey will also be presented since men play an important role in the realization of reproductive goals.

5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Knowledge of contraceptive methods is a key variable in any discussion of fertility regulation and in the evaluation of family planning programmes. Acquiring knowledge about fertility control is an important step toward gaining access to and then using a suitable contraceptive method in a timely and effective manner. Information on knowledge of contraception was collected by asking respondents a series of questions combining spontaneous recall and prompting. First, respondents were asked to name the ways or methods by which couples could delay or avoid pregnancy. If the respondent failed to mention a particular method spontaneously, the interviewer described the method and asked whether the respondent recognized it. Using this approach, information was collected for 12 modern family planning methods: female and male sterilization, the pill, the IUD, injectables, implants, male and female condoms, the diaphragm, foam or jelly, the lactational amenorrhoea method (LAM), and emergency contraception. Information was also collected on two traditional methods: periodic abstinence (safe period or rhythm method) and withdrawal. Other traditional or "folk" methods mentioned by the respondents, such as herbs or amulets, were also recorded.

Table 5.1.1 shows the level of knowledge of contraceptive methods among all women, currently married women, sexually active and inactive unmarried women, and for women who have never had any sexual experience, by specific method. The 2003 NDHS finds that 79 percent of all women age 15-49 know at least one method of family planning and 77 percent know a modern method. Knowledge of any modern method is higher among sexually active unmarried women (91 percent) than currently married women (76 percent) and unmarried women who never had sex (66 percent). Modern methods are more widely known than traditional methods (77 percent versus 43 percent). The most widely known modern contraceptive methods among all women are the pill (60 percent), the male condom (59 percent), injectables (57 percent), and female sterilization (37 percent). The diaphragm and foam/jelly are the least widely known (each reported by 9 percent of women), along with implants (10 percent) and male sterilization (11 percent).

The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. On average all women and currently married women know four methods each, while sexually active unmarried women know six methods.

Knowledge of contraception among men is higher than among women. Knowledge of any method or any modern method for all men is almost universal, with 9 out of every 10 men knowing at least one method (Table 5.1.2). The most well known modern method is the male condom (87 percent), followed by the pill (57 percent). The mean number of methods known by all men is five, while currently married men and sexually active unmarried men know an average of close to six.

Table 5.1.1 Knowledge of contraceptive methods: women

Percentage of all women, currently married women, sexually active unmarried women, sexually inactive unmarried women, and women with no sexual experience who know any contraceptive method, by specific method, Nigeria 2003

Contraceptive method	All women	Currently married women	Unmarried women who ever had sex		Unmarried women who never had sex
			Sexually active ¹	Not sexually active ²	
Any method	78.5	78.4	91.2	89.4	66.2
Any modern method	76.7	76.2	91.2	88.3	65.6
Female sterilization	37.2	39.6	44.0	42.5	19.2
Male sterilization	10.6	10.3	19.4	13.2	6.9
Pill	60.4	63.0	72.0	63.4	41.1
IUD	27.1	29.2	33.4	32.1	11.0
Injectables	57.1	61.0	69.1	59.7	32.2
Implants	10.4	10.4	18.6	13.7	5.4
Male condom	59.2	54.3	87.2	78.5	59.1
Female condom	12.7	11.5	23.6	20.4	9.0
Diaphragm	8.8	8.6	13.8	11.5	5.7
Foam/jelly	8.7	7.9	16.5	13.2	6.2
Lactational amenorrhoea method (LAM)	19.5	21.1	22.0	23.8	7.9
Emergency contraception	15.7	13.7	37.4	27.5	9.5
Any traditional method	42.8	43.1	67.3	57.2	22.2
Periodic abstinence	28.0	25.7	55.7	44.9	17.4
Withdrawal	25.6	23.6	58.7	40.0	13.8
Other method	16.2	18.9	19.0	13.5	4.2
Mean number of methods known	4.0	4.0	5.9	5.0	2.5
Number of women	7,620	5,336	362	833	1,090

¹ Had sexual intercourse in the month preceding the survey

² Did not have sexual intercourse in the month preceding the survey

Table 5.1.2 Knowledge of contraceptive methods: men

Percentage of all men, currently married men, sexually active unmarried men, sexually inactive unmarried men, and men with no sexual experience who know any contraceptive method, by specific method, Nigeria 2003

Contraceptive method	All men	Currently married men	Unmarried men who ever had sex		Unmarried men who never had sex
			Sexually active ¹	Not sexually active ²	
Any method	90.2	90.0	99.9	95.0	83.8
Any modern method	89.5	88.9	99.6	94.6	83.8
Female sterilization	37.9	44.7	39.1	32.2	25.5
Male sterilization	20.7	24.7	17.9	18.0	14.6
Pill	57.3	63.2	69.8	54.6	40.5
IUD	25.0	32.3	14.0	14.1	19.3
Injectables	52.9	60.1	60.3	46.5	37.3
Implants	16.9	20.9	8.2	10.9	15.0
Male condom	86.8	85.4	99.1	93.6	81.1
Female condom	19.5	22.5	21.5	24.0	9.7
Diaphragm	10.3	11.9	12.4	12.2	5.1
Foam/jelly	14.5	18.3	17.1	12.6	6.0
Lactational amenorrhoea method (LAM)	18.5	25.9	14.8	10.5	7.9
Emergency contraception	27.9	30.1	44.0	29.9	15.0
Any traditional method	59.2	68.9	76.5	60.4	29.6
Periodic abstinence	43.8	53.6	51.6	43.9	18.6
Withdrawal	49.4	57.9	65.9	50.6	23.2
Other method	10.2	13.8	14.0	5.0	3.3
Mean number of methods known	4.9	5.7	5.5	4.6	3.2
Number of men	2,346	1,245	230	312	559

¹ Had sexual intercourse in the month preceding the survey

² Did not have sexual intercourse in the month preceding the survey

Knowledge of Contraceptive Methods by Background Characteristics

Table 5.2 shows that knowledge of at least one contraceptive method and at least one modern method is almost universal in urban areas among currently married women and men. Knowledge is lower in rural areas. Knowledge of any family planning method among married women ranges from a low of 64 percent in the North East to a high of 97 percent in the South West. The same pattern is evident regarding knowledge of any modern method, from a low of 61 percent in the North East to a high of 97 percent in the South West. Men's knowledge varies similarly by region, although differentials are not as great. Women age 25-39 and women with secondary or higher education are more likely to know a method than the oldest and youngest women and those with no education.

Table 5.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women and men who know at least one contraceptive method and who know at least one modern method, by background characteristics, Nigeria 2003

Background characteristic	Women			Men		
	Knows any method	Knows any modern method ¹	Number	Knows any method	Knows any modern method ¹	Number
Age						
15-19	64.9	61.6	545	*	*	5
20-24	76.8	74.2	911	84.8	82.8	60
25-29	85.9	83.4	1,146	93.2	92.6	142
30-34	80.6	78.1	848	93.7	93.7	243
35-39	83.2	82.3	763	96.5	96.5	204
40-44	75.7	72.8	619	89.3	88.2	197
45-49	71.6	70.6	504	86.1	83.8	155
50-54	na	na	na	81.9	80.7	124
55-59	na	na	na	85.0	81.4	116
Residence						
Urban	91.0	90.7	1,633	95.6	95.2	401
Rural	72.9	69.8	3,703	87.3	85.9	844
Region						
North Central	77.4	75.9	754	93.2	92.7	174
North East	63.5	60.8	1,122	73.2	72.2	283
North West	75.1	71.8	1,880	95.2	93.2	372
South East	87.1	84.5	368	97.2	97.0	99
South South	94.2	93.3	664	91.2	90.2	172
South West	97.0	96.5	548	99.1	98.7	145
Education						
No education	66.5	63.3	2,877	75.9	72.8	399
Primary	87.0	85.2	1,175	92.8	92.5	366
Secondary	96.8	95.9	1,046	99.3	99.3	325
Higher	99.8	99.8	238	100.0	100.0	155
Total	78.4	76.2	5,336	90.0	88.9	1,245

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
¹Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, diaphragm, foam or jelly, lactational amenorrhoea method (LAM), and emergency contraception

5.2 EVER USE OF CONTRACEPTION

The 2003 NDHS collected data on the level of ever use of family planning methods, which is defined as the use of a contraceptive method at any time during a woman’s reproductive years. Respondents who said that they had heard of a contraceptive method were asked if they had ever used that method.

Table 5.3.1 shows the percent distribution of all women, currently married women, and sexually active unmarried women who have ever used any contraceptive method by specific method and age.

Twenty-nine percent of all women, 31 percent of currently married women, and 65 percent of sexually active unmarried women reported having used a method. The majority of women in each category used a modern method. The male condom is the most common modern method ever used among all women (10 percent) and sexually active married women (46 percent). The pill and the male condom are the most common modern methods ever used among currently married women (8 percent each).

Table 5.3.1 Ever use of contraception: women

Percentage of all women, currently married women, and sexually active unmarried women who have ever used any contraceptive method, by specific method and age, Nigeria 2003

Age	Modern method											Traditional method					Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	In-jectables	Im-plants	Male condom	Female condom	Dia-phragm	Foam/jelly	LAM	Emergency contraception	Any traditional method	Periodic abstinence	With-drawal		Other method
ALL WOMEN																		
15-19	11.2	9.2	0.0	2.2	0.0	1.3	0.0	6.5	0.1	0.0	0.0	0.6	2.0	5.4	3.3	2.9	1.0	1,716
20-24	30.3	22.8	0.0	6.5	0.3	3.5	0.1	14.8	0.2	0.1	0.4	2.2	4.2	17.5	10.0	9.5	3.5	1,494
25-29	39.2	30.0	0.1	10.1	1.6	5.1	0.0	15.5	0.2	0.1	0.5	6.1	3.9	21.9	12.5	12.0	5.1	1,382
30-34	36.7	28.2	0.0	10.0	1.6	8.9	0.0	9.6	0.1	0.4	0.6	6.5	2.3	17.1	9.6	8.4	4.3	941
35-39	39.8	30.6	0.6	11.7	3.1	10.0	0.1	8.2	0.1	0.2	0.4	7.1	3.6	18.9	12.7	10.0	4.3	816
40-44	31.8	24.6	0.2	10.6	3.8	9.4	0.4	6.0	0.0	0.1	0.3	5.1	0.7	15.9	9.7	7.6	4.8	688
45-49	28.8	22.5	0.7	9.1	5.0	6.9	0.1	4.4	0.0	0.3	0.9	4.4	1.0	12.4	7.7	4.8	2.7	583
Total	29.4	22.7	0.2	7.7	1.6	5.5	0.1	10.1	0.1	0.1	0.4	4.0	2.8	15.1	9.0	7.8	3.5	7,620
CURRENTLY MARRIED WOMEN																		
15-19	9.2	7.9	0.0	2.9	0.0	1.5	0.0	3.1	0.0	0.0	0.0	1.5	1.0	2.8	1.6	1.8	0.3	545
20-24	24.3	16.8	0.0	5.4	0.5	3.6	0.0	7.8	0.1	0.0	0.3	3.0	1.3	13.1	6.8	5.2	3.2	911
25-29	37.4	27.6	0.1	9.2	1.9	5.2	0.0	12.9	0.3	0.2	0.6	6.6	2.3	20.0	11.7	9.7	4.8	1,146
30-34	35.9	26.8	0.0	9.2	1.6	8.9	0.0	7.9	0.1	0.5	0.6	7.2	1.9	17.1	9.6	7.9	4.5	848
35-39	39.8	30.4	0.7	11.9	3.1	10.1	0.1	7.5	0.1	0.2	0.4	7.5	3.8	18.4	12.1	9.6	4.5	763
40-44	31.5	24.3	0.3	10.0	3.8	9.6	0.4	5.4	0.0	0.1	0.3	5.3	0.5	14.9	8.7	8.0	4.8	619
45-49	27.1	21.4	0.6	9.2	4.0	6.9	0.1	4.6	0.0	0.3	1.1	3.9	0.9	11.3	6.6	4.7	2.3	504
Total	30.7	23.1	0.2	8.4	2.0	6.5	0.1	7.8	0.1	0.2	0.5	5.3	1.8	15.0	8.7	7.2	3.7	5,336
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																		
Total	64.9	57.0	0.3	18.4	1.5	10.2	0.3	45.7	0.0	0.0	0.4	1.6	13.8	41.8	24.9	30.6	8.6	362

LAM = Lactational amenorrhoea method

¹ Women who had sexual intercourse in the month preceding the survey

Among currently married women, ever use of a method is highest among women age 35-39 (40 percent). Married women younger than 25 are the least likely to have ever used a method of contraception. Experience using LAM is reported by 5 percent of currently married women. LAM is one of the four most common modern methods of contraception used by currently married women in the prime reproductive years of 25-39. Periodic abstinence is the most commonly used traditional method across all age groups of married women.

Men were also asked about ever use of methods that require men's active participation to use, specifically male sterilization, male condom, periodic abstinence, and withdrawal. Approximately one-third of married men and three-fourths of sexually active unmarried men have ever used a method (Table 5.3.2). The male condom is the most common method, with 23 percent of currently married men and 69 percent of sexually active unmarried men reporting ever use. Use of periodic abstinence and withdrawal is also common. This is of particular concern regarding sexually active unmarried men because periodic abstinence and withdrawal do not prevent transmission of sexually transmitted infections.

Table 5.3.2 Ever use of contraception: men

Percentage of all men, currently married men, and sexually active unmarried men who have ever used any contraceptive method, by specific method and age, Nigeria 2003

Age	Modern method				Traditional method				Number of men
	Any method	Any modern method	Male sterilization	Male condom	Any traditional method	Periodic abstinence	Withdrawal	Other method	
ALL MEN									
15-19	12.1	9.8	0.0	9.8	4.7	1.8	3.8	0.0	453
20-24	34.5	30.2	0.4	30.0	13.5	7.5	8.9	0.6	426
25-29	48.2	42.0	0.2	42.0	33.5	23.1	24.9	1.6	328
30-34	50.7	35.2	0.3	34.9	38.6	25.0	25.9	2.7	299
35-39	36.7	24.7	0.0	24.7	24.6	17.1	18.1	2.1	220
40-44	34.8	27.0	0.0	27.0	28.3	19.0	17.8	0.9	208
45-49	37.5	21.0	1.2	21.0	32.9	21.1	21.3	1.7	159
50-54	29.2	13.2	0.0	13.2	24.6	18.9	12.5	4.3	133
55-59	25.4	10.9	0.0	10.9	20.3	14.5	12.8	0.7	120
Total	33.8	25.2	0.2	25.1	22.4	14.7	15.2	1.3	2,346
CURRENTLY MARRIED MEN									
15-19	*	*	*	*	*	*	*	*	5
20-24	21.2	14.9	0.0	14.9	11.2	5.0	7.8	2.5	60
25-29	33.8	27.4	0.0	27.4	27.2	20.0	18.0	0.7	142
30-34	48.2	31.6	0.4	31.2	36.8	25.0	22.6	3.0	243
35-39	36.1	24.0	0.0	24.0	23.4	16.7	16.7	2.2	204
40-44	34.5	27.6	0.0	27.6	27.6	18.6	17.1	0.9	197
45-49	37.1	20.8	1.3	20.8	32.3	20.2	21.1	1.7	155
50-54	29.4	12.6	0.0	12.6	26.1	20.0	13.3	4.6	124
55-59	24.9	11.3	0.0	11.3	19.6	13.5	13.3	0.8	116
Total	35.6	23.2	0.2	23.1	27.5	18.9	17.5	2.0	1,245
SEXUALLY ACTIVE UNMARRIED MEN ¹									
Total	76.1	69.4	0.3	69.4	40.8	22.6	34.3	2.7	230

Note: Male respondents were not asked about methods that are female controlled, such as the pill or the IUD. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Men who had sexual intercourse in the month preceding the survey

5.3 CURRENT USE OF CONTRACEPTION

The data on the current use of family planning are among the most important information collected in the 2003 NDHS, because they provide insight into one of the principal determinants of fertility among women, and they serve as a key measure for assessing the success of the national family planning programme. This section focuses on contraceptive use among currently married women since they are the most likely to be regularly exposed to the risk of pregnancy.

Table 5.4 shows the percent distribution of women by current use of specific family planning methods according to age. The 2003 NDHS results indicate that while 13 percent of currently married women are using a method of family planning, only 8 percent are using a modern method. These data indicate that there has been no significant change in levels of contraceptive use since 1999 (15 percent versus 16 percent).

Table 5.4 Current use of contraception

Percent distribution of all women, currently married women, and sexually active unmarried women by contraceptive method currently used, according to age, Nigeria 2003

Age	Modern method								Traditional method						Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	In-jectables	Male condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Other method	Not currently using		
ALL WOMEN																
15-19	6.6	4.7	0.0	1.1	0.0	0.4	2.6	0.4	0.1	1.9	0.9	0.7	0.3	93.4	100.0	1,716
20-24	15.7	10.9	0.0	2.7	0.2	1.1	6.0	0.8	0.1	4.8	2.4	1.2	1.3	84.3	100.0	1,494
25-29	18.1	11.7	0.1	3.0	0.5	1.4	5.0	1.6	0.1	6.4	2.9	1.8	1.7	81.9	100.0	1,382
30-34	14.2	10.3	0.0	1.9	0.8	2.5	2.6	2.0	0.2	3.9	2.0	1.1	0.8	85.8	100.0	941
35-39	16.4	11.2	0.6	2.3	1.6	3.2	2.1	1.0	0.2	5.2	2.5	1.9	0.8	83.6	100.0	816
40-44	14.6	8.6	0.2	1.6	1.3	3.0	1.7	0.7	0.1	6.1	4.0	1.2	0.9	85.4	100.0	688
45-49	7.9	4.9	0.7	0.9	1.0	1.5	0.8	0.0	0.0	3.0	0.9	1.4	0.7	92.1	100.0	583
Total	13.3	8.9	0.2	2.0	0.6	1.6	3.4	1.0	0.1	4.4	2.1	1.3	0.9	86.7	100.0	7,620
CURRENTLY MARRIED WOMEN																
15-19	4.3	3.8	0.0	1.7	0.0	0.4	0.3	1.4	0.0	0.5	0.0	0.3	0.2	95.7	100.0	545
20-24	9.4	6.6	0.0	1.4	0.2	1.1	2.2	1.4	0.1	2.9	1.0	0.5	1.3	90.6	100.0	911
25-29	16.1	10.0	0.1	2.3	0.6	1.5	3.4	1.9	0.0	6.1	2.9	1.8	1.5	83.9	100.0	1,146
30-34	13.6	9.5	0.0	1.8	0.7	2.4	1.9	2.2	0.3	4.1	2.1	1.2	0.9	86.4	100.0	848
35-39	16.3	10.9	0.7	2.4	1.6	3.3	1.5	1.0	0.2	5.5	2.7	1.9	0.9	83.7	100.0	763
40-44	15.1	8.8	0.3	1.6	1.2	3.4	1.8	0.7	0.0	6.3	4.1	1.3	0.9	84.9	100.0	619
45-49	8.9	5.4	0.6	1.0	1.1	1.8	0.8	0.0	0.0	3.5	1.1	1.6	0.8	91.1	100.0	504
Total	12.6	8.2	0.2	1.8	0.7	2.0	1.9	1.4	0.1	4.3	2.1	1.3	1.0	87.4	100.0	5,336
SEXUALLY ACTIVE UNMARRIED WOMEN ¹																
Total	49.9	38.6	0.3	9.5	1.0	3.4	23.8	0.0	0.7	11.3	4.0	4.2	3.1	50.1	100.0	362

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 had sexual intercourse in the month preceding the survey

The most commonly used methods among currently married women are injectables, male condoms, pill, and periodic abstinence, all in the range of 2 percent. The use of modern contraceptive methods varies by age. Current use of any modern method is 4 percent among currently married women age 15-19, rising to 11 percent among women age 35-39, and then dropping to 5 percent among the oldest women. Most of the women who are sterilized are age 35 or older. LAM is the most common method among the age group 25-34. The male condom is favoured among sexually active unmarried women (24 percent).

Current Use of Contraception by Background Characteristics

Table 5.5 and Figure 5.1 show that there is substantial variation in the current use of contraceptive methods according to background characteristics. Contraceptive use varies with residence, region, level of education, number of living children, and economic status of the household. Married women in urban areas are twice as likely to use a family planning method as their rural counterparts (20 percent versus 9 percent). The same pattern is evident for current use of any modern method (14 percent urban and 6 percent rural). Contraceptive use varies significantly by region. For example, one-third of married women in the South West use contraception—the majority using a modern method—compared with just 4 percent of women in the North East.

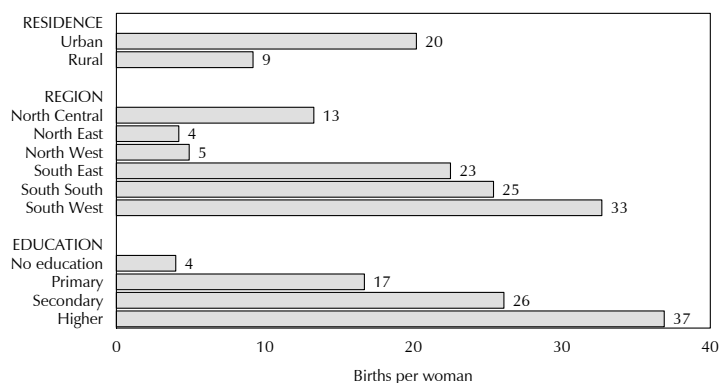
Table 5.5 Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Nigeria 2003

Background characteristic	Modern method								Traditional method					Total	Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	In-jectables	Male condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Other method			Not currently using
Residence																
Urban	20.2	13.9	0.3	3.3	1.9	2.3	4.0	1.7	0.3	6.3	2.9	2.8	0.6	79.8	100.0	1,633
Rural	9.2	5.7	0.1	1.1	0.2	1.8	1.0	1.2	0.0	3.5	1.7	0.6	1.2	90.8	100.0	3,703
Region																
North Central	13.3	10.3	0.8	2.2	0.1	4.1	1.5	1.2	0.0	3.0	1.9	0.6	0.4	86.7	100.0	754
North East	4.2	3.0	0.0	0.7	0.2	0.9	0.2	0.9	0.0	1.2	0.6	0.2	0.4	95.8	100.0	1,122
North West	4.9	3.3	0.1	0.6	0.1	0.8	0.1	1.7	0.0	1.6	0.2	0.0	1.4	95.1	100.0	1,880
South East	22.5	13.0	0.1	1.5	0.7	0.6	8.9	0.8	0.0	9.5	3.3	5.0	1.2	77.5	100.0	368
South South	25.4	13.8	0.4	4.0	0.7	4.7	2.4	1.5	0.0	11.6	7.3	2.9	1.5	74.6	100.0	664
South West	32.7	23.1	0.0	5.2	4.9	2.9	7.4	1.7	1.0	9.7	4.4	4.1	1.1	67.3	100.0	548
Education																
No education	4.0	2.3	0.1	0.3	0.2	0.7	0.2	0.8	0.0	1.7	0.4	0.2	1.0	96.0	100.0	2,877
Primary	16.7	11.2	0.4	3.0	1.1	2.7	1.9	1.6	0.2	5.5	2.8	1.6	1.1	83.3	100.0	1,175
Secondary	26.1	18.3	0.3	4.0	1.3	4.0	5.8	2.5	0.3	7.8	4.4	2.5	0.9	73.9	100.0	1,046
Higher	36.9	21.7	0.5	4.2	2.8	4.8	6.7	2.0	0.0	15.2	7.8	7.0	0.5	63.1	100.0	238
Number of living children																
0	1.7	1.4	0.0	0.6	0.1	0.0	0.6	0.0	0.0	0.2	0.1	0.0	0.2	98.3	100.0	656
1-2	11.5	7.4	0.0	1.6	0.4	0.9	2.9	1.5	0.1	4.1	2.3	0.7	1.1	88.5	100.0	1,751
3-4	14.2	9.6	0.2	2.8	1.0	1.7	1.6	1.9	0.3	4.6	1.8	1.8	1.0	85.8	100.0	1,449
5+	17.1	11.0	0.5	1.6	1.2	4.4	1.7	1.4	0.0	6.2	2.9	1.9	1.3	82.9	100.0	1,480
Wealth quintile																
Lowest	6.9	3.6	0.1	0.9	0.1	1.5	0.7	0.4	0.0	3.3	1.3	0.1	1.9	93.1	100.0	1,150
Second	5.6	2.9	0.1	0.4	0.3	1.2	0.4	0.4	0.0	2.8	1.4	0.6	0.8	94.4	100.0	1,142
Middle	9.1	6.7	0.2	1.7	0.3	2.1	0.3	1.9	0.0	2.4	1.4	0.3	0.7	90.9	100.0	1,086
Fourth	13.5	9.2	0.3	2.8	1.0	1.0	1.7	2.3	0.1	4.3	2.7	1.3	0.3	86.5	100.0	957
Highest	30.0	20.5	0.5	3.7	2.3	4.1	7.3	2.1	0.4	9.4	4.0	4.2	1.2	70.0	100.0	1,002
Total	12.6	8.2	0.2	1.8	0.7	2.0	1.9	1.4	0.1	4.3	2.1	1.3	1.0	87.4	100.0	5,336

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

Figure 5.1 Current Use of Any Contraceptive Method among Currently Married Women Age 15-49, by Background Characteristics



NDHS 2003

Current use of family planning is positively correlated with educational attainment. Use of any modern method increases from 2 percent among currently married women with no education to 22 percent among women with higher education. Interestingly, use of any traditional method also increases with the level of education, from slightly less than 2 percent of currently married women with no education to 15 percent of women with higher education.

As expected, there is a direct relationship between the number of living children and use of family planning. The 2003 NDHS indicates that use of any contraceptive method increases with the number of living children. Only 2 percent of currently married women with no children use contraception, compared to 17 percent with five or more children.

The wealth index measures the economic status of the household (Chapter 2). Data from the 2003 NDHS show that currently married women in households in the highest (most economically advantaged) quintile of the wealth index are more than four times as likely to use a method of contraception as those in the lowest (least advantaged) quintile (30 percent versus 7 percent).

A woman's desire and ability to control her fertility and her choice of contraceptive method are in part affected by her empowerment status and self-image. A woman who feels that she is unable to control her life may be less likely to feel she can make and carry out decisions about her fertility. Table 5.6 shows the distribution of currently married women by contraceptive use, according to selected indicators of women's status (described in Chapter 2).

Table 5.6 Current use of contraception by women's status

Percent distribution of currently married women by contraceptive method currently used, according to indicators of women's status, Nigeria 2003

Women's status indicator	Modern method								Traditional method					Total	Number of women	
	Any method	Any modern method	Female sterilization	Pill	IUD	Injunctables	Male condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Other method			Not currently using
Number of decisions in which woman has final say¹																
0	6.1	4.3	0.1	0.8	0.6	1.2	0.9	0.6	0.0	1.8	0.9	0.3	0.7	93.9	100.0	2,136
1-2	12.4	8.5	0.3	1.8	0.3	2.0	1.4	2.5	0.2	3.9	1.9	0.9	1.1	87.6	100.0	1,799
3-4	23.4	14.1	0.7	2.4	1.4	3.0	4.8	1.8	0.0	9.3	3.4	4.6	1.3	76.6	100.0	709
5	22.0	13.8	0.0	4.2	1.8	3.3	3.6	0.5	0.3	8.2	4.9	1.8	1.5	78.0	100.0	692
Number of reasons to refuse sex with husband																
0	5.2	3.3	0.1	0.8	0.3	0.8	0.3	0.1	0.0	1.9	0.4	0.2	1.3	94.8	100.0	506
1-2	11.7	7.7	0.0	1.4	0.8	1.4	1.3	2.6	0.1	4.0	1.2	1.7	1.1	88.3	100.0	1,409
3-4	14.1	9.2	0.3	2.1	0.8	2.4	2.5	1.1	0.1	4.9	2.7	1.2	0.9	85.9	100.0	3,422
Number of reasons wife beating is justified																
0	19.4	12.2	0.2	2.3	1.0	2.9	3.9	1.4	0.2	7.2	3.2	2.4	1.6	80.6	100.0	1,632
1-2	15.1	10.2	0.1	1.6	1.0	2.6	1.8	3.1	0.1	4.8	2.8	1.2	0.8	84.9	100.0	1,135
3-4	10.2	6.8	0.2	2.0	0.9	1.8	1.1	0.8	0.0	3.4	1.3	0.7	1.3	89.8	100.0	878
5-6	5.6	3.8	0.3	1.3	0.3	0.8	0.6	0.5	0.1	1.8	0.9	0.4	0.5	94.4	100.0	1,691
Total	12.6	8.2	0.2	1.8	0.7	2.0	1.9	1.4	0.1	4.3	2.1	1.3	1.0	87.4	100.0	5,336

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

LAM = Lactational amenorrhoea method

¹ Either by herself or jointly with others

The data indicate that, in Nigeria, there is a correlation between women's status and their ability to use a contraceptive method, including their ability to negotiate the use of male condoms or to discuss periodic abstinence with their partners. The strong positive relationship between empowerment and contraceptive use is observed for all three indicators of women's status.

5.4 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

Family planning may be used by couples to either space births or limit family size. Contraception is used to space births when there is an intention to delay a possible pregnancy. When couples have already had the number of children they want, family planning is used as a means to limit family size (i.e., to stop having children).

The 2003 NDHS asked women how many children they had at the time they first used a method of family planning. Table 5.7 shows the percent distribution of women who have ever used a contraceptive method by the number of living children at the time of first use of contraception, according to current age. Overall, 40 percent of women began using contraception before they gave birth and an additional 25 percent began after having one child. Early use of family planning increases among younger women. For example, the data show that 80 percent of the youngest women started contraceptive use before they began having children, compared with 10 percent of the oldest women. The pattern suggests that younger women are increasingly adopting family planning to delay or space births, while older women are adopting family planning to limit births.

Table 5.7 Number of children at first use of contraception

Percent distribution of women who have ever used contraception by number of living children at the time of first use of contraception, according to current age, Nigeria 2003

Current age	Number of living children at time of first use of contraception					Missing	Total	Number of women
	0	1	2	3	4+			
15-19	79.8	14.0	0.4	0.7	0.0	5.1	100.0	192
20-24	67.1	25.1	5.9	1.3	0.0	0.6	100.0	452
25-29	42.2	32.1	13.5	6.5	5.0	0.6	100.0	542
30-34	25.4	26.6	17.4	12.8	17.7	0.2	100.0	346
35-39	19.9	19.4	15.4	8.7	35.8	0.8	100.0	324
40-44	16.3	21.0	13.0	9.2	39.3	1.2	100.0	219
45-49	10.1	23.4	9.1	9.2	48.1	0.0	100.0	168
Total	39.7	24.7	11.4	6.7	16.6	1.0	100.0	2,243

5.5 KNOWLEDGE OF FERTILE PERIOD

The successful use of natural family planning methods depends largely on an understanding of when during the menstrual cycle a woman is most likely to conceive. An elementary knowledge of reproductive physiology thus provides background for the successful practice of coitus-associated methods such as withdrawal. Such knowledge is especially critical for the practice of periodic abstinence.

The 2003 NDHS asked respondents about their knowledge of a woman's fertile period. Table 5.8 provides the results for all women users and nonusers of periodic abstinence. Only one-fifth (20 percent) of all respondents reported the correct timing of the fertile period, that is halfway through her menstrual cycle. Even among users of periodic abstinence, less than one in three knows the correct timing of the fertile period. It is clear that knowledge of the fertile period is minimal among women, which has major implications regarding use of periodic abstinence as an effective means of pregnancy prevention.

Table 5.8 Knowledge of fertile period

Percent distribution of women by knowledge of the fertile period during the ovulatory cycle, according to current use/nonuse of periodic abstinence, Nigeria 2003

Perceived fertile period	Users of periodic abstinence	Nonusers of periodic abstinence	All women
Just before her period begins	3.1	3.2	3.2
During her period	1.4	1.2	1.2
Right after her period has ended	50.2	33.0	33.4
Halfway between two periods	28.8	19.8	20.0
Other	0.0	0.2	0.1
No specific time	5.4	10.8	10.7
Don't know	9.6	31.3	30.9
Missing	1.5	0.4	0.4
Total	100.0	100.0	100.0
Number of women	163	7,457	7,620

5.6 SOURCE OF CONTRACEPTION

In the 2003 NDHS, information was collected from current users of family planning methods on where they most recently obtained their method of contraception. Such information is important to family planning programme managers for strategic planning purposes. Table 5.9 shows the percent distribution of current users by source.

Table 5.9 Source of contraception

Percent distribution of current users of modern contraceptive methods by most recent source of method, according to specific method, Nigeria 2003

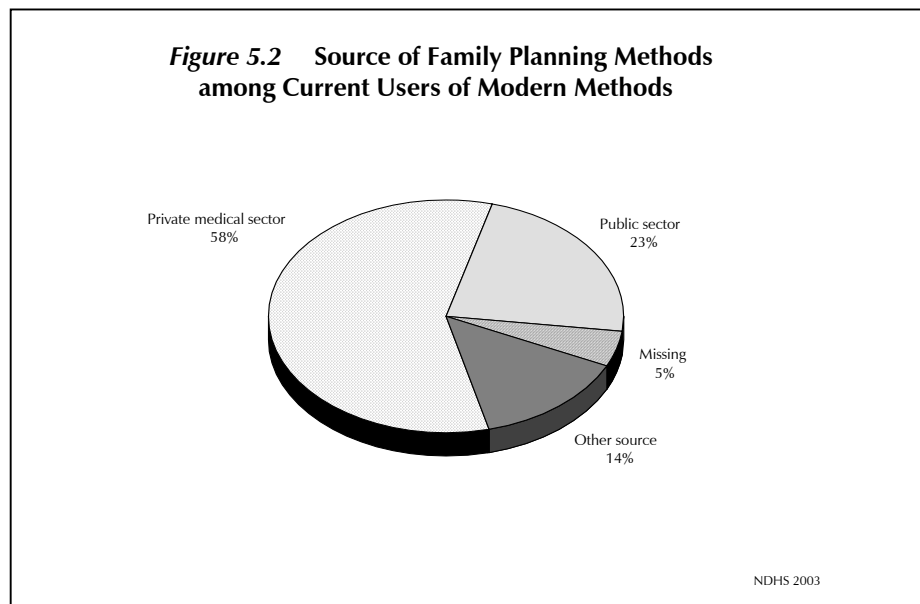
Source	Pill	IUD	Injectables	Male condoms	Total ¹
Public sector	18.6	(65.5)	48.4	4.1	22.8
Government hospital	10.9	(47.0)	22.9	3.1	13.1
Government health center	4.9	(12.9)	19.0	0.4	6.5
Family planning clinic	1.3	(5.6)	6.0	0.5	2.4
Community health worker	1.5	(0.0)	0.5	0.0	0.8
Other public	0.0	(0.0)	0.0	0.1	0.1
Private medical sector	74.0	(32.5)	48.0	59.2	57.7
Private hospital or clinic	2.3	(30.3)	17.9	0.6	7.5
Pharmacy	71.6	(0.0)	25.1	58.3	48.8
Private doctor	0.0	(0.0)	4.3	0.3	1.0
Private community health worker	0.0	(0.0)	0.6	0.0	0.1
Other private medical	0.0	(2.1)	0.0	0.0	0.2
Other source	5.5	(0.0)	1.0	29.1	14.3
Shop	1.9	(0.0)	0.0	4.7	2.5
Friends/relatives	3.6	(0.0)	1.0	24.5	11.8
Other	0.2	(0.0)	0.6	0.3	0.3
Missing	1.7	(2.1)	1.9	7.2	4.9
Total	100.0	(100.0)	100.0	100.0	100.0
Number of women	152	45	121	260	597

Note: Table excludes lactational amenorrhoea method (LAM) and emergency contraception. Figures in parentheses are based on 25-49 unweighted cases.

¹ Total includes 12 sterilized women, 1 implant user, 2 diaphragm users, 1 foam/jelly user, and 4 users of female condoms.

According to the findings of the 2003 NDHS, the private sector was the most frequently reported source of contraceptive supply (Figure 5.2), providing contraception to two and a half times as many women as the public sector (58 percent versus 23 percent). A private hospital or clinic was the most frequently reported private sector source (49 percent), while a government hospital was the most frequently reported in the public sector (13 percent). This pattern is different from that observed in the 1999 NDHS, which indicated that women accessed family planning methods from both sectors equally.

Access to specific methods varies greatly by source. The public sector is the most common source of IUDs (66 percent), and the private sector is the most common source for the pill (74 percent) and male condom (59 percent). Provision of injectables for current users is equally shared by the public sector and the private sector (48 percent each).



5.7 INFORMED CHOICE

Informed choice is an important aspect of the delivery of family planning services. It is required that all family planning providers inform method users of the potential side effects and what they should do if they encounter such side effects. This information is to assist the user in coping with side effects and thus decrease discontinuations of temporary methods. Contraceptive users should also be informed of the choices they have with respect to other methods.

Table 5.10 shows that less than half of users were given information about each of the three issues considered to be essential parts of informed choice. Forty-two percent were informed about potential side effects of their method, 39 percent were told what to do if they experience any of the side effects, and 42 percent were given information about other family planning method options. There are significant differentials by background characteristics. Family planning providers in the public sector are twice as likely to inform contraceptive users about method side effects or problems, what to do if they experience side effects, and other contraceptive options as their counterparts in the private sector. Women in urban areas have significantly more access to information than their rural counterparts.

Table 5.10 Informed choice

Among current users of modern contraceptive methods who adopted the current method in the five years preceding the survey, percentage who were informed about the side effects of the method used, percentage who were informed what to do if side effects were experienced, and percentage who were informed of other methods that could be used for contraception, by method, initial source of method, and background characteristics, Nigeria 2003

Method, source, and background characteristic	Informed about side effects or problems of method used ¹	Informed what to do if experienced side effects ¹	Informed of other methods that could be used ²
Method			
Pill	36.5	32.0	41.7
IUD	(53.6)	(50.4)	(58.9)
Injectables	45.5	44.7	56.8
Initial source of method³			
Public sector	64.5	60.3	69.5
Private medical sector	36.1	34.8	46.6
Residence			
Urban	49.6	47.2	47.1
Rural	35.7	31.6	37.0
Region			
North Central	38.1	33.8	43.0
North East	(41.8)	(37.0)	(35.4)
North West	(61.7)	(59.1)	28.0
South East	(25.9)	(22.0)	(21.2)
South South	35.4	31.2	44.2
South West	(51.5)	(50.5)	53.5
Education			
No education	(36.5)	(30.3)	25.2
Primary	45.7	40.6	45.0
Secondary	41.5	39.1	43.6
Higher	45.4	46.2	51.7
Wealth quintile			
Lowest	(36.1)	(37.9)	(45.7)
Second	(33.8)	(26.7)	(36.6)
Middle	37.2	32.2	39.0
Fourth	34.0	28.6	33.0
Highest	53.3	51.7	48.9
Total	42.4	39.1	41.7

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Among users of female sterilization, pill, IUD, injectables, and implants

² Among users of female sterilization, pill, IUD, injectables, implants, female condom, diaphragm, foam or jelly, and lactational amenorrhoea method (LAM)

³ Source at start of current episode of use

5.8 FUTURE USE OF CONTRACEPTION

Intention to use contraception is an important indicator of the changing demand for family planning, that is, the extent to which nonusers of contraception plan to use family planning in the future. Currently married women who were not using contraceptives at the time of the survey were asked about their intention to use family planning in the future. The results of this inquiry are shown in Table 5.11.

Table 5.11 Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Nigeria 2003

Intention	Number of living children ¹					Total
	0	1	2	3	4+	
Intends to use	21.3	26.2	28.4	27.2	29.1	27.4
Unsure	9.9	11.1	9.1	7.4	6.9	8.4
Does not intend to use	68.7	62.4	62.1	65.3	63.3	63.8
Missing	0.1	0.3	0.4	0.1	0.7	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	480	815	757	680	1,932	4,664

¹ Includes current pregnancy

A little more than one-quarter (27 percent) of currently married women intend to use family planning in the future, compared with two-thirds (64 percent) who do not intend to use a method. Intention to use increases with the number of living children; for example, 29 percent of women with four or more children intend to use a contraceptive method in the future compared with 21 percent of women with no children.

Reasons for Not Intending to Use Contraception

The reasons given by respondents who do not intend to use a contraceptive method in the future are important to the family planning programme since they identify areas for potential interventions.

Table 5.12 presents the distribution of currently married nonusers who do not intend to use family planning in the future by the main reason for not intending to use. Half of nonusers gave a fertility-related reason for not planning to use contraception. In particular, 36 percent cited desire for as many children as possible as the main reason. This reason is more prominent among younger women (45 percent) than older women (28 percent). One-quarter of all nonusers cited opposition to use

as the reason for not intending to use. Opposition to use includes respondent's own opposition (14 percent), the opposition of her husband or partner (4 percent), and religious prohibition (9 percent). Method-related reasons, which include health concerns and fear of side effects, are cited by only 10 percent of nonusers. Nine percent cited lack of knowledge as their reason for not intending to use in the future.

Table 5.12 Reasons for not intending to use contraception

Percent distribution of currently married women who are not using a contraceptive method and who do not intend to use in the future by main reason for not intending to use, according to age, Nigeria 2003

Reason	Age		Total
	15-29	30-49	
Fertility-related reasons	47.1	54.8	51.3
Infrequent sex/no sex	1.0	6.0	3.7
Menopausal/had hysterectomy	0.2	6.3	3.5
Subfecund/infecund	0.5	14.2	8.0
Wants as many children as possible	45.4	28.3	36.1
Opposition to use	29.0	23.8	26.2
Respondent opposed	16.0	11.8	13.7
Husband/partner opposed	4.0	3.8	3.9
Others opposed	0.0	0.1	0.1
Religious prohibition	8.9	8.0	8.5
Lack of knowledge	9.5	7.7	8.5
Knows no method	8.0	6.6	7.3
Knows no source	1.5	1.0	1.2
Method-related reasons	9.1	10.2	9.7
Health concerns	2.9	3.2	3.1
Fear of side effects	5.4	5.6	5.5
Lack of access/too far	0.0	0.2	0.2
Costs too much	0.2	0.1	0.1
Inconvenient to use	0.3	0.2	0.2
Interferes with body's normal processes	0.3	0.8	0.6
Other	1.0	1.0	1.0
Don't know	4.1	2.5	3.2
Missing	0.2	0.0	0.1
Total	100.0	100.0	100.0
Number of women	1,357	1,619	2,976

Preferred Method of Contraception for Future Use

Future demand for specific methods of family planning was assessed by asking current nonusers which method they intend to use in the future. Table 5.13 shows that among currently married nonusers who intend to use in the future, the preferred method is injectables (28 percent), followed by the pill (23 percent), and periodic abstinence (6 percent). One-fifth of women are unsure which method they would prefer to use. There is little difference by age.

Table 5.13 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, according to age, Nigeria 2003

Method	Age		Total
	15-29	30-49	
Female sterilization	0.3	2.9	1.4
Pill	22.5	22.8	22.6
IUD	2.1	3.1	2.6
Injectables	27.6	27.9	27.7
Implants	0.6	2.0	1.2
Male condom	6.1	3.5	5.0
Female condom	0.0	0.1	0.0
Diaphragm	0.0	0.8	0.3
Foam/jelly	0.0	0.7	0.3
Lactational amenorrhoea method (LAM)	1.9	2.8	2.3
Periodic abstinence	6.4	6.3	6.3
Withdrawal	1.6	1.5	1.5
Other	10.3	7.1	8.9
Unsure	20.6	18.5	19.7
Total	100.0	100.0	100.0
Number of women	718	559	1,278

5.9 Exposure to Family Planning Messages

Electronic media (radio and television), print media (newspaper, magazines, posters, and leaflets), and traditional folk media (town criers and mobile public announcements) are the major potential sources of information about family planning in Nigeria. Information about public exposure to messages on a particular type of media allows policymakers to ensure the use of the most effective means of communication for various target groups in the population. To assess the effectiveness of electronic, print, and traditional folk media on the dissemination of family planning information, respondents in the 2003 NDHS were asked if they had heard or seen family planning messages on the radio or television, read a family planning message in a newspaper, magazine, poster, or leaflet, or heard a family planning message through traditional folk media during the months preceding the survey. The results are shown in Tables 5.14.1 and 5.14.2.

Table 5.14.1 Exposure to family planning messages: women

Percentage of women who heard or saw a family planning message on the radio, television, newspaper/magazine, posters/leaflets/brochures, town crier/mobile public announcement, in the months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Exposed to family planning messages on:						Number of women
	Radio	Television	Newspaper/magazine	Posters/leaflets/brochures	Town crier/mobile public announcement	None of the specified media sources	
Age							
15-19	30.4	16.2	9.2	11.4	7.1	65.5	1,716
20-24	41.7	24.0	15.1	17.3	8.0	53.7	1,494
25-29	47.4	25.4	14.4	17.0	9.7	49.4	1,382
30-34	44.0	22.8	13.0	15.8	8.4	53.6	941
35-39	43.7	24.5	13.7	17.5	9.1	51.9	816
40-44	38.6	18.0	9.0	10.5	7.1	59.9	688
45-49	39.8	18.3	8.6	11.6	8.7	58.4	583
Residence							
Urban	54.7	39.6	20.3	23.3	10.9	40.2	2,629
Rural	32.6	11.8	7.9	10.2	6.9	64.8	4,991
Region							
North Central	26.3	14.4	9.7	14.4	7.7	69.7	1,121
North East	20.8	7.6	5.7	9.7	3.9	76.6	1,368
North West	39.3	10.8	4.6	5.4	2.7	60.4	2,095
South East	53.6	27.5	18.4	14.9	10.2	41.4	737
South South	49.1	36.2	23.1	28.1	20.9	44.7	1,342
South West	63.8	47.1	20.9	23.8	8.0	30.1	958
Education							
No education	27.1	6.0	2.3	4.3	2.7	72.1	3,171
Primary	38.3	18.2	8.2	12.2	9.6	58.6	1,628
Secondary	53.0	36.1	21.6	24.1	11.9	40.9	2,370
Higher	72.6	64.6	46.5	48.0	23.0	17.4	451
Wealth quintile							
Lowest	21.5	4.0	3.2	4.2	3.7	77.6	1,414
Second	26.5	6.4	3.9	6.1	4.2	71.6	1,439
Middle	36.4	11.7	8.1	11.0	7.8	61.2	1,513
Fourth	48.1	26.1	12.6	16.7	9.0	48.0	1,526
Highest	63.4	52.7	29.6	32.0	15.2	29.1	1,728
Total	40.2	21.4	12.2	14.7	8.3	56.3	7,620

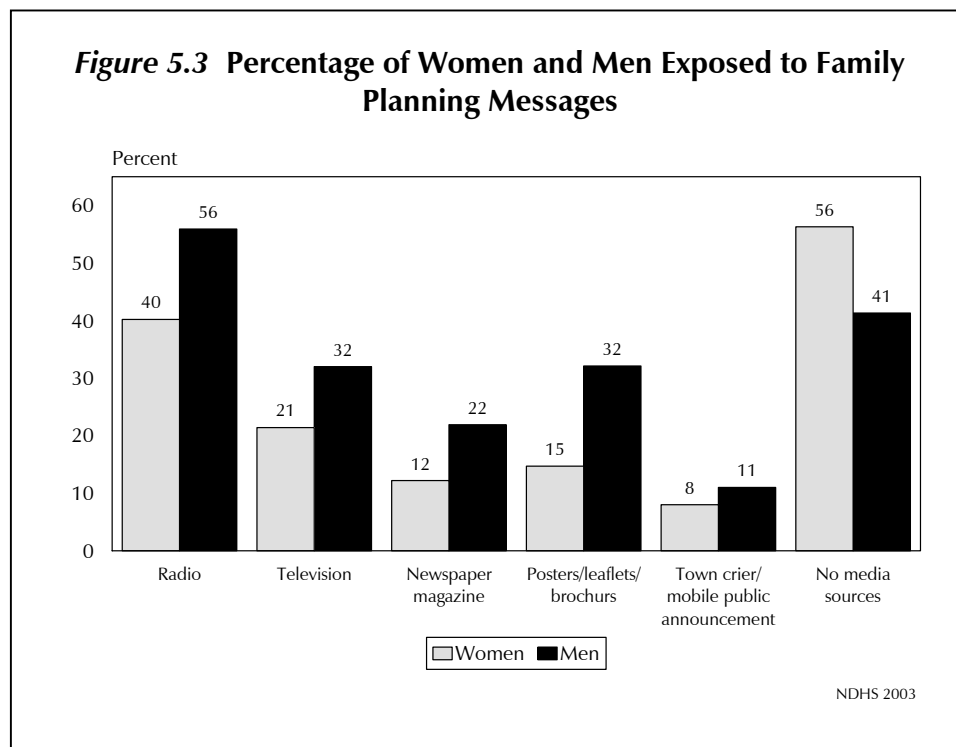
Radio is the most common source of family planning messages for both women and men (40 and 56 percent, respectively). This is true regardless of age, residence, region, education, or economic status. Television is the next most common source among all respondents, with 21 percent of women and 32 percent of men having seen a message. Men are more likely than women to have read a family planning message in a newspaper or magazine (22 percent versus 12 percent) or on a poster or in a brochure (32 percent versus 15 percent). In part, this reflects higher levels of literacy among men. Additionally, approximately one in ten respondents has heard a message from a town crier or a mobile public announcement (Figure 5.3).

Table 5.14.2 Exposure to family planning messages: men

Percentage of men who heard or saw a family planning message on the radio, television, newspaper/magazine, posters/leaflets/brochures, town crier/mobile public announcement, in the months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Exposed to family planning messages on:						Number of men
	Radio	Television	Newspaper/magazine	Posters/leaflets/brochures	Town crier/mobile public announcement	None of the specified media sources	
Age							
15-19	45.2	26.9	12.6	23.8	7.9	51.5	453
20-24	55.8	36.8	24.0	34.9	13.4	40.6	426
25-29	63.3	38.6	28.4	40.6	14.8	32.6	328
30-34	64.2	37.1	28.2	35.7	12.1	33.8	299
35-39	53.6	28.7	23.1	29.1	10.4	43.2	220
40-44	55.5	28.5	21.8	30.1	14.3	43.7	208
45-49	61.0	33.0	22.7	38.1	11.5	38.8	159
50-54	53.8	27.9	21.4	35.3	7.4	42.8	133
55-59	57.3	18.0	14.4	19.5	4.6	41.9	120
Residence							
Urban	66.2	47.3	29.1	40.8	15.2	30.1	872
Rural	49.9	22.9	17.7	27.0	8.9	47.9	1,474
Region							
North Central	54.2	32.2	24.7	39.2	21.6	40.5	348
North East	49.3	24.1	14.6	33.9	6.7	48.4	421
North West	49.3	16.9	8.9	18.8	4.4	48.8	602
South East	43.1	28.2	22.1	22.7	14.5	55.5	207
South South	61.3	40.3	35.8	44.2	7.1	35.1	445
South West	80.0	61.1	33.7	36.5	22.3	18.4	322
Education							
No education	37.8	7.2	2.4	11.6	3.0	61.3	507
Primary	52.3	22.4	10.7	24.8	6.6	46.4	603
Secondary	63.2	42.6	28.0	38.7	13.5	33.4	960
Higher	71.9	61.4	61.4	63.2	28.4	20.9	276
Wealth quintile							
Lowest	36.4	11.0	8.5	16.6	5.0	61.3	423
Second	49.0	15.4	11.2	23.3	6.6	50.7	418
Middle	55.7	22.8	16.1	26.1	8.1	41.5	436
Fourth	64.7	43.8	27.2	43.7	12.9	31.8	507
Highest	68.1	56.5	39.7	44.6	20.3	27.8	563
Total	55.9	32.0	21.9	32.1	11.2	41.3	2,346

More than half of women and 41 percent of men were not exposed to family planning messages from any source during the months preceding the survey. There are significant differences in exposure by background characteristics: those respondents residing in rural areas, in the north, in households lower on the wealth index, and those with less education are the least likely to have been exposed to family planning messages.



5.10 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Information on contacts of nonusers with family planning providers is important for determining whether family planning initiatives are effective or not. Contact could be through a home visit by a health worker or a visit to a health facility. The 2003 NDHS asked women who are not using contraception whether in the 12 months preceding the survey 1) they were visited by a community health worker who discussed family planning, and 2) whether they visited a health facility, and if so, whether anyone discussed family planning.

Table 5.15 shows that few women who are nonusers had contacts with health workers who discussed family planning. Only 4 percent of nonusers reported that they were visited by a family planning service provider at home, and 6 percent of nonusers visited a health facility and discussed family planning with a provider. Across all age groups, residence, region, education, and economic status, the percentage of nonusers who visited a health facility but did not discuss family planning is significantly higher than the percentage of nonusers who visited a health facility and discussed family planning. This is an indication of missed opportunities for increasing family planning acceptance and use.

Educational attainment and a higher score on the wealth index are correlated with greater exposure to family planning providers. Three percent of women with no education versus 14 percent of women with higher education discussed family planning on a visit to a health facility. Similarly, 3 percent of women in households in the two lowest quintiles of the wealth index versus 10 percent of those in households in the two highest quintiles discussed family planning at a health facility. The proportion of nonusers who did not discuss family planning with a fieldworker or health facility staff is very high across all background characteristics. The high proportion of nonusers of family planning represents a large pool of potential users that could be targeted for family planning counselling.

Table 5.15 Contact of nonusers with family planning providers

Percentage of women who are not using contraception who were visited by a community health extension worker (CHEW) who discussed family planning, percentage who visited a health facility and discussed family planning, and percentage who visited a health facility but did not discuss family planning, in the 12 months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Women who were visited by a CHEW who discussed family planning	Women who visited health facility and discussed family planning	Women who visited health facility didn't discuss family planning	Did not discuss family planning with CHEW or at a health facility	Number of women
Age					
15-19	1.4	1.6	15.4	97.4	1,603
20-24	3.7	5.3	27.3	92.5	1,260
25-29	4.0	9.7	31.2	88.7	1,132
30-34	4.7	10.8	29.4	87.1	808
35-39	4.9	6.4	28.3	90.3	682
40-44	5.1	6.3	23.2	90.9	587
45-49	3.1	4.6	18.7	94.3	537
Residence					
Urban	4.4	8.9	29.6	89.0	2,121
Rural	3.1	4.6	21.9	93.7	4,488
Region					
North Central	2.9	5.9	24.2	92.4	984
North East	3.0	4.5	22.9	94.4	1,314
North West	1.5	2.3	28.0	96.9	1,994
South East	4.4	2.4	30.0	94.3	590
South South	7.1	10.8	17.0	85.4	1,020
South West	5.0	15.4	23.0	82.2	707
Education					
No education	1.5	2.6	21.8	96.4	3,042
Primary	4.2	8.6	25.9	89.5	1,403
Secondary	5.3	8.4	25.5	88.9	1,872
Higher	9.4	13.6	36.2	82.0	290
Wealth quintile					
Lowest	1.6	2.8	18.4	96.2	1,313
Second	2.3	2.8	19.9	95.7	1,343
Middle	3.5	4.7	24.0	93.5	1,379
Fourth	5.2	10.2	28.0	87.5	1,310
Highest	5.0	9.8	32.0	87.5	1,263
Total	3.5	6.0	24.4	92.2	6,608

CHEW =Community health extension worker

5.11 DISCUSSION OF FAMILY PLANNING WITH HUSBAND

Although discussion between a husband and wife about contraceptive use is not a precondition for adoption of contraception, its absence may be an impediment to use. Interspousal communication is thus an important intermediate step along the path to eventual adoption, and especially continuation, of contraceptive use. Lack of discussion may reflect a lack of personal interest, hostility to the subject, or customary reticence in talking about sex-related matters. To gain insight about interspousal communication on family planning, currently married women in the 2003 NDHS were asked the number of times family planning was discussed with their husbands in the 12 months preceding the survey.

Table 5.16 presents information on currently married women who know a contraceptive method by the number of times they discussed family planning with their husbands in the past year, according to age. Almost two-thirds of women reported that they never discussed family planning with their husbands.

Table 5.16 Discussion of family planning with husband

Percent distribution of currently married women who know a contraceptive method by the number of times they discussed family planning with their husband in the past year, according to current age, Nigeria 2003

Age	Number of times family planning was discussed with husband				Total	Number of women
	Never	Once or twice	Three or more	Missing		
15-19	80.0	16.1	3.8	0.1	100.0	353
20-24	67.8	22.6	9.7	0.0	100.0	700
25-29	58.8	27.5	13.5	0.3	100.0	985
30-34	62.4	23.0	14.5	0.0	100.0	684
35-39	63.0	24.5	12.2	0.3	100.0	634
40-44	62.3	20.6	16.7	0.4	100.0	469
45-49	68.8	21.5	8.4	1.3	100.0	361
Total	64.6	23.2	11.9	0.3	100.0	4,186

Women age 15-19 were the least likely to have had a discussion about family planning. It is notable, however, that 12 percent of women discussed family planning at least three times. In particular, women in their prime childbearing years were the most likely to have had multiple discussions about family planning with their husbands.

5.12 ATTITUDES TOWARD FAMILY PLANNING

When couples have a positive attitude toward family planning, they are more likely to adopt a family planning method. In the 2003 NDHS, married women were asked whether they approved of family planning and what they perceived as their husband’s attitude toward family planning. This information is useful in the development of family planning policies because it indicates the extent to which further education and publicity are needed to gain general acceptance of family planning. If there is widespread disapproval of contraception, this can be a major barrier to adoption of contraceptive methods.

Table 5.17 shows that more than half (55 percent) of married women who know a family planning method approve of family planning. Almost two-thirds of those who approve, which is 33 percent of all respondents, reported that their husband also approves of family planning. However, one-third of women who approve say that their husband disapproves. Among the 39 percent of those interviewed who disapprove of family planning, almost all reported that their husband also disapproves of family planning.

Education plays a significant role in approval of family planning. Sixty-one percent of women with higher education reported that both they and their husband approve of family planning. This compares with just 16 percent of women with no education. Approval of family planning is also higher among urban than rural residents.

There is significant regional variation in approval of family planning. In particular, approval in the south tends to be higher than in the north. For example, 61 percent of women in the South West say that both they and their husbands approve of family planning, as do 51 percent of women in the South East. More than half of women in the North West, however, say that both they and their husbands disapprove.

Table 5.17 Attitudes of couples toward family planning

Percent distribution of currently married women who know of a method of family planning, by approval of family planning and perception of their husband's attitude toward family planning, according to background characteristics, Nigeria 2003

Background characteristic	Woman approves of family planning			Woman disapproves of family planning			Woman is unsure ¹	Total	Number of women
	Husband approves	Husband disapproves	Husband's attitude unknown	Husband approves	Husband disapproves	Husband's attitude unknown			
Age									
15-19	14.9	6.2	13.3	1.6	46.1	7.1	10.8	100.0	353
20-24	29.9	12.3	10.2	2.9	31.4	6.4	6.9	100.0	700
25-29	42.1	10.6	9.0	2.0	26.5	4.3	5.7	100.0	985
30-34	33.4	11.5	12.2	1.9	29.4	4.8	6.9	100.0	684
35-39	35.9	11.7	9.5	0.5	30.6	5.8	5.8	100.0	634
40-44	33.6	10.6	9.5	3.1	30.7	6.0	6.4	100.0	469
45-49	28.2	10.7	11.7	1.6	33.2	8.8	5.9	100.0	361
Residence									
Urban	40.6	10.4	9.3	1.8	28.1	4.1	5.7	100.0	1,487
Rural	29.2	11.0	11.1	2.0	32.8	6.7	7.1	100.0	2,699
Region									
North Central	40.6	11.0	15.8	1.8	16.6	6.3	8.1	100.0	584
North East	18.0	11.4	11.9	2.8	38.7	9.3	7.9	100.0	713
North West	17.4	7.5	8.1	1.8	51.6	6.6	7.0	100.0	1,412
South East	50.7	9.1	6.2	2.9	22.4	3.5	5.2	100.0	321
South South	47.4	17.8	9.5	2.1	13.8	3.8	5.5	100.0	625
South West	60.6	11.5	12.8	0.7	8.2	1.8	4.5	100.0	531
Education									
No education	15.6	9.8	11.5	1.9	44.7	8.2	8.3	100.0	1,914
Primary	38.6	12.2	11.8	1.7	24.2	5.5	6.0	100.0	1,022
Secondary	54.8	10.9	8.0	2.6	17.1	2.3	4.4	100.0	1,012
Higher	61.2	13.2	6.5	0.9	11.5	1.5	5.1	100.0	237
Total	33.3	10.8	10.5	1.9	31.1	5.8	6.6	100.0	4,186

¹ Includes missing

OTHER PROXIMATE DETERMINANTS OF FERTILITY

This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant: nuptiality and sexual intercourse, postpartum amenorrhoea, abstinence from sexual relations, and menopause. Generally, marriage is a primary indication of the exposure of women to the risk of pregnancy and, therefore, is important for the understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility. For this reason, it is important to examine trends in age at marriage. Data on age at first sexual intercourse, which is a more direct measure of the beginning of exposure to pregnancy and the level of exposure, are also presented in this chapter. Durations of postpartum amenorrhoea, postpartum abstinence, and menopause are additional measures of other proximate determinants of fertility that, like marriage and sexual intercourse, influence exposure to the risk of pregnancy.

6.1 CURRENT MARITAL STATUS

Table 6.1 presents the percent distribution of women and men by marital status at the time of the survey. In this table, the term "married," refers to legal or formal unions, while "living together" refers to informal unions. Widowed, divorced, and separated make up the remainder of the "ever-married" or "ever-in-union" category. In other tables and text, the term "currently married" refers to both formal and informal unions.

Age	Marital status						Total	Number
	Never married	Married	Living together	Divorced	Separated	Widowed		
WOMEN								
15-19	66.7	30.9	0.8	1.1	0.3	0.1	100.0	1,716
20-24	36.1	59.2	1.8	1.4	1.1	0.4	100.0	1,494
25-29	12.2	80.3	2.6	2.3	1.9	0.6	100.0	1,382
30-34	5.1	86.7	3.4	1.6	1.6	1.6	100.0	941
35-39	1.7	91.3	2.2	1.4	0.6	2.8	100.0	816
40-44	0.7	87.6	2.4	2.2	1.5	5.6	100.0	688
45-49	0.9	84.7	1.7	3.1	1.6	8.1	100.0	583
Total	25.3	68.0	2.0	1.7	1.2	1.8	100.0	7,620
MEN								
15-19	98.9	1.1	0.0	0.0	0.0	0.0	100.0	453
20-24	84.7	13.3	0.6	0.3	1.1	0.0	100.0	426
25-29	54.0	41.9	1.5	1.8	0.8	0.0	100.0	328
30-34	14.5	75.4	5.8	1.5	2.0	0.9	100.0	299
35-39	4.9	89.6	3.3	1.6	0.5	0.2	100.0	220
40-44	3.6	89.1	5.6	1.1	0.6	0.0	100.0	208
45-49	0.2	93.5	4.0	0.4	0.1	1.8	100.0	159
50-54	0.2	92.2	1.2	3.2	2.0	1.2	100.0	133
55-59	0.0	94.5	1.7	0.9	0.0	2.8	100.0	120
Total	44.7	50.8	2.3	1.0	0.8	0.5	100.0	2,346

In general, marriage and cohabitation are considered to be primary factors of exposure to the risk of pregnancy. Table 6.1 indicates that in Nigeria 25 percent of women age 15-49 have never married, while 68 percent are married, 2 percent are living together, and 5 percent are separated, divorced, or widowed. It is of interest to note that among adolescents age 15-19, more than 30 percent are married or living together. As expected, the percentage married increases with age. Widowhood also increases with age, from less than 1 percent below age 30 to 8 percent among women age 45-49.

The proportion of men who have never married is considerably higher (45 percent) than that of women (25 percent). About half of men are formally married, 2 percent are living together, and 2 percent are either divorced, separated, or widowed. A significant proportion of men marry when they are age 25 or older, unlike women who tend to marry at younger ages. In addition, the proportion of widowers does not increase significantly with age among men, possibly because of higher rates of remarriage among men.

6.2 POLYGYNY

Polygyny (having more than one spouse) has implications for the frequency of exposure to sexual activity and fertility. Measurement of polygyny is derived from responses of currently married women to the following questions, “Does your husband (partner) have any other wives apart from yourself,” and if so, “How many other wives does he have?” Similarly, currently married men were asked, “How many wives do you have?”

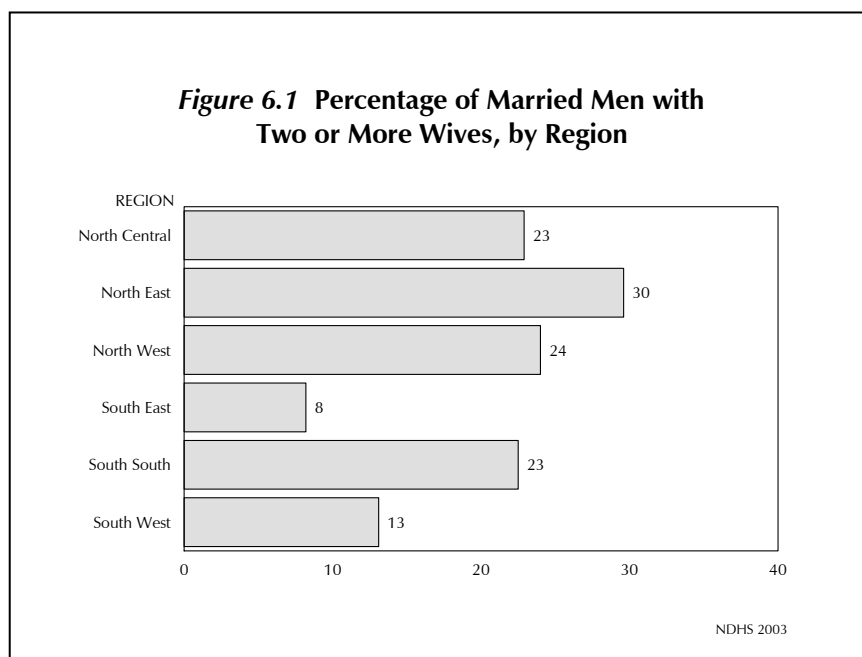
Table 6.2 presents the proportion of currently married women who are in polygynous unions by background characteristics. The data show that 36 percent of married women in Nigeria are in polygynous unions. Twenty-seven percent report that they have only one cowife, while 9 percent say they have two or more cowives. The percentage of women in polygynous unions tends to increase with age, from 27 percent of women age 15-19 to 45 percent of those age 40-44. Further, polygyny is more prevalent in rural than in urban areas, and more common among women with lower levels of education. There is marked regional variation in polygyny. Polygyny is more prevalent in the northern parts of Nigeria and ranges from a low of 10 percent in the South East to a high of 44 percent in the North East. Approximately one-fifth of men are in polygynous unions, which is less than the proportion of women (36 percent) (Figure 6.1).

Table 6.2 Polygyny

Percent distribution of currently married women age 15-49 by number of cowives and percent distribution of currently married men age 15-59 by number of wives, according to background characteristics, Nigeria 2003

Background characteristic	Women						Men					
	Number of cowives					Number	Number of wives				Number	
	0	1	2+	Missing	Total		1	2+	Missing	Total		
Age												
15-19	72.3	22.9	4.0	0.8	100.0	545	*	*	*	*	5	
20-24	72.7	22.2	3.9	1.2	100.0	911	98.0	2.0	0.0	100.0	60	
25-29	67.1	25.5	7.1	0.3	100.0	1,146	93.3	6.7	0.0	100.0	142	
30-34	58.2	31.5	10.1	0.2	100.0	848	84.5	15.5	0.0	100.0	243	
35-39	58.2	28.7	11.8	1.3	100.0	763	74.2	24.7	1.2	100.0	204	
40-44	54.2	30.6	14.3	0.8	100.0	619	71.6	28.2	0.3	100.0	197	
45-49	57.9	24.0	17.8	0.3	100.0	504	69.0	31.0	0.0	100.0	155	
50-54	na	na	na	na	na	na	68.6	30.9	0.5	100.0	124	
55-59	na	na	na	na	na	na	67.1	32.5	0.4	100.0	116	
Residence												
Urban	69.6	21.8	8.1	0.4	100.0	1,633	81.9	17.8	0.3	100.0	401	
Rural	60.9	28.6	9.7	0.8	100.0	3,703	75.1	24.6	0.3	100.0	844	
Region												
North Central	60.9	24.8	13.9	0.3	100.0	754	77.1	22.9	0.0	100.0	174	
North East	55.8	34.3	9.8	0.0	100.0	1,122	70.4	29.6	0.0	100.0	283	
North West	58.7	32.5	7.7	1.1	100.0	1,880	75.2	24.0	0.8	100.0	372	
South East	88.1	4.4	6.0	1.6	100.0	368	91.8	8.2	0.0	100.0	99	
South South	73.8	17.4	7.6	1.2	100.0	664	77.5	22.5	0.0	100.0	172	
South West	70.7	18.4	11.0	0.0	100.0	548	86.2	13.1	0.7	100.0	145	
Education												
No education	55.2	33.8	10.4	0.6	100.0	2,877	69.9	29.9	0.2	100.0	399	
Primary	62.9	25.2	11.1	0.7	100.0	1,175	77.5	22.4	0.1	100.0	366	
Secondary	82.7	11.2	5.1	1.0	100.0	1,046	85.2	14.1	0.7	100.0	325	
Higher	82.9	13.1	4.0	0.0	100.0	238	79.3	20.4	0.3	100.0	155	
Total	63.5	26.5	9.2	0.7	100.0	5,336	77.3	22.4	0.3	100.0	1,245	

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.



6.3 AGE AT FIRST MARRIAGE

Marriage is universal in Nigeria, as revealed by the results of the 1991 Census (NPC, 1998). The age at which a woman first gets married influences the length of time she is exposed to the risk of pregnancy during her childbearing years.

The proportion of women who are married by specific exact ages and median age at first marriage are shown in Table 6.3. Three-fifths of women age 30-49 at the time of the survey were married by age 18, while eight in ten were married by age 22. The median age at first marriage is 16.6 years for women 25-49, and has increased from 15.5 years among women 45-49 to 19.1 among women age 20-24. This implies that younger women are marrying at later ages than women did in the past.

Table 6.3 Age at first marriage								
Percentage of women and men who were first married by specific exact ages and median age at first marriage, according to current age, Nigeria 2003								
Current age	Percentage first married by exact age:					Percentage never married	Number	Median age at first marriage
	15	18	20	22	25			
WOMEN								
15-19	16.1	na	na	na	na	66.7	1,716	a
20-24	18.8	43.3	55.5	na	na	36.1	1,494	19.1
25-29	25.5	47.0	58.4	70.2	82.1	12.2	1,382	18.5
30-34	34.4	61.3	71.3	79.0	85.5	5.1	941	16.5
35-39	38.0	63.7	74.8	82.6	90.4	1.7	816	16.0
40-44	41.8	65.1	77.6	85.2	90.6	0.7	688	15.7
45-49	43.5	70.6	79.2	85.3	90.8	0.9	583	15.5
20-49	30.6	55.1	66.3	na	na	13.2	5,904	17.2
25-49	34.6	59.1	69.9	78.7	86.8	5.5	4,410	16.6
MEN								
15-19	0.7	na	na	na	na	98.9	453	a
20-24	0.4	4.1	8.2	na	na	84.7	426	a
25-29	1.4	4.8	13.1	23.3	36.7	54.0	328	a
30-34	1.7	7.6	14.0	22.0	43.5	14.5	299	26.4
35-39	3.4	13.7	22.8	30.9	44.6	4.9	220	26.1
40-44	1.6	7.1	19.1	32.0	50.5	3.6	208	24.9
45-49	1.1	7.9	17.1	30.7	53.1	0.2	159	24.2
50-54	6.1	15.0	27.7	40.7	58.4	0.2	133	23.6
55-59	1.1	9.7	16.3	22.8	37.9	0.0	120	26.5
20-59	1.7	7.7	15.5	na	na	31.7	1,983	a
25-59	2.1	8.7	17.6	27.8	45.1	16.3	1,466	a

na = Not applicable
 a Omitted because less than 50 percent of the respondents were married for the first time before reaching the beginning of the age group

Table 6.3 also shows that men marry at significantly older ages than women. The median age at first marriage for men is over 23 years in all age groups. Less than half of men age 25-29 have married, compared with almost 90 percent of women. Unlike women, there are no significant differentials in men's median age at first marriage between the younger and the older cohorts.

Table 6.4 shows the median age at first marriage among women age 20-49 and men age 25-59 by current age and background characteristics. Among women, the median age at first marriage is consistently lower in rural areas than in urban areas. However, in both rural and urban areas, younger women are marrying at later ages. For example, the median age at first marriage for urban women age 45-49 is 16.5 as opposed to 21.1 years among women age 25-29. Similarly, in rural areas, the median age at first marriage among the oldest women is 15.2 versus 17.8 years among women in their early twenties.

Across regions, there is evidence of increasing median age at first marriage between the oldest and youngest cohorts. The region with the lowest median age at first marriage, the North West, shows an increase from 14.1 years among women age 45-49 to 15.5 years among women age 20-24. There are substantial differentials in age at first marriage by wealth quintile: women from more advantaged households tend to marry later than those from less advantaged households.

Background characteristic	Current age: women						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	a	21.1	18.6	17.5	17.5	16.5	19.6	18.9	a
Rural	17.8	17.0	15.8	15.5	15.3	15.2	16.3	15.9	24.9
Region									
North Central	19.6	18.9	17.8	16.5	16.5	16.5	18.2	17.7	a
North East	16.3	15.9	14.7	15.0	14.7	14.7	15.3	15.0	23.1
North West	15.5	15.1	14.8	14.5	14.0	14.1	14.8	14.6	24.0
South East	a	23.8	22.5	20.7	19.6	17.3	a	21.8	a
South South	a	21.4	20.2	16.8	17.5	16.2	a	19.2	a
South West	a	22.7	21.5	21.3	20.1	19.7	a	21.3	a
Education									
No education	15.4	15.1	14.7	14.7	14.5	15.0	14.9	14.8	22.5
Primary	18.1	17.9	17.3	16.8	17.7	16.4	17.5	17.3	a
Secondary	a	22.1	20.4	20.2	20.4	(22.7)	a	21.2	a
Higher	a	a	26.7	24.3	21.8	(20.8)	a	24.8	a
Wealth quintile									
Lowest	16.3	15.4	15.2	14.5	14.7	15.2	15.3	15.0	23.4
Second	16.7	15.9	14.8	15.3	14.9	14.5	15.4	15.1	23.3
Middle	17.9	16.5	15.8	15.8	15.4	15.6	16.4	15.9	24.9
Fourth	19.6	19.8	17.7	15.4	16.3	15.6	17.9	17.4	a
Highest	a	23.2	22.0	20.8	20.1	19.8	a	21.8	a
All women	19.1	18.5	16.5	16.0	15.7	15.5	17.2	16.6	na
All men	na	a	26.4	26.1	24.9	24.2	na	na	a

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
^aOmitted because less than 50 percent were married for the first time before the beginning of the age group

6.4 AGE AT FIRST SEXUAL INTERCOURSE

Age at first marriage is used as a proxy for the onset of a woman's exposure to the risk of pregnancy. However, some women start sexual activity before marriage, therefore the age at which they begin sexual intercourse signifies the beginning of their exposure to the risk of pregnancy, instead of their age at first marriage. Table 6.5 presents the percentage of women and men who had first sexual intercourse by specific ages and the median age at first sexual intercourse.

Table 6.5 Age at first sexual intercourse

Percentage of women and men who had first sexual intercourse by specified exact ages and median age at first intercourse, according to current age, Nigeria 2003

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
WOMEN								
15-19	20.3	na	na	na	na	48.9	1,716	a
20-24	21.2	54.1	73.9	na	na	13.6	1,494	17.6
25-29	26.7	55.1	72.2	84.6	91.3	2.7	1,382	17.3
30-34	34.2	63.5	77.7	84.9	89.0	0.7	941	16.1
35-39	36.6	65.4	77.1	84.4	88.3	0.3	816	15.9
40-44	42.0	66.5	77.7	83.2	86.8	0.3	688	15.6
45-49	42.7	70.7	79.5	85.7	89.1	0.0	583	15.5
20-49	31.2	60.5	75.5	na	na	4.3	5,904	16.7
25-49	34.6	62.7	76.1	84.6	89.3	1.1	4,410	16.2
MEN								
15-19	7.9	na	na	na	na	75.2	453	a
20-24	5.1	22.3	47.4	na	na	37.9	426	a
25-29	7.5	22.7	44.4	66.9	81.3	14.3	328	20.4
30-34	7.2	25.0	47.2	62.1	81.6	2.6	299	20.3
35-39	6.2	25.1	38.1	56.9	73.7	0.6	220	20.8
40-44	4.4	22.7	38.8	57.2	70.5	0.4	208	20.8
45-49	2.4	16.6	31.7	50.9	69.8	0.0	159	21.8
50-54	5.6	16.4	35.7	53.1	76.7	0.2	133	21.3
55-59	1.7	14.8	22.7	39.7	48.4	0.0	120	25.2
20-59	5.5	21.8	41.1	na	na	11.5	1,893	a
25-59	5.6	21.6	39.3	57.8	74.3	3.9	1,466	20.8

na = Not applicable

^aOmitted because less than 50 percent had intercourse for the first time before reaching the beginning of the age group

One-third of women age 25-49 report that they had sexual intercourse by age 15. By age 20, more than three-quarters of women, and by age 25, almost all women (nine in ten), have had sexual intercourse. The median age at first sexual intercourse is lower among the older women than among the younger women. For the oldest women (age 45-49), the median age at first intercourse is 15.5 years and for younger women (age 20-24), the median age at first intercourse is 17.6 years.

As with marriage, the age at which the majority of men have had sexual intercourse is higher than for women. For example, at age 20, two-fifths of men have had sexual intercourse, compared with three-quarters of women. However, whereas median age at first intercourse has increased among women, it has decreased among men. Median age at first intercourse has declined from 25.2 years among men age 55-59 to 20.4 years among men age 25-29.

Table 6.6 presents the median age at first sexual intercourse for different cohorts by background characteristics. Rural women have their first sexual intercourse at younger ages than their urban counterparts. Among the regions, age at first sex is lowest in the North East and North West (15 years or less), and highest in the South West and South East (approximately 19 years). For women, the median age at first sexual intercourse increases with level of educational attainment. Women with no education start

sexual activity as early as 15 years of age, while women with secondary or higher education have their first sexual intercourse after age 18. Among the younger cohorts, median age at first intercourse increases with level of education.

Table 6.6 presents the same information for men. Rural and urban men have their first sexual experience at almost the same ages. Educational differentials are also small. Median age at first intercourse among men does vary by region, ranging from a low of 18.9 years in North Central to 23.5 years in the North West.

Table 6.6 Median age at first intercourse

Median age at first sexual intercourse among women age 20-49 and among men age 25-59, by current age and background characteristics, Nigeria 2003

Background characteristic	Current age: women						Women age 20-49	Women age 25-49	Men age 25-59
	20-24	25-29	30-34	35-39	40-44	45-49			
Residence									
Urban	18.7	18.7	17.9	16.7	17.3	16.0	18.2	17.8	21.5
Rural	16.9	16.4	15.6	15.6	15.2	15.2	15.9	15.7	20.6
Region									
North Central	18.0	18.3	17.0	16.9	16.7	16.1	17.6	17.3	18.9
North East	16.1	15.9	14.9	14.8	14.8	14.7	15.3	15.0	21.1
North West	15.8	15.2	14.9	14.7	14.3	14.3	14.9	14.7	23.5
South East	a	18.9	18.9	19.0	19.8	16.9	19.1	18.8	20.7
South South	18.0	18.1	16.9	16.8	16.2	15.8	17.4	17.0	20.5
South West	19.1	19.9	19.1	18.8	19.6	19.2	19.3	19.4	20.4
Education									
No education	15.5	15.2	14.8	14.8	14.6	15.1	15.0	14.9	21.5
Primary	16.9	16.9	16.3	16.8	17.1	16.1	16.7	16.7	20.8
Secondary	18.8	18.7	18.8	18.5	19.8	20.4	18.8	18.8	20.4
Higher	a	20.6	19.8	18.6	20.3	19.2	a	20.1	20.9
All women	17.6	17.3	16.1	15.9	15.6	15.5	16.7	16.2	na
All men	na	20.4	20.3	20.8	20.8	21.8	na	na	20.8

na = Not applicable
^aOmitted because less than 50 percent were married for the first time before the beginning of the age group

6.5 RECENT SEXUAL ACTIVITY

In the absence of contraception, the probability of pregnancy is related to the regularity of sexual intercourse. The information on recent intercourse is important for the refinement of the measurement of exposure to pregnancy.

Table 6.7.1 presents the distribution of women by timing of the last sexual intercourse, according to background characteristics. In the four weeks preceding the survey, 56 percent of women age 15-49 were sexually active, while 19 percent were sexually active in the last 12 months, and 7 percent had not had sex for more than one year. Among all women, 14 percent have never had sexual intercourse. The proportion of women who were sexually active in the four weeks preceding the survey increases with age up to a maximum of 70 percent of women age 35-39; at older ages the percentage declines.

Not surprisingly, there is great variation in the percentage of women who were sexually active in the last four weeks by marital status. It is notable that among currently married women, the proportion of women who had recent intercourse remains relatively stable at all marital durations.

Table 6.7.1 Recent sexual activity: women

Percent distribution of women by timing of last sexual intercourse, according to background characteristics, Nigeria 2003

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the last 4 weeks	Within 1 year ¹	One or more years ago	Missing			
Current age							
15-19	33.5	13.9	2.4	1.3	48.9	100.0	1,716
20-24	55.3	20.9	6.2	4.0	13.6	100.0	1,494
25-29	63.7	22.8	5.2	5.6	2.7	100.0	1,382
30-34	67.4	19.6	6.0	6.2	0.7	100.0	941
35-39	70.1	18.1	7.2	4.4	0.3	100.0	816
40-44	66.9	18.9	11.4	2.5	0.3	100.0	688
45-49	59.5	17.1	21.1	2.2	0.0	100.0	583
Marital status							
Never married	15.1	19.5	7.5	1.4	56.5	100.0	1,926
Married or living together	73.7	17.7	4.3	4.3	0.0	100.0	5,336
Divorced/separated/widowed	19.7	30.0	41.5	8.4	0.4	100.0	358
Marital duration²							
Married only once							
0-4 years	77.5	15.7	2.2	4.6	0.1	100.0	1,149
5-9 years	72.3	20.8	2.0	4.9	0.0	100.0	880
10-14 years	71.0	17.8	5.4	5.7	0.0	100.0	704
15-19 years	74.7	16.3	4.6	4.5	0.0	100.0	552
20-24 years	73.9	19.1	5.1	2.0	0.0	100.0	538
25+ years	70.9	17.6	9.0	2.4	0.0	100.0	580
Married more than once	73.6	17.4	4.6	4.4	0.0	100.0	933
Residence							
Urban	51.8	20.1	7.6	3.1	17.4	100.0	2,629
Rural	58.8	18.0	6.5	4.1	12.7	100.0	4,991
Region							
North Central	41.6	25.0	11.1	4.5	17.8	100.0	1,121
North East	63.4	16.0	5.0	5.8	9.8	100.0	1,368
North West	77.8	11.2	2.5	2.5	6.0	100.0	2,095
South East	42.2	22.2	8.7	3.3	23.7	100.0	737
South South	50.8	20.9	7.7	3.4	17.2	100.0	1,342
South West	35.4	26.2	11.5	3.3	23.5	100.0	958
Education							
No education	71.0	15.0	6.3	4.5	3.2	100.0	3,171
Primary	51.3	21.1	8.7	4.3	14.6	100.0	1,628
Secondary	41.6	20.7	5.9	2.7	29.0	100.0	2,370
Higher	49.5	26.0	8.7	2.1	13.8	100.0	451
Current contraceptive method							
Pill	79.1	13.8	4.1	3.1	0.0	100.0	152
IUD	(78.4)	(21.6)	(0.0)	(0.0)	(0.0)	(100.0)	45
Condom	62.4	34.7	2.0	0.9	0.0	100.0	260
Periodic abstinence	58.2	35.4	3.4	2.9	0.0	100.0	163
Other method	72.6	22.9	2.9	1.5	0.0	100.0	392
No method	54.5	17.5	7.5	4.0	16.5	100.0	6,608
Total	56.4	18.7	6.8	3.7	14.3	100.0	7,620

Note: Figures in parentheses are based on 25-29 unweighted cases.

¹ Excludes women who had sexual intercourse within the last 4 weeks

² Excludes women who are not currently married

Rural women are more likely to be sexually active (59 percent) than urban women (52 percent). Among the six regions, the North West has the highest proportion of sexually active women (78 percent), followed by the North East (63 percent). The South West has the lowest proportion of sexually active women (35 percent), followed by the South East and North Central (42 percent each). Women with no education are more likely to be sexually active than women with some education, as are women who are using a contraceptive method.

Table 6.7.2 shows that almost half the men interviewed were sexually active in the four weeks preceding the survey. Another one-fifth had sexual intercourse in the past year, while 7 percent had not had sex in more than a year. Twenty-four percent of men had never had sex. The percentage sexually

Table 6.7.2 Recent sexual activity: men
Percent distribution of men by timing of last sexual intercourse, according to background characteristics, Nigeria 2003

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the last 4 weeks	Within 1 year ¹	One or more years ago	Missing			
Current age							
15-19	11.1	7.1	6.5	0.0	75.2	100.0	453
20-24	29.3	21.7	11.1	0.0	37.9	100.0	426
25-29	53.0	24.6	7.9	0.2	14.3	100.0	328
30-34	62.8	26.9	7.4	0.3	2.6	100.0	299
35-39	69.3	25.4	3.8	0.9	0.6	100.0	220
40-44	75.6	16.2	4.0	3.9	0.4	100.0	208
45-49	72.8	22.0	4.6	0.6	0.0	100.0	159
50-54	72.6	22.0	4.6	0.6	0.2	100.0	133
55-59	67.0	22.0	8.6	2.5	0.0	100.0	120
Marital status							
Never married	20.5	15.2	11.0	0.0	53.3	100.0	1,048
Married or living together	73.0	23.0	2.7	1.3	0.0	100.0	1,245
Divorced/separated/widowed	27.8	39.3	32.9	0.0	0.0	100.0	53
Marital duration²							
Married only once							
0-4 years	72.0	23.8	3.9	0.3	0.0	100.0	268
5-9 years	67.3	29.6	3.1	0.0	0.0	100.0	178
10-14 years	71.2	20.6	3.4	4.9	0.0	100.0	145
15-19 years	79.9	18.7	0.5	0.9	0.0	100.0	142
20-24 years	79.4	18.1	1.7	0.8	0.0	100.0	131
25+ years	68.5	25.0	4.3	2.3	0.0	100.0	163
Married more than once	75.4	22.2	1.2	1.2	0.0	100.0	218
Residence							
Urban	43.0	20.1	7.8	1.0	28.0	100.0	872
Rural	51.8	19.7	6.6	0.5	21.3	100.0	1,474
Region							
North Central	42.4	28.5	8.4	0.0	20.7	100.0	348
North East	60.1	17.4	4.0	1.6	16.9	100.0	421
North West	55.2	9.1	2.9	0.5	32.3	100.0	602
South East	30.1	26.6	16.8	3.2	23.2	100.0	207
South South	47.8	20.9	7.2	0.0	24.1	100.0	445
South West	40.5	27.9	11.1	0.0	20.4	100.0	322
Education							
No education	66.8	13.2	4.1	1.1	14.8	100.0	507
Primary	46.3	25.1	7.0	0.4	21.2	100.0	603
Secondary	39.2	18.4	9.0	0.2	33.2	100.0	960
Higher	52.5	25.7	5.8	2.3	13.7	100.0	276
Total	48.6	19.9	7.1	0.7	23.8	100.0	2,346

¹ Excludes men who had sexual intercourse within the last 4 weeks
² Excludes men who are not currently married

active increases with age from 11 percent of men age 15-19 to 76 percent of men age 40-44; thereafter, the percentage decrease slightly. The table shows that men in union are the most likely to be sexually active (73 percent).

Men's patterns of sexual activity by residence and region are similar to those of women. As with women, recent sexual activity varies with educational attainment. Approximately 67 percent of men with no education were sexually active in the four weeks preceding the survey, compared with 39 percent of men with some secondary education.

6.6 POSTPARTUM AMENORRHOEA, ABSTINENCE, AND INSUSEPTIBILITY

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. This is the period during which a woman becomes temporarily infecund following childbirth. A number of studies have established a direct relationship between the length and intensity of breastfeeding and the duration of postpartum amenorrhoea. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. Women are considered insusceptible if they are not exposed to the risk of pregnancy, either because they are amenorrhoeic or are abstaining from sexual intercourse following a birth. Women who gave birth during the three years preceding the survey were asked about the duration of amenorrhoea and the duration of sexual abstinence following childbirth.

Table 6.8 shows the percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible by number of months since birth. Mean and median durations are also shown. In Nigeria, women are amenorrhoeic for approximately 13 months after giving birth. The median duration of postpartum abstinence is lower—just 3 months. Eighty-five percent of women abstain from sex during the first two months following childbirth. The proportion abstaining decreases with increasing months after delivery, particularly during the first year after birth. A comparison of the data with those from the 1999 NDHS indicates that there has been no change in the duration of postpartum insusceptibility.

Table 6.9 shows the median duration of postpartum amenorrhoea, abstinence, and insusceptibility by background characteristics. The median duration of postpartum amenorrhoea, abstinence, and insusceptibility are 13 months, 3 months, and 15 months, respectively. Urban women in Nigeria have a shorter duration of amenorrhoea and postpartum insusceptibility than rural women, but have longer postpartum abstinence. There are also substantial differentials by region and mother's education.

Table 6.8 Postpartum amenorrhoea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Nigeria 2003

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrhoeic	Abstaining	Insusceptible	
< 2	91.7	85.1	97.2	189
2-3	81.6	52.5	88.0	241
4-5	69.4	33.0	77.4	272
6-7	63.5	33.4	70.4	249
8-9	65.2	29.2	72.5	244
10-11	52.4	23.7	60.7	216
12-13	52.9	13.9	56.5	238
14-15	51.2	19.3	59.0	204
16-17	33.4	14.7	41.3	216
18-19	24.9	11.4	31.1	143
20-21	18.6	5.5	21.0	153
22-23	16.1	18.3	29.9	143
24-25	6.2	4.3	10.0	273
26-27	4.6	2.7	6.8	230
28-29	3.2	3.4	6.7	167
30-31	2.1	3.9	6.0	198
32-33	1.0	3.2	4.2	175
34-35	2.2	4.3	5.4	184
Total	38.1	21.0	43.8	3,734
Median	13.2	3.0	15.1	na
Mean	13.1	7.6	15.1	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable

Table 6.9 Median duration of postpartum insusceptibility by background characteristics

Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Postpartum:			Number of births
	Amenorrhoea	Abstinence	Insusceptibility	
Mother's age				
15-29	13.0	2.8	14.6	2,307
30-49	13.6	3.4	15.9	1,427
Residence				
Urban	10.6	3.5	12.6	1,110
Rural	14.1	2.7	16.3	2,624
Region				
North Central	13.0	16.5	19.2	540
North East	15.8	2.3	16.3	857
North West	15.4	1.9	15.5	1,282
South East	10.8	4.3	13.2	244
South South	7.2	3.9	9.5	491
South West	10.6	5.5	12.1	320
Mother's education				
No education	15.8	2.3	17.0	1,855
Primary	12.7	5.7	14.1	883
Secondary	7.3	3.5	8.7	866
Higher	5.6	4.7	6.2	129
Total	13.2	3.0	15.1	3,734

Note: Medians are based on status at the time of the survey.

6.7 MENOPAUSE

The lack of a menstrual period in the preceding six months among women who are neither pregnant nor postpartum amenorrhoeic is taken as evidence of menopause. Table 6.10 shows the proportion of women who are menopausal. The proportion of women who are menopausal increases steadily after age 30. More than half of women age 48-49 report that they are menopausal.

Table 6.10 Menopause

Percentage of women age 30-49 who are menopausal by age, Nigeria 2003

Age	Percentage menopausal ¹	Number of women
30-34	0.6	941
35-39	1.5	816
40-41	5.9	381
42-43	12.7	247
44-45	28.9	280
46-47	36.3	142
48-49	52.4	221
Total	10.6	3,028

¹ Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

FERTILITY PREFERENCES

This chapter addresses three questions that allow an assessment of the need for contraception. Does the respondent want more children? If so, how long would she prefer to wait before the next child? If she could start afresh, how many children in all would she want? This chapter also examines the occurrence of unwanted or mistimed pregnancies and analyzes the effect that prevention of such pregnancies would have on the fertility rates. Because the underlying rationale of most family planning programmes is to give couples the freedom and ability to bear the number of children they want and to achieve the spacing of births they prefer, these are key issues for programme planners.

Interpretation of data on fertility preferences has always been the subject of controversy. Survey questions have been criticized on the grounds that answers are misleading because 1) they reflect unformed, ephemeral views, which are held with weak intensity and little conviction; and 2) they do not take into account the effect of social pressures or the attitudes of other family members, particularly the husband, who may exert a major influence on reproductive decisions. The first objection has greater force in noncontracepting societies where the idea of conscious reproductive choice may still be alien; preference data from these settings should be interpreted with caution. In societies with moderate to high levels of use, greater interpretive weight can be attached to the findings. The second objection is correct in principle. In practice, however, its importance is doubtful; for instance, the evidence from surveys in which both husbands and wives are interviewed suggests that there is no radical difference between the views of the two sexes.

The inclusion of women who are currently pregnant complicates the measurement of views on future childbearing. For these women, the question on desire for more children is rephrased to refer to desire for another child after the one that they are expecting. To take into account the way in which the preference variable is defined for pregnant women, the results are classified by number of living children, including the current pregnancy as equivalent to a living child.

7.1 DESIRE FOR MORE CHILDREN

Information on fertility preferences among currently married women is presented in Table 7.1. The table shows the potential need for contraceptive services for spacing as well as for limiting births. Until recently, concern for providing appropriate contraceptive methods to couples who wish to have no more children has overshadowed contraception for child spacing purposes. The interest in spacing has been reinforced by recent evidence that 1) short birth intervals are harmful to the welfare of children and mothers; 2) large numbers of couples wish to postpone childbearing by using contraception; and 3) there is a potential demand for contraception for spacing births in some countries where demand for limiting family size has not yet emerged.

Table 7.1 shows that the desire for more children is related to the number of living children women already have. Virtually all currently married women with no children want to have a child, eight in ten express the desire to have a child soon. As the number of living children increases, the desire to have children decreases. The percentage of women who want to space the birth of their next child (have another later) first rises with parity, up to parity two, then declines steadily with the rise in the number of living children. This pattern was also observed in the 1999 NDHS (NPC, 2000:88). However, it is striking that almost three-quarters of women with four living children (73 percent) want to have another child.

It is equally significant that 18 percent of all women want no more children. The desire to stop childbearing begins to appear when couples have had at least three living children. While only 2 percent

of childless women want no children, half of women who have had six or more children say they want to stop childbearing.

Irrespective of the number of living children, more than half of women (52 percent) either want to delay having another child or stop childbearing altogether. These women are potential contraceptive users for spacing or for limitation of fertility.

Table 7.1 Fertility preferences by number of living children

Percent distribution of currently married women by desire for children, according to number of living children, Nigeria 2003

Desire for children	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Have another soon ²	79.2	47.1	42.1	36.8	32.4	23.2	14.8	37.1
Have another later ³	10.5	43.8	46.2	42.6	36.7	29.5	19.1	33.8
Have another, undecided when	2.3	5.1	4.4	6.3	3.5	3.8	3.6	4.3
Undecided	0.9	0.5	0.7	2.7	3.5	3.7	3.9	2.3
Want no more	1.8	0.6	4.4	8.2	20.5	34.4	50.3	18.1
Sterilized ⁴	0.0	0.0	0.0	0.1	0.3	0.0	0.8	0.2
Declared infecund	5.1	2.4	2.2	3.2	3.0	4.4	7.1	3.9
Missing	0.3	0.5	0.0	0.1	0.0	1.0	0.4	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	491	902	871	776	701	608	986	5,336

¹ Includes current pregnancy

² Wants next birth within 2 years

³ Wants to delay next birth for 2 or more years

⁴ Includes both female and male sterilization

7.2 DESIRE TO LIMIT CHILDBEARING

Table 7.2 presents the percentage of currently married women who want no more children by number of living children and background characteristics. This table provides information about variations in the potential demand for fertility control.

The data show that the desire to limit childbearing is higher in urban than rural areas (22 and 17 percent, respectively) and varies with the number of living children. In urban areas, for example, one-third of women with four living children desire no more children. This compares with just 15 percent of women living in rural areas. There are no significant urban-rural differences in the desire to limit childbearing once women have had six or more children. At that parity, about half of women in both urban and rural areas want no more children.

There are large regional variations in the desire to limit childbearing. In general, the desire to limit childbearing is lowest in the North West (7 percent) and highest in the South East and South South regions (32 percent each). In the South West, even at parity four, half of all currently married women want no more children. In all the southern regions, the majority desire no more children once they have had five children. At parity six and above, eight in every ten women in the southern regions do not want any more children. In contrast, in the North West and North East, the majority of women do not wish to limit childbearing, irrespective of the number of living children they already have. This is especially true of women in the North West; in that region, just two out of every ten women with six or more children say that they want no more children.

Table 7.2 Desire to limit childbearing by background characteristics

Percentage of currently married women who want no more children, by number of living children and background characteristics, Nigeria 2003

Background characteristic	Number of living children ¹							All women
	0	1	2	3	4	5	6+	
Residence								
Urban	0.0	0.0	5.1	12.5	34.1	46.0	49.4	21.8
Rural	2.5	0.9	4.1	6.5	15.2	29.2	51.8	16.7
Region								
North Central	0.0	0.0	7.2	7.3	31.8	46.6	61.9	24.1
North East	3.5	0.2	4.5	8.1	16.0	23.3	44.8	16.3
North West	2.2	0.9	1.3	3.0	8.2	10.4	20.7	6.5
South East	(0.0)	0.0	4.6	10.0	27.7	55.6	83.5	31.6
South South	(0.0)	0.0	3.7	12.3	16.7	53.8	80.6	31.6
South West	(0.0)	1.6	11.0	21.4	52.0	62.3	80.9	29.9
Education								
No education	2.8	0.8	4.1	7.7	15.4	22.8	40.5	15.0
Primary	0.0	0.0	4.8	8.9	19.1	44.1	65.4	25.8
Secondary	0.0	0.8	3.7	7.7	23.5	53.0	68.2	16.4
Higher	(0.0)	(0.0)	(9.1)	(14.3)	(76.2)	(49.9)	(81.0)	29.3
Wealth quintile								
Lowest	2.8	1.5	2.7	6.7	13.5	17.7	48.3	15.5
Second	1.2	0.2	5.9	7.0	12.5	27.8	49.6	16.1
Middle	3.7	0.3	3.2	5.1	15.6	38.8	46.3	17.3
Fourth	0.0	0.0	4.9	10.0	25.1	35.3	45.2	18.4
Highest	0.0	0.9	5.1	13.4	39.5	56.1	76.7	24.8
Total	1.8	0.6	4.4	8.3	20.8	34.4	51.0	18.3

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes current pregnancy

In addition to regional differences, the desire to limit childbearing varies by education. Almost twice as many women with higher education as women with no education want to limit childbearing (29 percent versus 15 percent). The desire to limit childbearing increases with household economic status. For example, one in six women in households in the lowest wealth quintile wants to limit childbearing, compared with one in four women in households in the highest quintile.

Among women residing in urban areas and in the south and in the North Central region, among those with some education, and among those in the highest wealth quintile, parity five appears to be the threshold value at which a significant proportion begin to want no more children.

7.3 NEED FOR FAMILY PLANNING

This section discusses the extent of need and potential demand for family planning services in Nigeria. Unmet need for family planning refers to fecund women who either wish to postpone the next birth (spacers) or who wish to stop childbearing altogether (limiters), but are not using a contraceptive method. Pregnant women are considered to have unmet need for spacing or limiting if their pregnancy was mistimed or unwanted, respectively. Similarly, amenorrhoeic women are classified as having unmet need if their last birth was mistimed or unwanted. Women who are currently using a family planning method are said to have a met need for family planning method. The total demand for family planning comprises those who fall in the met need and the unmet need categories.

Table 7.3 presents estimates for unmet need, met need, and total demand for family planning among currently married Nigerian women by background characteristics. The total demand for family planning among currently married women is 30 percent, and 43 percent of that demand is satisfied. The demand for spacing purposes is twice as high as the demand for limiting purposes (20 and 10 percent, respectively). Overall, less than one-fifth of currently married women have an unmet need for family planning (17 percent). Twelve percent have unmet need for spacing and 5 percent for limiting.

Unmet need does not vary much by age except for women age 45-49, who have the lowest unmet need. It is notable that up to age 34, virtually all unmet need for family planning is for spacing purposes. After age 35, most unmet need is for limiting childbearing. Total unmet need for family planning is highest in the South South region, where one-fourth of currently married women have unmet need for family planning, and lowest in the North West (11 percent). There are no rural-urban differentials nor does unmet need vary substantially by wealth quintile. However, it should be noted that among women in households in the lowest wealth quintile, only 32 percent of demand for family planning is satisfied, compared with 62 percent among women in households in the highest wealth quintile. No doubt, women in more economically advantaged households have the means to satisfy their family planning needs, unlike women in poorer households.

Table 7.4 shows the need for family planning among all women and women who are not currently married. As expected, unmet need for family planning is higher among currently married women (17 percent) and lower among all women (14 percent) and women who are not currently married (6 percent).

Table 7.3 Need for family planning among currently married women

Percentage of currently married women with unmet need for family planning, and with met need for family planning, and the total demand for family planning, by background characteristics, Nigeria 2003

Background characteristic	Unmet need for family planning ¹			Met need for family planning (currently using) ²			Total demand for family planning ³			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	13.9	0.6	14.6	4.1	0.2	4.3	18.0	0.9	18.9	22.9	545
20-24	16.1	0.3	16.4	9.3	0.2	9.4	25.4	0.4	25.8	36.5	911
25-29	16.0	1.1	17.1	15.3	0.8	16.1	31.2	1.9	33.2	48.5	1,146
30-34	13.9	5.3	19.1	8.8	4.8	13.6	22.7	10.0	32.7	41.5	848
35-39	8.1	10.1	18.1	5.2	11.1	16.3	13.3	21.2	34.5	47.4	763
40-44	5.3	14.1	19.3	2.5	12.7	15.1	7.7	26.7	34.4	43.9	619
45-49	2.4	9.0	11.4	1.2	7.6	8.9	3.6	16.7	20.3	43.7	504
Residence											
Urban	11.7	5.5	17.3	12.1	8.2	20.2	23.8	13.7	37.5	54.0	1,633
Rural	11.8	4.9	16.7	6.0	3.3	9.2	17.8	8.2	26.0	35.5	3,703
Region											
North Central	15.2	6.6	21.8	7.0	6.4	13.3	22.2	12.9	35.1	37.9	754
North East	13.1	5.0	18.1	2.8	1.4	4.2	15.9	6.4	22.3	19.0	1,122
North West	9.9	1.2	11.1	4.6	0.4	4.9	14.5	1.5	16.1	30.8	1,880
South East	9.0	10.0	18.9	12.3	10.2	22.5	21.2	20.2	41.4	54.3	368
South South	13.0	11.5	24.5	14.7	10.7	25.4	27.7	22.3	49.9	50.9	664
South West	11.3	5.9	17.2	19.1	13.6	32.7	30.4	19.5	49.9	65.6	548
Education											
No education	10.1	3.9	14.1	2.5	1.4	4.0	12.7	5.4	18.0	22.1	2,877
Primary	13.4	7.6	21.0	8.3	8.4	16.7	21.7	16.0	37.7	44.4	1,175
Secondary	15.8	4.9	20.7	18.1	8.0	26.1	33.9	12.9	46.8	55.8	1,046
Higher	6.6	8.1	14.7	24.1	12.8	36.9	30.7	20.9	51.7	71.5	238
Wealth quintile											
Lowest	11.3	3.6	14.9	3.8	3.1	6.9	15.1	6.8	21.8	31.8	1,150
Second	10.6	5.0	15.6	4.1	1.6	5.6	14.7	6.5	21.2	26.6	1,142
Middle	12.5	4.2	16.7	5.4	3.7	9.1	17.9	7.9	25.8	35.2	1,086
Fourth	13.0	6.9	19.9	8.8	4.7	13.5	21.8	11.6	33.4	40.3	957
Highest	11.9	6.2	18.0	18.4	11.6	30.0	30.3	17.8	48.0	62.4	1,002
Total	11.8	5.1	16.9	7.8	4.8	12.6	19.6	9.9	29.5	42.7	5,336

¹ *Unmet need for spacing* includes pregnant women whose pregnancy was mistimed, amenorrhoeic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. *Unmet need for limiting* refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrhoeic women who became pregnant while using a method (these women are in need of better contraception).

² *Using for spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. *Using for limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

³ Nonusers who are pregnant or amenorrhoeic and women whose pregnancy was the result of a contraceptive failure are *not* included in the category of unmet need, but are included in the total demand for contraception (since they would have been using had their method not failed).

Table 7.4 Need for family planning among all women and among women who are not currently married

Percentage of all women and women who are not currently married with unmet need for family planning, and with met need for family planning, and the total demand for family planning, by background characteristics, Nigeria 2003

Background characteristic	Unmet need for family planning ¹			Met need for family planning (currently using) ²			Total demand for family planning ³			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
ALL WOMEN											
Age											
15-19	7.7	0.2	7.9	6.3	0.3	6.6	14.0	0.5	14.5	45.4	1,716
20-24	12.7	0.3	13.0	15.4	0.3	15.7	28.0	0.6	28.6	54.8	1,494
25-29	14.4	1.0	15.4	17.0	1.1	18.1	31.4	2.1	33.5	54.1	1,382
30-34	13.9	4.9	18.8	9.4	4.8	14.2	23.3	9.7	33.0	43.0	941
35-39	7.6	9.5	17.1	5.8	10.6	16.4	13.4	20.1	33.5	48.9	816
40-44	4.7	12.8	17.5	2.5	12.1	14.6	7.3	24.9	32.1	45.6	688
45-49	2.4	8.0	10.3	1.1	6.8	7.9	3.5	14.8	18.3	43.4	583
Residence											
Urban	8.9	3.5	12.5	13.7	5.6	19.3	22.7	9.1	31.8	60.8	2,629
Rural	10.5	3.7	14.2	7.4	2.6	10.1	18.0	6.4	24.3	41.4	4,991
Region											
North Central	12.3	4.6	16.8	7.2	5.0	12.2	19.5	9.6	29.0	42.0	1,121
North East	12.0	4.1	16.1	2.8	1.2	4.0	14.7	5.3	20.0	19.7	1,368
North West	9.0	1.1	10.0	4.2	0.6	4.8	13.2	1.6	14.9	32.5	2,095
South East	7.7	5.0	12.7	14.8	5.2	20.0	22.5	10.2	32.7	61.1	737
South South	10.7	6.0	16.8	18.0	6.0	24.0	28.8	12.0	40.7	58.8	1,342
South West	7.2	3.4	10.5	18.3	8.0	26.2	25.4	11.3	36.8	71.4	958
Education											
No education	9.8	3.6	13.4	2.5	1.6	4.0	12.2	5.2	17.4	23.2	3,171
Primary	11.2	5.6	16.8	7.5	6.3	13.8	18.8	11.8	30.6	45.2	1,628
Secondary	10.3	2.4	12.6	17.0	4.0	21.0	27.3	6.4	33.6	62.4	2,370
Higher	5.1	4.3	9.4	28.6	7.1	35.7	33.7	11.4	45.1	79.1	451
Total	10.0	3.7	13.6	9.6	3.7	13.3	19.6	7.3	26.9	49.3	7,620
WOMEN WHO ARE NOT CURRENTLY MARRIED											
Age											
15-19	4.8	0.0	4.8	7.4	0.3	7.6	12.2	0.3	12.4	61.3	1,171
20-24	7.3	0.4	7.6	24.9	0.6	25.5	32.2	0.9	33.1	77.0	583
25-29	6.6	0.3	6.8	25.6	2.3	28.0	32.2	2.6	34.8	80.4	236
30-34	14.2	1.4	15.7	14.4	5.3	19.7	28.6	6.7	35.3	55.7	93
35-39	0.9	1.8	2.7	13.8	3.3	17.1	14.7	5.1	19.8	86.4	53
40-44	0.0	1.1	1.1	3.1	7.1	10.2	3.1	8.2	11.3	90.2	69
45-49	2.3	1.3	3.6	0.5	1.5	2.1	2.8	2.9	5.7	36.5	79
Residence											
Urban	4.3	0.2	4.6	16.5	1.4	17.9	20.8	1.6	22.4	79.6	996
Rural	6.7	0.3	7.1	11.7	0.9	12.6	18.4	1.2	19.6	64.0	1,288
Region											
North Central	6.3	0.4	6.7	7.7	2.2	9.9	13.9	2.7	16.6	59.6	366
North East	6.8	0.3	7.1	2.6	0.0	2.6	9.4	0.3	9.7	27.0	245
North West	0.5	0.0	0.5	1.1	2.6	3.7	1.6	2.6	4.2	88.0	215
South East	6.5	0.0	6.5	17.3	0.2	17.5	23.8	0.2	24.0	72.8	369
South South	8.6	0.7	9.2	21.3	1.3	22.6	29.8	1.9	31.8	71.0	678
South West	1.7	0.0	1.7	17.1	0.4	17.5	18.8	0.4	19.2	91.2	411
Education											
No education	6.2	0.2	6.4	1.5	3.2	4.7	7.7	3.4	11.1	42.3	293
Primary	5.6	0.3	5.9	5.6	0.7	6.3	11.2	1.0	12.2	51.6	454
Secondary	6.0	0.4	6.3	16.2	0.8	17.0	22.1	1.2	23.3	72.9	1,324
Higher	3.4	0.0	3.4	33.5	0.7	34.2	37.0	0.7	37.7	90.8	213
Total	5.7	0.3	6.0	13.8	1.1	14.9	19.5	1.4	20.9	71.3	2,284

¹ *Unmet need for spacing* includes pregnant women whose pregnancy was mistimed, amenorrhoeic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth unless they say it would not be a problem if they discovered they were pregnant in the next few weeks. *Unmet need for limiting* refers to pregnant women whose pregnancy was unwanted, amenorrhoeic women whose last child was unwanted, and fecund women who are neither pregnant nor amenorrhoeic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrhoeic women who became pregnant while using a method (these women are in need of better contraception).

² *Using for spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. *Using for limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

³ Nonusers who are pregnant or amenorrhoeic and women whose pregnancy was the result of a contraceptive failure are *not* included in the category of unmet need, but are included in the total demand for contraception (since they would have been using had their method not failed).

7.4 IDEAL NUMBER OF CHILDREN

This section discusses responses of women to inquiries about what they consider to be the ideal number of children. Respondents who had no children were asked how many children they would like to have if they could choose the number of children to have in their whole life. Those who had living children were asked about the number of children they would choose if they could start their childbearing again. Responses provide an indicator of future fertility, while the information supplied by the latter group also provides a measure of unwanted fertility.

Table 7.5 shows the distribution of respondents by ideal number of children and mean ideal number of children according to actual number of living children for all women and for all men. One in every nine women gave a non-numeric response¹ to the question on ideal number of children. In general, Nigerian women, irrespective of their number of living children, consider a large number of children ideal.

The ideal number of children is 6.7 for all women and 7.3 for currently married women. Almost two-thirds of all women consider five or more children to be ideal. Only 6 percent of women think three or less children is ideal.

Among all women, the mean ideal number of children increases with the number of living children, from 5.4 for those without any children to 8.6 among those with six or more children. Clearly, Nigerian women consider a large family to be desirable.

Nigerian men, on average, want even more children than Nigerian women. Indeed, men's mean ideal number of children is about two children more than that of women (8.6 versus 6.7). Currently married men report a mean ideal number of children that is three children more than the ideal of currently married women (10.6 versus 7.3). These findings are similar to those from the 1999 NDHS (NPC, 2000:95).

¹ Non-numeric responses include “it is up to God,” “any number,” and “don’t know.”

Table 7.5 Ideal number of children

Percent distribution of all women and all men by ideal number of children and mean ideal number of children for all women and for all men and for currently married women and for currently married men, according to number of living children, Nigeria 2003

Ideal number of children	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
WOMEN								
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	0.2	0.1	0.0	0.2	0.2	0.1	0.1	0.1
2	2.5	2.2	1.6	0.5	0.6	1.7	0.4	1.6
3	7.6	6.2	3.9	2.1	0.7	2.0	1.4	4.4
4	30.2	21.2	16.6	12.7	11.8	5.7	6.3	18.2
5	18.1	15.6	17.4	14.7	9.6	11.5	5.9	14.2
6+	34.5	44.9	51.2	57.7	65.6	63.6	68.2	50.7
Non-numeric responses	6.8	9.7	9.4	12.2	11.4	15.5	17.7	10.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,319	1,109	936	818	737	646	1,055	7,620
Mean ideal number of children for:²								
All women	5.4	6.3	6.6	7.0	7.5	7.6	8.6	6.7
Number	2,161	1,001	849	718	653	546	868	6,795
Currently married women	6.9	6.6	6.7	7.0	7.5	7.7	8.6	7.3
Number	431	805	786	678	621	510	806	4,638
MEN								
0	1.5	0.0	0.0	0.0	0.0	0.0	0.2	0.8
1	0.0	0.1	0.7	0.0	0.0	0.0	0.0	0.1
2	2.0	0.3	1.3	0.0	0.0	0.0	0.4	1.2
3	5.7	11.2	5.1	7.1	1.6	2.7	1.1	4.8
4	21.0	18.3	14.3	15.6	30.8	17.3	7.2	17.3
5	20.9	14.2	16.1	19.5	9.0	7.2	6.9	15.8
6+	39.4	37.6	39.9	45.0	41.9	56.7	58.1	44.6
Non-numeric responses	9.5	18.3	22.6	12.9	16.7	16.1	26.1	15.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	1,139	168	161	145	117	102	513	2,346
Mean ideal number of children for:²								
All men	6.7	7.3	8.3	9.6	9.3	10.2	13.4	8.6
Number	1,031	138	124	126	98	85	379	1,982
Currently married men	6.7	8.0	8.5	9.7	9.4	10.3	13.5	10.6
Number	80	105	116	122	95	83	371	972

¹ Includes current pregnancy

² Means are calculated excluding respondents giving non-numeric responses.

7.5 IDEAL NUMBER OF CHILDREN BY BACKGROUND CHARACTERISTICS

Among both women and men, there are significant variations in mean ideal number of children by background characteristics (Table 7.6). The older the respondent, the more children they consider ideal; this is true across most background characteristics. However, even the youngest women (age 15-19), think the ideal family size is about six children (5.8). Rural women want one more child than urban women (7.0 versus 6.0). Women in the North West have the largest ideal number of children (8.6), followed by those in the North East (7.8). Women in the south, on the other hand, want fewer children than women in the north. The number is lowest in the South West (4.8).

Table 7.6 Mean ideal number of children by background characteristics

Mean ideal number of children for all women by current age and mean ideal number of children for all men, according to background characteristics, Nigeria 2003

Background characteristic	Current age: women							All women	All men
	15-19	20-24	25-29	30-34	35-39	40-44	45-49		
Residence									
Urban	5.5	5.6	5.7	6.4	6.6	7.0	7.1	6.0	6.6
Rural	6.0	6.6	7.0	7.4	8.1	8.0	8.1	7.0	9.8
Region									
North Central	5.2	6.0	6.1	6.4	7.1	6.9	7.6	6.2	8.0
North East	7.0	6.9	7.9	8.0	8.9	9.1	8.8	7.8	12.5
North West	7.4	8.2	8.5	9.3	9.6	9.1	9.4	8.6	12.8
South East	5.2	5.0	5.0	5.3	5.6	5.8	6.3	5.3	5.3
South South	5.0	5.1	5.3	5.7	5.9	7.0	6.9	5.5	6.7
South West	4.4	4.4	4.4	4.8	5.2	5.4	6.3	4.8	4.8
Education									
No education	7.5	7.8	8.4	8.7	9.1	8.7	8.6	8.3	14.4
Primary	5.9	6.5	6.5	6.6	7.2	7.1	6.8	6.6	9.0
Secondary	5.0	5.1	5.1	5.5	5.5	5.8	5.0	5.2	6.8
Higher	(5.0)	5.1	4.6	4.8	4.8	(5.6)	(5.3)	4.9	6.5
Wealth quintile									
Lowest	6.4	6.7	8.0	8.1	8.6	8.4	8.8	7.6	11.4
Second	6.3	7.0	7.4	7.8	8.5	8.3	8.4	7.4	11.6
Middle	6.3	6.9	7.0	7.4	8.0	8.6	7.7	7.1	9.6
Fourth	5.8	6.0	6.3	7.2	7.9	7.3	7.8	6.5	7.4
Highest	4.7	5.1	5.0	5.3	5.6	5.6	5.8	5.1	5.0
All women	5.8	6.2	6.5	7.1	7.5	7.7	7.8	6.7	na

Note: Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

The ideal number of children declines as level of education and wealth quintile increase. For example, the mean ideal number of children is 4.9 among women with higher education, compared with 8.3 for women with no education. Similarly, women in households in the lowest wealth quintile want 7.6 children, compared with the 5.1 children for women living in households in the highest wealth quintile, a difference of 2.5 children. These findings are similar to those of the 1999 NDHS (NPC, 2000:97), which showed that ideal family size has a strong negative correlation with level of education.

Table 7.6 also presents the findings for men. As observed earlier, men, irrespective of background characteristics, want more children than women. Similar to women, the ideal family size among urban men is lower than among rural men (6.6 and 9.8, respectively). However, the differential for men between urban and rural ideal number of children (3.2 children) is larger than the differential for women (1 child). The magnitude of regional differences is also more pronounced for men than for women. Men in the North West want almost three times as many children as men in the South West (12.8 versus 4.8). Similar to women, the mean ideal number of children is lowest in the South West and South East and highest in the North West and North East.

Men's ideal number of children decreases as level of education and wealth quintile increase. For example, men without education want twice as many children as men with higher education (14.4 versus 6.5). In fact, men without education have the largest ideal family size among all the subgroups in the sample.

7.6 WANTED AND UNWANTED FERTILITY

In the 2003 NDHS, women were asked a series of questions for each child born in the preceding five years (and for any current pregnancy) to determine whether the particular pregnancy was planned, unplanned but wanted at a later time, or unwanted. These questions form a potentially powerful indicator of the degree to which couples successfully control childbearing. In addition, the data can be used to gauge the effect of the prevention of unwanted births on fertility.

The questions are demanding. The respondent is required to recall accurately her wishes at one or more points in the past five years and to report them honestly. The danger of rationalization is present and a previously unwanted pregnancy may well become a cherished child. Despite these potential problems, results from previous surveys have proved plausible. Respondents are clearly willing to report unwanted conceptions, although some after-the-fact rationalization probably occurs; the result is probably an underestimate of unwanted fertility.

In DHS surveys, these retrospective questions are asked independently of the questions on the desire for more children and total desired family size and have not been cross-edited at the data processing stage.

Table 7.7 shows the percent distribution of births in the five years preceding the survey by planning status of birth, according to birth order and mother's age at birth. Although more than eight in ten births were wanted at the time, one out of every six births was either not wanted at all or was wanted later (mistimed). There is no clear pattern in the percentage of births not wanted by birth order.

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	83.0	8.4	7.8	0.9	100.0	1,430
2	88.3	8.0	2.7	1.0	100.0	1,169
3	88.8	8.9	1.5	0.7	100.0	1,005
4+	83.0	10.6	5.6	0.7	100.0	3,483
Mother's age at birth						
<20	82.4	9.4	7.1	1.1	100.0	1,235
20-24	85.4	10.9	3.1	0.5	100.0	1,916
25-29	88.4	8.8	1.8	1.0	100.0	1,776
30-34	84.1	9.8	5.6	0.6	100.0	1,100
35-39	81.7	7.5	10.1	0.7	100.0	770
40-44	76.0	9.8	12.3	1.8	100.0	246
45-49	81.9	7.5	10.6	0.0	100.0	43
Total	84.7	9.5	5.0	0.8	100.0	7,087

7.7 WANTED FERTILITY RATES

Table 7.8 presents total wanted fertility rates and total fertility rates for the three years preceding the survey by background characteristics. Wanted fertility rates are calculated in the same manner as the conventional age-specific fertility rates presented in Chapter 4, except that births classified as unwanted are omitted from the numerator. The remainder is cumulated to form a total wanted fertility rate, which is analogous to the conventional TFR. A comparison of the two rates suggests the potential effect of the elimination of unwanted births.

The total wanted fertility rate is 5.3, which is 0.4 births less than the total fertility rate of 5.7. This difference implies a low level of unwanted births in Nigeria. However, there are some differences between wanted TFRs and actual TFRs across subgroups. For example, the difference between the two rates is lowest in the North West (0.1 child) and largest in the South South region (0.7 child).

7.8 IDEAL NUMBER OF CHILDREN AND UNMET NEED BY WOMEN'S STATUS

Table 7.9 shows women's ideal family size and their unmet need for family planning by the three indicators of women empowerment—number of decisions in which the respondent participates, number of reasons for which a woman can refuse to have sexual relations with her husband, and number of reasons for which the respondent feels a husband is justified in beating his wife (see Chapter 3).

The data indicate that the higher the status of women, the lower the ideal number of children. This is true regardless of indicator of women's status. However, the relationship between women's status indicators and unmet need for family planning is unclear.

Table 7.8 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	4.6	4.9
Rural	5.7	6.1
Region		
North Central	5.2	5.7
North East	6.7	7.0
North West	6.6	6.7
South East	3.5	4.1
South South	3.9	4.6
South West	3.9	4.1
Education		
No education	6.5	6.7
Primary	5.7	6.3
Secondary	4.3	4.7
Higher	2.6	2.8
Wealth quintile		
Lowest	6.1	6.5
Second	5.9	6.3
Middle	5.4	5.7
Fourth	5.6	5.9
Highest	3.8	4.2
Total	5.3	5.7

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

Table 7.9 Ideal number of children and unmet need for family planning by women's status

Mean ideal number of children and unmet need for family planning, by women's status indicators, Nigeria 2003

Women's status indicator	Mean ideal number of children ¹	Number	Unmet need for family planning ²			Number of women
			For spacing	For limiting	Total	
Number of decisions in which woman has final say³						
0	8.1	1,791	11.8	2.6	14.4	2,136
1-2	7.3	1,564	12.6	5.0	17.6	1,799
3-4	6.1	643	13.3	8.6	21.9	709
5	6.3	640	8.1	9.7	17.8	692
Number of reasons to refuse sex with husband						
0	8.0	420	12.6	4.0	16.6	506
1-2	7.9	1,171	10.4	4.4	14.8	1,409
3-4	7.0	3,046	12.2	5.6	17.8	3,422
Number of reasons wife beating is justified						
0	6.4	1,493	11.5	5.5	16.9	1,632
1-2	7.5	998	9.6	5.2	14.8	1,135
3-4	7.3	761	16.1	4.4	20.5	878
5-6	8.1	1,386	11.4	5.1	16.4	1,691
Total	7.3	4,638	11.8	5.1	16.9	5,336

¹ Totals are calculated excluding the women giving non-numeric responses.

² See Table 7.3 for definition of unmet need for family planning.

³ Either by herself or jointly with others

INFANT AND CHILD MORTALITY

One important objective of the 2003 Nigeria Demographic and Health Survey (2003 NDHS) was to measure levels and trends of mortality among children, because infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life. Estimates of childhood mortality are based on information from the birth history section of the questionnaire administered to women. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere, and the number who have died). For each of these births, information was collected on sex, month and year of birth, survivorship status, and current age or, if the child had died, age at death. This information is used to directly estimate the following five mortality rates:

Neonatal mortality:	the probability of dying within the first month of life
Postneonatal mortality:	the difference between infant and neonatal mortality
Infant mortality:	the probability of dying before the first birthday
Child mortality:	the probability of dying between the first and fifth birthdays
Under-five mortality:	the probability of dying between birth and the fifth birthday.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

8.1 DATA QUALITY ASSESSMENT

The reliability of mortality estimates depends on the sampling variability of the estimates and on nonsampling errors. Sampling variability and sampling errors are discussed in Appendix B. Nonsampling errors depend on the completeness with which child deaths are reported and the accuracy of the reported date of birth and age at death. Omission of births and deaths affects mortality estimates, displacement of dates impacts mortality trends, and misreporting of age at death may distort the age pattern of mortality.

Typically, the most serious source of nonsampling errors in a survey that collects retrospective information on births and deaths arises from an underreporting of births and deaths of children who are not alive at the time of the survey. Mothers may be reluctant to talk about their dead children because of feelings associated with any death or because the culture in which they live may discourage discussing the dead. Even if a respondent is willing to discuss a dead child, she may be likely to forget events that happened in the more distant past, particularly if a child was alive only for a short time.

When selective omission of childhood deaths occurs, it is usually most severe for deaths in early infancy. However, the proportion of neonatal deaths occurring in the first week of life is high: 74 percent for the period 0-4 years preceding the survey. Furthermore, it appears that early infant deaths for births that occurred longer before the survey have not been severely underreported; 72 percent of all neonatal deaths in the 20 years preceding the survey were early neonatal deaths (Appendix Table C.5).

Another issue affecting childhood mortality estimates is the quality of reporting of age at death. If age at death is misreported, estimates may be biased, especially if the net effect of age misreporting results in transference of deaths from one age bracket to another. To minimize the error in reporting of age at death, interviewers were instructed to record the age at death in days for deaths under one month and in months for deaths under two years. They also were asked to probe for deaths reported at one year to determine a more precise age at death in terms of months. Despite the emphasis during interviewer training and fieldwork monitoring on probing for accurate age at death, Appendix Table C.6 shows that the num-

ber of reported deaths at age 12 months or one year of age is several times that reported for ages 11 and 13 months. It is likely, then, that some of these deaths actually occurred before one year of age but are not included in the infant mortality rate. Of course, the excess deaths reported at 12 months and one year of age have no effect on estimates of overall under-five mortality rates.

Despite evidence of heaping at age of death, it should be noted that the age at death data collected in the 2003 NDHS are far superior to those collected in the 1999 NDHS and are substantially better than those in the 1990 NDHS, both in terms of heaping of age at death and completeness of reporting of age at death. Furthermore, the majority of deaths recorded at one year of age occurred in the North East and North West (data not shown), where lack of recordkeeping and uncertainty regarding dates of events makes this type of data collection extremely difficult.

8.2 LEVELS

Table 8.1 shows early childhood mortality rates based on data from the 2003 NDHS. For the five years immediately preceding the survey (1999-2003), the infant mortality rate was 100 deaths per 1,000 live births. The estimates of neonatal mortality and postneonatal mortality were 48 and 52 deaths per 1,000 births, respectively. The estimate of child mortality (age 1 to age 4) was higher: 112 deaths per 1,000 children surviving to 12 months of age. The overall under-five mortality rate for the period was 201 deaths per 1,000 births.

Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Nigeria 2003

Years preceding the survey	Approximate calendar period	Neonatal mortality (NN)	Postneonatal mortality ¹ (PNN)	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
0-4	1999-2003	48	52	100	112	201
5-9	1994-1998	59	61	120	132	236
10-14	1989-1993	55	58	113	136	234

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

8.3 COMPARISON OF INFANT MORTALITY RATES WITH PREVIOUS DEMOGRAPHIC AND HEALTH SURVEYS

The 2003 NDHS Compared with the 1999 NDHS

The infant mortality estimate from the 2003 NDHS (100 per 1,000) is significantly higher than those from the 1990 NDHS (87 per 1,000) and the 1999 NDHS (75 per 1,000). In the case of the latter survey, there is evidence of omission of births and deaths from the period preceding the survey (National Population Commission, 2000). The conclusion of the data quality assessment in the 1999 NDHS report is that the reported rates significantly underestimated the true mortality levels in the country. The very substantial difference between the 1999 and 2003 surveys confirms the underreporting of events in the 1999 NDHS. Thus, this chapter will include no further discussion of the 1999 results.

The 2003 NDHS Compared with the 1990 NDHS

The 1990 NDHS infant mortality rate of 87 per 1,000 is significantly lower than the 2003 NDHS rate of 100 per 1,000, which would indicate a worsening of health conditions in the country during the 1990s. In comparing the results of the two surveys, however, it is necessary to consider that the difference between the rates may not indicate an increase in infant mortality, but rather reflect an underestimate during the previous survey.

The 2003 NDHS results for the period 10-14 years preceding the survey, which would correspond to approximately the 1989-1993 calendar years, produce an infant mortality rate of 113 per 1,000, while the 1990 NDHS estimate for approximately the same time period (1986-1990) was 87 per 1,000. The 26-point difference is substantial, and it is unlikely that sampling variability is responsible for the much higher rate of the 2003 survey.

Table 8.2 shows a comparison between the infant mortality rates from the 2003 NDHS and the 1990 NDHS, according to the four regions of analysis used in the 1990 survey.¹ The rates are shown for approximately the same time period, which is the 10-14 years preceding the 2003 NDHS (1989-1993) and the 0-4 years preceding the 1990 NDHS (1986-1990). For clarity, this section examines only infant mortality rates for comparable time periods. A more detailed analysis would include neonatal, postneonatal, and child mortality.

The comparison of infant mortality rates suggests that the 1990 survey underestimated mortality in certain regions. Table 8.2 shows that while the estimates for infant mortality in the Southeast and Southwest are statistically identical, there are discrepancies between the Northeast and Northwest rates. In the case of the Northwest, the rate calculated from the 2003 data is 136 per 1,000 compared with the 1990 estimate of 110 per 1,000, a 26-point difference. The difference between rates in the Northeast region is even greater: the rate from the 2003 survey is 129 per 1,000, compared with the 1990 survey rate of 83 per 1,000, a 46-point difference.

Mortality estimates from the two surveys for the Northeast and Northwest are substantially different. Greater credibility should be placed in the 2003 estimates for two reasons. First, studies have shown that respondents typically underreport infant and child deaths. Thus, it is likely that the interviewers working in the Northeast during the 2003 NDHS were better able to obtain complete information regarding respondents' dead children. Second, in the case of the Northeast, the infant mortality rates in the 1990 survey were as low as rates in the southern regions, even though women in the Northeast were comparatively disadvantaged in terms of various maternal care indicators such as antenatal and delivery care.

Although a thorough investigation of the discrepancies between the two sets of estimates is beyond the scope of this report, evidence points to a serious underestimate of mortality in the Northeast and Northwest regions during the 1990 NDHS. This, in turn, would have biased

Table 8.2 Comparison of infant mortality rates from the 2003 NDHS and the 1990 NDHS

Infant mortality rates (per 1,000 live births) for the period 10-14 years preceding the 2003 NDHS and the period 0-4 years preceding the 1990 NDHS, by region

Region/ survey	Infant mortality rate
Northeast	
2003 NDHS	129
1990 NDHS	83
Northwest	
2003 NDHS	136
1990 NDHS	110
Southeast	
2003 NDHS	74
1990 NDHS	78
Southwest	
2003 NDHS	81
1990 NDHS	75
Total	
2003 NDHS	113
1990 NDHS	87

Note: For this comparison, the regions of analysis are the four regions used in the 1990 NDHS.

¹ There are slight differences in the definitions of the regions because of changes in state boundaries that occurred after the 1990 survey. For example, the creation of Kwara and Kogi states affects the dividing line between the Northeast and Northwest regions. However, any impact this has on the results of the comparative analysis should be negligible.

downward the infant mortality rate for the entire country, because the high-fertility respondents of the north contributed more than half of the births in Nigeria in the sample. The greater contribution to the underestimate is attributable to respondents in the Northeast. In conclusion, this preliminary analysis indicates that the 1990 survey estimate of 87 per 1,000 for the 1986-1990 period was an underestimate. Thus, it is not possible to conclude that the difference between the 1990 rate (87 per 1,000) and the 2003 rate (100 per 1,000) is due to an increase in mortality risks during the intervening years. Clearly, poor data quality in the previous survey contributes to the difference.

8.4 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 8.3 shows the 2003 NDHS infant and child mortality rates by socioeconomic variables. The estimated mortality rates are for the 10-year period preceding the survey. A 10-year period is used to calculate the rates for population subgroups to reduce sampling variability.

Table 8.3 Early childhood mortality rates by background characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality ¹ (PNN)	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Residence					
Urban	37	44	81	78	153
Rural	60	61	121	139	243
Region					
North Central	53	49	103	70	165
North East	61	65	125	154	260
North West	55	59	114	176	269
South East	34	32	66	40	103
South South	53	68	120	63	176
South West	39	30	69	47	113
Mother's education					
No education	60	64	124	166	269
Primary	53	58	111	85	186
Secondary	37	35	71	45	113
Higher	(39)	(22)	(61)	(20)	(80)
Wealth quintile					
Lowest	59	74	133	143	257
Second	70	70	140	178	293
Middle	56	54	110	118	215
Fourth	48	39	87	101	179
Highest	23	30	52	29	79
Total	53	56	109	121	217

Note: Figures in parentheses are based on 250 to 499 exposed persons.
¹ Computed as the difference between the infant and the neonatal mortality rates

As is the case in most countries, mortality rates in infancy and early childhood are higher in rural than in urban areas. In terms of infant mortality, rural rates (121 per 1,000) exceed urban rates (81 per 1,000) by a factor of about 1.5. Much of this difference arises from the neonatal rates. In the case of child mortality, rural rates (139 per 1,000) exceed urban rates (78 per 1,000) by a factor of about 1.8. Infant and child mortality rates also vary according to region. For example, the North East, North West, and South South have the highest infant mortality rates, followed by North Central. In these regions, infant mortality is estimated as exceeding 100 per 1,000. Infant mortality in the South East and South West,

however, is estimated at less than 70 per 1,000. Regional differentials in infant mortality are consistent with regional differentials in basic indicators of maternal care, such as antenatal care visits and content, as well as delivery assistance (see Chapter 9).

As expected, mortality levels decline as mother's education increases. Between education categories, the differentials are greater for postneonatal mortality and, especially, child mortality than for neonatal mortality. The mortality risk of children is also associated with the economic status of the household. The under-five mortality rate in households in the lowest and second quintiles of the wealth index is more than three times that in households in the highest quintile.

8.5 DEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 8.4 shows the relationship between early childhood mortality and demographic variables. As was the case with the socioeconomic differentials, the rates are shown for the 10-year period preceding the survey.

Table 8.4 Early childhood mortality rates by demographic characteristics					
Neonatal, postneonatal, infant, child, and under-five mortality rates for the ten-year period preceding the survey, by demographic characteristics, Nigeria 2003					
Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality ¹ (PNN)	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Sex of child					
Male	60	56	116	120	222
Female	46	56	102	122	212
Mother's age at birth					
<20	58	65	123	143	248
20-29	48	52	100	114	203
30-39	55	57	113	112	212
40-49	(95)	(50)	(145)	(188)	(306)
Birth order					
1	59	47	106	105	200
2-3	40	54	94	105	189
4-6	51	58	109	128	223
7+	73	65	137	152	269
Previous birth interval²					
<2	79	81	160	174	307
2 years	49	62	111	134	230
3 years	32	31	63	75	134
4+ years	30	31	61	59	116
Birth size³					
Small/very small	67	72	139	na	na
Average or larger	42	43	86	na	na
Medical maternity care³					
No antenatal or delivery care	63	67	130	na	na
Either antenatal or delivery care	37	37	74	na	na
Both antenatal and delivery care	31	34	65	na	na

Note: Figures in parentheses are based on 250 to 499 exposed persons.
na =Not applicable
¹ Computed as the difference between the infant and the neonatal mortality rates
² Excludes first-order births
³ Rates for the five-year period preceding the survey

As expected, mortality rates are generally higher for boys than for girls. There are significant differences in mortality risks associated with mother's age and birth order. The largest differentials are in the neonatal period. Shorter birth intervals are associated with higher childhood mortality, both during and after infancy. In terms of the length of the preceding birth interval, mortality rates are markedly lower for intervals of at least two years than for shorter birth intervals. There is a further decrease in the risk of death after a three-year birth interval. In terms of under-five mortality, births following an interval of at least three years are at less than half the risk of death as births occurring within two years of a preceding birth.

Studies have shown that a child's weight at birth is an important indicator of his or her survival chances. Since relatively few mothers had information on their child's exact weight at birth, they were asked instead whether their child was very large, larger than average, average, smaller than average, or small at birth. This has been found to be a good proxy for children's weight. Children reported to be small or very small have substantially higher mortality rates. Children whose mothers did not receive antenatal or delivery care also have higher mortality rates.

8.6 MORTALITY DIFFERENTIALS BY WOMEN'S STATUS

The ability to access information, make decisions, and act effectively in their own interest, or in the interest of those who depend on them, are essential aspects of the empowerment of women. It follows that if women, the primary caretakers of children, are empowered, the health and survival of their infants will be enhanced. Table 8.5 presents mortality rates by three indicators of women's status: participation in household decisionmaking, attitude toward refusing to have sex with their husband, and attitude toward wife-beating. For all three indicators, there is an association between increasing women's status and decreasing levels of mortality.

Table 8.5 Early childhood mortality by women's status indicators					
Neonatal, postneonatal, infant, child and under-five mortality rates for the ten-year period preceding the survey, by women's status indicators, Nigeria 2003					
Indicator of women's status	Neonatal mortality (NN)	Postneonatal mortality ¹ (PNN)	Infant mortality (_{1q0})	Child mortality (_{4q1})	Under-five mortality (_{5q0})
Number of decisions in which woman has final say²					
0	57	55	112	154	249
1-2	56	61	116	123	225
3-4	40	53	94	59	147
5	48	50	97	92	181
Number of reasons to refuse sex with husband					
0	54	51	105	150	239
1-2	62	56	118	123	227
3-4	49	57	106	116	210
Number of reasons wife beating is justified					
0	47	42	89	78	160
1-2	56	52	108	112	208
3-4	46	70	115	120	221
5-6	62	63	125	167	271

¹ Computed as the difference between the infant and the neonatal mortality rates
² Either by herself or jointly with others

8.7 HIGH-RISK FERTILITY BEHAVIOUR

Previous research has shown a strong relationship between the fertility patterns of women and the mortality risks of their children. Typically, mortality risks are greater for children who are born to mothers who are too young or too old, who are born after a short birth interval, or who have a high birth order. In this analysis, a mother is classified as “too young” if she is less than 18 years of age and “too old” if she is older than 34 years of age. A “short birth interval” is defined as a birth occurring within 24 months of the previous birth, and a child is of “high birth order” if the mother has already given birth to three or more children.

Table 8.6 shows the distribution of children born in the five years preceding the survey by risk category. While first births to women age 18-34 are considered an unavoidable risk, they are included in the analysis and are shown as a separate risk category. Column 1 shows that in the five-year period before the survey, 41 percent of births were in a single high-risk category and 24 percent were in a multiple high-risk category. Only one-fifth of births were not in any high-risk category.

Column 2 shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. The risk ratio for children in any avoidable high-risk category (1.4) was about 40 percent higher than for children not in any high-risk category.

The last column in Table 8.6 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. For example, a woman who was 37 years old at the time of the survey and had three previous births, the last of which occurred three years earlier, would be classified in the multiple high-risk category for being too old (35 or older) and at risk of having a high-order birth (more than three previous births). Twenty-seven percent of currently married women would fall in this category. Overall, eight in ten married women have the potential to give birth to a child with an elevated risk of mortality. Almost half of all married women (48 percent) have the potential to give birth to children in the multiple high-risk categories.

Table 8.6 High-risk fertility behaviour

Percent distribution of children born in the five years preceding the survey by category of elevated risk of dying and the risk ratio, and the percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Nigeria 2003

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women ¹
	Percentage of births	Risk ratio	
Not in any high-risk category	21.2	1.00	13.3 ^a
Unavoidable risk category			
First order births between ages 18 and 34 years	13.7	1.22	6.4
Single high-risk category			
Mother's age <18	7.9	1.76	2.9
Mother's age >34	0.7	1.18	3.8
Birth interval <24 months	6.7	1.10	10.0
Birth order >3	25.8	1.16	15.3
Subtotal	41.2	1.26	32.0
Multiple high-risk category			
Age <18 & birth interval <24 months ²	1.0	1.30	1.1
Age >34 & birth interval <24 months	0.0	1.61	0.1
Age >34 & birth order >3	11.4	1.25	27.0
Age >34 & birth interval <24 months & birth order >3	2.1	2.60	5.6
Birth interval <24 months & birth order >3	9.3	2.13	14.6
Subtotal	23.9	1.72	48.3
In any avoidable high-risk category	65.1	1.43	80.3
Total	100.0	na	100.0
Number of births	6,219	na	5,336

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead of births *not in any high-risk category*.

na =Not applicable

¹ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.

² Includes the combined categories age <18 and birth order >3

^a Includes sterilized women

MATERNAL AND CHILD HEALTH

The state of maternal and child health is one indicator of a society's level of development, as well as an indicator of the performance of the health care delivery system. This chapter presents findings on several important aspects of reproductive and child health such as antenatal and delivery care, postnatal care, characteristics of the neonate, vaccinations, and common childhood illnesses and their treatment.

9.1 ANTENATAL CARE

This section provides information on issues relating to antenatal care (ANC) services. ANC from a trained provider is important in monitoring pregnancy and helping to reduce the risks for the mother and child during this period. Table 9.1 shows the percent distribution of women who had a live birth in the five years preceding the survey by antenatal care provider for the most recent birth, according to background characteristics. The data show that six in ten mothers received antenatal care from a trained medical professional. The most common antenatal care providers are nurses or midwives (37 percent). More than one-third of mothers (37 percent) did not receive any antenatal care.

Almost half of teenage mothers did not receive antenatal care, compared with approximately one-third of mothers age 20 and older. The type of antenatal care provider also varies by the age at which women give birth. Teenage mothers are also less likely to receive ANC from a doctor. The receipt of ANC also varies by birth order, with births at higher parities less likely to receive ANC, particularly from a trained provider.

There are clear differences in ANC by residence; women residing in urban areas and in the south are much more likely to receive ANC than their rural and northern-dwelling counterparts. This difference is likely to be due to the concentration of hospitals and health care facilities in urban and southern areas. It is striking that rural women are three times less likely to receive antenatal care than urban women. Forty-seven percent of mothers in the North East and 59 percent of mothers in the North West did not receive ANC, whereas in other regions the proportion of women not receiving ANC ranges from 1 to 25 percent.

There is a positive relationship between ANC and educational attainment. For example, three-fifths of mothers with no education did not receive any ANC from a trained provider. In contrast, doctors provide ANC to 70 percent of mothers with higher education.

There is also a positive relationship between the household wealth index and type of ANC provider. Whereas six in ten women in households in the two lowest quintiles did not receive ANC from a health professional, only 2 in 100 women in the most advantaged households were without care.

9.1.1 Number and Timing of ANC Visits

Antenatal care can be more effective in preventing adverse pregnancy outcomes when it is sought early in the pregnancy and continues through to delivery. Table 9.2 shows number of antenatal care visits and timing of the first visit by residence. At least four antenatal visits are recommended during pregnancy to ensure proper care. Less than half of mothers made four or more ANC visits (Figure 9.1). There is a relationship between residence and number of visits. Seventy-one percent of urban women make four or more visits to an antenatal care provider compared with only 38 percent of rural women.

Table 9.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Nigeria 2003

Background characteristic	Antenatal care provider							Total	Number of women
	Doctor	Nurse/ midwife/ auxiliary midwife	Community health extension worker	Traditional birth attendant	Other	No one	Missing		
Age at birth									
<20	12.4	34.0	3.5	2.2	0.2	47.7	0.0	100.0	719
20-34	24.0	36.7	1.9	2.4	0.3	34.7	0.1	100.0	2,514
35-49	20.8	39.9	1.4	3.2	0.4	33.9	0.4	100.0	678
Birth order									
1	24.9	36.6	2.5	2.9	0.2	32.9	0.1	100.0	803
2-3	26.4	34.2	2.0	2.6	0.3	34.3	0.1	100.0	1,102
4-5	21.1	39.2	1.4	2.2	0.3	35.8	0.1	100.0	874
6+	13.9	37.4	2.5	2.3	0.5	43.2	0.2	100.0	1,132
Residence									
Urban	38.5	44.2	0.3	1.5	0.1	15.0	0.2	100.0	1,144
Rural	14.2	33.6	2.8	2.9	0.4	46.0	0.1	100.0	2,766
Region									
North Central	23.8	50.0	0.5	0.0	0.1	25.3	0.2	100.0	575
North East	10.9	36.4	5.3	0.2	0.1	47.1	0.0	100.0	862
North West	5.4	31.5	1.9	1.6	0.6	59.0	0.0	100.0	1,341
South East	50.8	45.4	0.2	0.9	0.8	0.8	1.2	100.0	222
South South	38.8	33.3	0.7	10.0	0.3	16.8	0.0	100.0	544
South West	56.0	35.9	0.8	5.0	0.0	2.3	0.1	100.0	367
Education									
No education	8.2	27.7	2.8	1.2	0.4	59.6	0.0	100.0	1,989
Primary	22.3	49.7	1.9	5.4	0.2	20.3	0.2	100.0	918
Secondary	42.3	45.2	1.1	2.9	0.2	8.1	0.2	100.0	862
Higher	70.2	27.9	0.0	0.0	0.0	1.7	0.2	100.0	143
Wealth quintile									
Lowest	7.6	26.4	3.2	2.9	0.2	59.7	0.1	100.0	852
Second	9.2	28.1	2.1	2.2	0.3	58.1	0.1	100.0	846
Middle	15.4	41.1	3.3	2.0	1.0	37.2	0.1	100.0	808
Fourth	25.5	51.6	1.1	3.6	0.1	18.0	0.2	100.0	735
Highest	56.5	39.3	0.4	1.8	0.1	1.8	0.1	100.0	670
Total	21.3	36.7	2.1	2.5	0.3	36.9	0.1	100.0	3,911

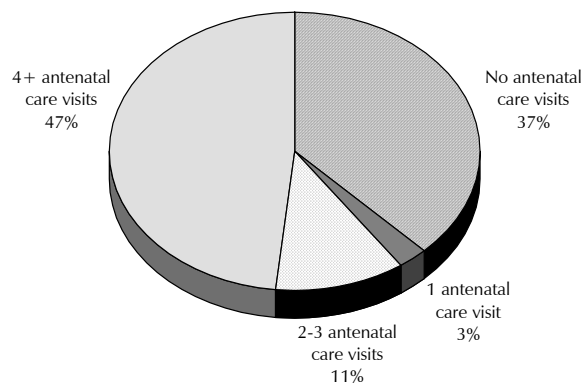
Note: If more than one source of ANC was mentioned, only the provider with the highest qualification is considered in this tabulation.

Table 9.2 Number of antenatal care visits and timing of first visit

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit, according to residence, Nigeria 2003

Number and timing of ANC visits	Residence		Total
	Urban	Rural	
Number of ANC visits			
None	15.0	46.0	36.9
1	2.8	2.5	2.6
2-3	8.4	12.1	11.0
4+	71.1	37.6	47.4
Don't know/missing	2.7	1.8	2.1
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	15.0	46.0	36.9
<4	23.4	13.9	16.7
4-5	38.1	22.0	26.7
6-7	20.4	15.0	16.6
8+	2.3	2.1	2.1
Don't know/missing	0.8	1.0	1.0
Total	100.0	100.0	100.0
Median months pregnant at first visit (for those with ANC)	4.9	5.1	5.0
Number of women	1,144	2,766	3,911

Figure 9.1 Number of Antenatal Care Visits



Note: Total does not add to 100 due to missing cases.

NDHS 2003

Among women who receive antenatal care, 17 percent make their first ANC visit during the first three months of pregnancy. Although the proportions of urban and rural mothers who received antenatal care for the most recent births in the last five years differ substantially, among those who received antenatal care the proportion of women who benefit from ANC during the first trimester differs only slightly by residence. Slightly more than one-quarter of both urban and rural women who received antenatal care made their first visit during the first trimester. This result is also confirmed by the median number of months pregnant at first visit: 4.9 for urban mothers and 5.1 for rural mothers.

9.1.2 Components of ANC

The content of antenatal care is important in judging its quality. Certain items of care have been selected and included in the questionnaire to indicate the level of the care received. Pregnancy complications are an important source of maternal and child mortality and morbidity, and thus information on the signs of complications and tests for complications should be routinely included in all antenatal care. Moreover, in Nigeria, neonatal tetanus, malaria, and maternal anemia are major causes of neonatal mortality. In the 2003 Nigeria Demographic and Health Survey (2003 NDHS), respondents were asked whether they had received each of the following services at least once during antenatal care: weight measured, height measured, blood pressure measured, and urine and blood samples taken. Information on iron supplements and antimalarial drugs was collected and reported for the most recent birth in the five years preceding the survey, whether or not the mother saw anyone for antenatal care.

Table 9.3 shows the percent distribution of women who received antenatal care by the content of care and receipt of iron tablets or syrup and antimalarial drugs, according to background characteristics. More than half of all women were informed of signs of pregnancy complications, and about the same proportion had their height measured. More than eight in ten women had their weight measured and blood pressure taken, and almost two-thirds had urine and blood samples taken. For each component of ANC, older women were more likely than younger women to report that they had received services.

Urban-rural residence is an important determinant of the likelihood of receiving all of the specified components of ANC, with urban women receiving more components of care than rural woman. Once again, northern mothers appear to receive lower quality ANC than mothers in the south.

There is a positive correlation between both level of education and wealth quintile and the content of antenatal care women receive. Mothers with higher education and women in households higher on the wealth index receive more services than those with less education and those living in households lower on the wealth index.

Iron is a vital component of hemoglobin, which carries oxygen to the body tissues. To sustain life, mothers need iron. Almost six in ten mothers received iron supplements, while less than one in four mothers received antimalarial drugs during pregnancy. The likelihood of a mother receiving iron supplementation or an antimalarial varies by background characteristics in a pattern similar to that of antenatal care services.

Table 9.3 Antenatal care content

Percentage of women with a live birth in the five years preceding the survey who received antenatal care for the most recent birth, by content of antenatal care, and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup or antimalarial drugs for the most recent birth, according to background characteristics, Nigeria 2003

Background characteristic	Among women who received antenatal care						Number of women	Received iron tablets or syrup	Receive anti-malarial drugs	Number of women
	Informed of signs of pregnancy complications	Weight measured	Height measured	Blood pressure measured	Urine sample taken	Blood sample taken				
Age at birth										
<20	45.8	78.1	48.0	71.4	53.5	50.2	376	49.2	30.4	719
20-34	56.2	83.7	57.2	81.8	65.7	66.6	1,640	60.0	40.7	2,514
35-49	58.7	83.8	61.0	83.9	68.6	72.4	446	59.2	39.5	678
Birth order										
1	53.9	82.1	54.7	79.4	66.3	63.3	538	60.4	43.0	803
2-3	55.1	83.9	58.8	82.4	67.0	68.9	723	60.5	37.6	1,102
4-5	58.5	85.1	58.8	81.2	63.8	66.3	561	60.5	40.3	874
6+	52.9	80.3	53.4	79.1	60.4	61.5	641	51.6	35.0	1,132
Residence										
Urban	66.2	91.6	64.3	90.6	81.4	81.3	970	78.4	55.3	1,144
Rural	47.8	77.2	51.4	74.1	53.4	54.6	1,492	49.4	31.6	2,766
Region										
North Central	47.3	90.8	63.0	92.6	74.7	75.3	429	58.7	39.4	575
North East	44.3	84.4	63.4	77.8	50.1	52.0	456	54.4	31.5	862
North West	48.1	80.2	46.8	64.1	54.1	42.2	549	40.6	25.3	1,341
South East	66.0	83.4	56.3	89.4	76.1	85.9	218	93.7	63.1	222
South South	60.0	68.8	49.0	76.6	63.4	69.9	452	69.4	56.7	544
South West	75.6	92.8	64.4	94.9	80.2	86.1	358	89.2	60.2	367
Education										
No education	42.0	77.7	52.0	72.2	50.5	48.2	802	39.0	23.9	1,989
Primary	52.8	79.8	52.2	78.5	60.3	65.5	730	68.7	44.6	918
Secondary	65.9	88.3	61.1	88.2	77.5	77.3	790	84.4	59.7	862
Higher	80.4	97.4	78.4	96.8	91.4	91.8	140	91.2	76.7	143
Wealth quintile										
Lowest	39.0	70.3	46.4	68.5	36.9	45.5	343	36.4	24.9	852
Second	41.3	72.2	52.3	69.5	49.7	47.2	354	37.0	28.0	846
Middle	48.2	78.0	52.7	74.3	56.4	54.2	507	57.8	32.1	808
Fourth	59.5	86.9	58.8	87.0	72.5	74.4	602	75.0	48.1	735
Highest	72.0	95.1	64.9	92.0	85.4	85.0	657	92.9	66.6	670
Total	55.0	82.8	56.5	80.6	64.4	65.1	2,462	57.9	38.6	3,911

9.1.3 Tetanus Toxoid

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of infant deaths. A pregnant woman is expected to receive two doses of the toxoid for full protection. On the other hand, if a woman has been fully vaccinated during a previous pregnancy, she may only require one dose for the current pregnancy.

Table 9.4 shows the distribution of women who received tetanus toxoid injections during pregnancy according to background characteristics.

Eleven percent of mothers received one dose and 40 percent received two or more doses of tetanus toxoid. However, almost half of respondents did not receive any tetanus toxoid injection during their pregnancy. This nonreceipt was more prevalent among teenage mothers, rural residents, mothers in the North West, those with no education, and those living in households in the lowest wealth quintile, with at least six in ten of these mothers not receiving tetanus toxoid injections.

The proportion of mothers who received two or more tetanus toxoid injections increases with age at birth, level of education, and wealth quintile. The percentage of urban women who received full tetanus coverage is almost twice that of rural women. At the regional level, there is a great disparity between mothers in the north and those in the south. In the north, only 20 to 45 percent of mothers received two or more injections, compared with 62 to 77 percent in the southern regions.

Table 9.4 Tetanus toxoid injections						
Percent distribution of women who had a live birth in the five years preceding the survey by number of tetanus toxoid injections received during pregnancy for the most recent birth, according to background characteristics, Nigeria 2003						
Background characteristic	No injections	One injection	Two or more injections	Don't know/missing	Total	Number of women
Age at birth						
<20	61.6	9.4	27.1	1.9	100.0	719
20-34	44.2	10.7	43.0	2.1	100.0	2,514
35-49	43.5	10.9	43.8	1.8	100.0	678
Birth order						
1	46.2	12.1	39.9	1.8	100.0	803
2-3	44.8	9.9	42.1	3.2	100.0	1,102
4-5	45.5	9.0	44.3	1.2	100.0	874
6+	51.8	11.2	35.5	1.5	100.0	1,132
Residence						
Urban	24.7	12.7	60.7	2.0	100.0	1,144
Rural	56.6	9.6	31.8	2.0	100.0	2,766
Region						
North Central	33.4	17.2	45.4	3.9	100.0	575
North East	56.2	12.3	30.8	0.7	100.0	862
North West	72.6	6.1	20.1	1.2	100.0	1,341
South East	7.3	12.3	77.4	2.9	100.0	222
South South	27.0	9.5	61.5	2.0	100.0	544
South West	9.3	12.5	74.0	4.3	100.0	367
Education						
No education	70.4	8.3	20.4	1.0	100.0	1,989
Primary	32.8	10.8	52.6	3.8	100.0	918
Secondary	16.3	15.5	66.0	2.1	100.0	862
Higher	4.6	10.2	82.1	3.1	100.0	143
Wealth quintile						
Lowest	69.9	9.5	19.1	1.4	100.0	852
Second	68.6	7.2	22.7	1.6	100.0	846
Middle	49.9	11.2	36.9	2.0	100.0	808
Fourth	27.4	13.8	55.7	3.1	100.0	735
Highest	10.1	11.7	76.4	1.9	100.0	670
Total	47.3	10.5	40.2	2.0	100.0	3,911

9.2 PLACE OF DELIVERY

Proper medical attention and hygienic conditions during delivery can reduce the risk of complication and infections that can cause serious illness or the death of the mother, her baby, or both. The 2003 NDHS collected information on the place of delivery and the type of assistance received, for all births during the five years preceding the survey. Table 9.5 shows the percent distribution of live births by place of delivery, according to background characteristics.

Table 9.5 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Nigeria 2003

Background characteristic	Place of delivery						Total	Number of births
	Any facility ¹	Public sector	Private sector	Home	Other	Missing		
Mother's age at birth								
<20	21.6	15.4	6.2	76.5	0.7	1.2	100.0	1,121
20-34	35.8	18.9	16.9	63.4	0.3	0.5	100.0	4,206
35-49	31.3	18.5	12.8	67.6	0.2	1.0	100.0	892
Birth order								
1	43.4	24.4	19.0	55.3	0.6	0.7	100.0	1,278
2-3	34.7	17.9	16.8	64.1	0.6	0.6	100.0	1,908
4-5	32.4	18.6	13.8	66.7	0.2	0.6	100.0	1,365
6+	22.0	13.4	8.6	77.2	0.1	0.8	100.0	1,667
Residence								
Urban	54.2	28.5	25.6	44.8	0.5	0.5	100.0	1,795
Rural	23.8	14.0	9.8	75.1	0.3	0.7	100.0	4,424
Region								
North Central	45.4	27.0	18.4	54.6	0.0	0.0	100.0	897
North East	17.1	14.5	2.6	82.2	0.0	0.6	100.0	1,472
North West	10.4	8.8	1.6	88.6	0.0	1.0	100.0	2,161
South East	84.1	19.9	64.1	13.2	0.3	2.5	100.0	371
South South	53.2	29.5	23.7	45.0	1.6	0.3	100.0	789
South West	77.6	33.7	43.9	20.8	1.5	0.1	100.0	529
Mother's education								
No education	10.3	7.1	3.2	88.8	0.2	0.6	100.0	3,224
Primary	40.5	22.7	17.9	58.0	0.4	1.1	100.0	1,465
Secondary	69.2	35.4	33.7	30.0	0.5	0.4	100.0	1,316
Higher	88.1	48.6	39.5	10.5	1.2	0.2	100.0	215
Antenatal care visits²								
None	3.7	2.7	1.0	95.6	0.6	0.1	100.0	1,444
1-3	27.8	16.1	11.7	72.2	0.0	0.0	100.0	532
4+	59.2	33.0	26.2	40.2	0.5	0.1	100.0	1,855
Don't know/missing	57.7	20.3	37.4	35.2	0.0	7.1	100.0	81
Wealth quintile								
Lowest	11.5	7.5	4.0	87.1	0.5	0.9	100.0	1,394
Second	16.1	10.5	5.6	82.8	0.0	1.1	100.0	1,379
Middle	24.9	15.6	9.3	74.5	0.4	0.2	100.0	1,255
Fourth	43.8	28.1	15.7	55.2	0.1	0.9	100.0	1,157
Highest	79.7	34.9	44.8	19.2	0.8	0.2	100.0	1,033
Total	32.6	18.2	14.4	66.4	0.4	0.7	100.0	6,219

¹ Sum of percentage delivered at a public sector facility and percentage delivered at a private sector facility

² Includes only the most recent birth in the five years preceding the survey

Two-thirds of births in Nigeria are delivered at home; this means the majority of births occur without quality delivery services. Only one-third of deliveries occur in a health facility: 18 percent in the public sector and 14 percent in the private sector.

Urban women are more than twice as likely as rural women to deliver in a health facility. There are significant regional differentials in place of delivery. Births in health facilities range from a low of 10 percent in the North West to a high of 84 percent in the South East. Educational attainment, number of antenatal care visits, and household economic status are all positively correlated with the likelihood of delivering in a facility. However, birth order is positively correlated with the likelihood of delivering at home.

9.2.1 Assistance during Delivery

The level of assistance received by a woman during delivery can reduce maternal and child deaths and related complications, which is one of the goals of the global Safe Motherhood Initiative. Maternal complications may arise during puerperium as a result of trauma sustained during labour, disorders of the circulatory system, or psychological disorders. The presence of a trained assistant during delivery, therefore, becomes imperative. Table 9.6 shows the percent distribution of live births by assistance provided during delivery, according to background characteristics.

Slightly more than one-third of births in Nigeria are attended by doctors, nurses, or midwives. One-fifth of births receive the assistance of a traditional birth attendant. One in every four births is assisted by a relative or some other untrained person, while 17 percent are unassisted. Differentials in delivery assistance are similar to those described previously in this chapter.

Table 9.6 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, according to background characteristics, Nigeria 2003

Background characteristic	Person providing assistance during delivery							Total	Number of births
	Doctor	Nurse/ midwife/ auxiliary midwife	Community health extension worker	Traditional birth attendant	Relative/ other	No one	Don't know/ missing		
Mother's age at birth									
<20	5.1	19.1	1.9	25.3	33.6	13.9	1.1	100.0	1,121
20-34	7.1	30.7	0.9	19.3	24.0	17.3	0.7	100.0	4,206
35-49	5.7	30.6	1.0	19.4	23.1	19.1	1.2	100.0	892
Birth order									
1	10.7	34.4	1.9	18.8	25.8	7.5	0.9	100.0	1,278
2-3	7.1	30.2	0.6	20.8	26.2	14.3	0.8	100.0	1,908
4-5	6.0	29.3	0.7	18.9	25.7	18.9	0.6	100.0	1,365
6+	3.2	21.7	1.3	22.3	24.8	25.6	1.1	100.0	1,667
Residence									
Urban	14.1	44.4	0.3	11.6	17.9	10.6	1.0	100.0	1,795
Rural	3.5	22.2	1.4	23.9	28.7	19.4	0.8	100.0	4,424
Region									
North Central	9.6	39.0	1.5	6.1	34.7	9.0	0.1	100.0	897
North East	2.4	17.4	2.2	25.4	31.7	19.8	1.0	100.0	1,472
North West	0.8	11.5	0.7	24.3	31.0	30.5	1.2	100.0	2,161
South East	20.2	67.3	0.2	3.0	6.2	0.4	2.8	100.0	371
South South	8.6	47.0	0.2	32.2	9.8	1.8	0.3	100.0	789
South West	23.9	57.0	0.7	9.0	8.4	0.9	0.1	100.0	529
Mother's education									
No education	2.0	10.7	1.2	26.3	32.1	26.8	1.0	100.0	3,224
Primary	5.3	38.6	1.1	19.6	24.3	10.2	0.9	100.0	1,465
Secondary	13.8	57.9	0.9	9.8	13.9	2.9	0.7	100.0	1,316
Higher	38.9	50.0	0.0	2.2	8.3	0.4	0.2	100.0	215
Wealth quintile									
Lowest	1.8	9.8	1.4	31.6	34.3	20.3	0.8	100.0	1,394
Second	1.5	16.2	1.3	25.4	31.1	23.3	1.2	100.0	1,379
Middle	3.8	22.5	1.3	21.7	29.5	20.6	0.6	100.0	1,255
Fourth	6.6	43.6	1.0	13.8	20.5	13.2	1.5	100.0	1,157
Highest	23.1	61.2	0.2	4.3	7.5	3.5	0.2	100.0	1,033
Total	6.6	28.6	1.1	20.4	25.6	16.9	0.9	100.0	6,219

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

9.2.2 Delivery Characteristics

Caesarean section (C-section) may be performed as a result of adverse conditions developing during labour as well as a decision reached before labour. In both cases, it tends to reduce the risks of delivery for mother and child. Table 9.7 shows that C-sections are rare in Nigeria: less than 2 percent of births are delivered by this procedure. Women with higher education are the most likely to have had a C-section; among these women, 14 percent of births are delivered by C-section. Caesarean section occurs more frequently in the South East (9 percent of births) than in other regions.

Table 9.7 Delivery characteristics

Percentage of live births in the five years preceding the survey delivered by caesarian section, and percent distribution by birth weight and by mother's estimate of baby's size at birth, according to background characteristics, Nigeria 2003

Background characteristic	Delivery by caesarian section	Birth weight					Size of child at birth					Number of births
		Not weighed	Less than 2.5 kg	2.5 kg or more	Don't know/missing	Total	Very small	Smaller than average	Average or larger	Don't know/missing	Total	
Mother's age at birth												
<20	1.3	84.2	0.4	5.2	10.3	100.0	8.3	8.2	81.8	1.7	100.0	1,121
20-34	1.8	70.1	1.5	13.8	14.6	100.0	6.2	8.5	84.2	1.1	100.0	4,206
35-49	1.9	70.2	1.5	11.9	16.4	100.0	5.1	6.3	86.9	1.7	100.0	892
Birth order												
1	3.6	68.1	1.6	15.1	15.2	100.0	6.9	8.3	83.3	1.4	100.0	1,278
2-3	1.3	70.1	1.2	14.9	13.8	100.0	5.7	7.7	85.3	1.3	100.0	1,908
4-5	1.6	72.9	1.0	11.9	14.2	100.0	6.2	8.4	84.3	1.1	100.0	1,365
6+	0.8	79.0	1.4	6.3	13.4	100.0	7.0	8.2	83.5	1.3	100.0	1,667
Residence												
Urban	3.5	50.3	2.5	26.6	20.5	100.0	5.0	6.8	87.2	1.0	100.0	1,795
Rural	1.0	81.8	0.8	6.0	11.5	100.0	7.0	8.6	82.9	1.4	100.0	4,424
Region												
North Central	0.9	63.7	2.2	7.9	26.2	100.0	6.4	9.9	83.5	0.2	100.0	897
North East	1.1	87.2	0.4	4.2	8.2	100.0	8.7	10.1	78.7	2.5	100.0	1,472
North West	0.5	90.3	0.3	2.6	6.8	100.0	6.8	6.0	86.2	1.0	100.0	2,161
South East	8.6	30.9	5.6	47.9	15.6	100.0	3.6	10.3	82.5	3.6	100.0	371
South South	2.5	55.1	1.4	23.8	19.7	100.0	5.2	6.9	87.4	0.5	100.0	789
South West	3.9	31.2	2.8	35.8	30.2	100.0	2.3	8.3	88.5	0.9	100.0	529
Mother's education												
No education	0.4	90.7	0.4	1.7	7.2	100.0	8.3	8.9	81.0	1.7	100.0	3,224
Primary	1.3	67.7	1.3	9.9	21.1	100.0	4.9	7.5	86.5	1.0	100.0	1,465
Secondary	3.4	43.3	3.2	30.2	23.2	100.0	3.9	7.4	88.0	0.7	100.0	1,316
Higher	13.9	15.9	3.2	68.3	12.7	100.0	4.0	3.9	91.6	0.5	100.0	215
Wealth quintile												
Lowest	0.5	91.4	0.1	1.9	6.6	100.0	9.3	10.5	78.2	2.0	100.0	1,394
Second	0.7	88.7	0.2	2.1	8.9	100.0	7.5	8.4	82.6	1.5	100.0	1,379
Middle	1.0	80.5	1.1	5.6	12.9	100.0	5.6	6.8	86.4	1.2	100.0	1,255
Fourth	1.6	63.0	1.5	12.3	23.2	100.0	5.2	6.4	87.2	1.2	100.0	1,157
Highest	5.8	27.5	4.2	46.1	22.2	100.0	3.4	8.0	88.2	0.4	100.0	1,033
Total	1.7	72.7	1.3	12.0	14.1	100.0	6.4	8.1	84.2	1.3	100.0	6,219

Birth weight is a major determinant of infant and child health and mortality. Birth weight of less than 2.5 kilograms is considered low. For all births during the five-year period preceding the survey, mothers were asked about their perception of the child's size at birth. They were then asked to report the actual weight in kilograms if the child had been weighed after delivery. It is not surprising that with the majority of deliveries occurring at home, the vast majority of newborns were not weighed at birth (73 percent). Birth weight was reported for one in seven births in the preceding five years. The same proportion of mothers said that their newborns were weighed but they did not remember the weight. Among births for which the birth weight was known, one in ten was classified as low birth weight (i.e., the infant weighed less than 2.5 kg at birth).

The percentage of children not weighed varies by background characteristics. Weighing at birth is less prevalent among teenage mothers, higher parity births, births in rural areas, and those in the North East and North West. The likelihood of being weighed at birth is also low among mothers with no education and those living in households in the lowest wealth quintile.

According to mothers' estimates of their newborns' size, more than eight in ten (84 percent) were of average or larger size. However, almost one in six births was reported as either very small or smaller than average.

9.3 POSTNATAL CARE

Postnatal care is important both for the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. The postnatal period is defined as the time between the delivery of the placenta and 42 days (6 weeks) following the delivery. The timing of postnatal care is important. The first two days after delivery are critical, since most maternal and neonatal deaths occur during this period. Table 9.8 measures postnatal care for births that occurred outside a health facility in the five years preceding the survey. If a woman had more than one live birth outside a health facility, only the most recent birth is considered.

In Nigeria, less than one-fourth of women who gave birth outside a health facility receive postnatal care within two days of birth (23 percent). An additional 3 percent have a checkup within the first week after birth. However, more than seven out of ten women who deliver outside a health facility receive no postnatal care. There are significant differentials by residence, region, education, and economic index.

Table 9.8 Postnatal care by background characteristics

Percent distribution of women whose last live birth in the five years preceding the survey occurred outside a health facility, by timing of postnatal care, according to background characteristics, Nigeria 2003

Background characteristic	Timing of first postnatal checkup				Did not receive postnatal checkup ¹	Total	Number of women
	Within 2 days of delivery	3-6 days after delivery	7-41 days after delivery	Don't know/missing			
Age at birth							
<20	23.9	2.1	2.7	0.3	71.0	100.0	546
20-34	23.9	2.9	2.2	0.6	70.5	100.0	1,570
35-49	20.1	1.6	3.4	0.7	74.2	100.0	449
Birth order							
1	25.0	2.0	2.5	0.4	70.1	100.0	454
2-3	23.6	3.1	3.0	0.5	69.8	100.0	691
4-5	25.1	2.0	2.5	0.5	69.8	100.0	561
6+	20.7	2.5	2.1	0.7	74.0	100.0	860
Residence							
Urban	31.3	4.4	3.5	0.4	60.4	100.0	498
Rural	21.3	2.0	2.2	0.6	73.9	100.0	2,068
Region							
North Central	13.8	1.7	4.3	0.2	80.1	100.0	303
North East	31.5	1.7	1.9	0.8	64.0	100.0	701
North West	18.6	1.5	1.3	0.5	78.1	100.0	1,194
South East	17.2	2.3	3.1	1.4	76.0	100.0	37
South South	32.9	7.7	3.4	0.7	55.4	100.0	251
South West	26.9	10.7	15.0	0.0	47.4	100.0	81
Education							
No education	21.0	1.5	2.0	0.6	74.9	100.0	1,766
Primary	25.5	4.2	3.1	0.4	66.8	100.0	519
Secondary	32.7	5.6	3.0	0.6	58.1	100.0	265
Higher	*	*	*	*	*	*	15
Wealth quintile							
Lowest	18.9	1.0	1.7	0.6	77.8	100.0	740
Second	19.0	2.1	1.5	1.3	76.1	100.0	692
Middle	24.9	3.1	2.4	0.0	69.7	100.0	589
Fourth	29.8	3.7	3.7	0.0	62.8	100.0	412
Highest	41.5	6.6	8.8	0.4	42.7	100.0	133
Total	23.2	2.5	2.5	0.6	71.3	100.0	2,566

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

¹ Includes women who received the first postnatal checkup after 41 days

9.4 REPRODUCTIVE HEALTH CARE BY WOMEN'S STATUS

Table 9.9 shows women's use of antenatal, delivery, and postnatal care services by three indicators of women's status (empowerment) defined in Chapter 3. In societies where health care is widespread, women's status and age may not affect their access to reproductive health services; in other societies, however, increased empowerment of women is likely to be associated with increased ability to seek out and use health services to better meet their reproductive health needs, including the need for safe motherhood.

Table 9.9 Reproductive health care by women's status

Percentage of women with a live birth in the five years preceding the survey who received antenatal and postnatal care from a health professional for the most recent birth, and percentage of births in the five years preceding the survey for which mothers received professional delivery care, by women's status indicators, Nigeria 2003

Women's status indicator	Percentage of women who received antenatal care from a doctor, nurse/midwife, or auxiliary midwife	Percentage of women who received postnatal care within first two days of delivery ¹	Number of women	Percentage of births for which mothers received delivery care from a doctor, nurse/midwife, or auxiliary midwife	Number of births
Number of decisions in which woman has final say²					
0	50.2	35.4	1,616	24.0	2,585
1-2	60.4	54.8	1,328	34.7	2,152
3-4	77.4	66.3	478	59.1	756
5	75.5	66.3	489	60.6	726
Number of reasons to refuse sex with husband					
0	53.3	44.6	359	33.7	557
1-2	54.3	45.0	1,037	27.3	1,677
3-4	63.5	52.2	2,515	40.3	3,985
Number of reasons wife beating is justified					
0	72.3	61.5	1,188	54.1	1,821
1-2	63.3	49.5	836	36.2	1,327
3-4	57.0	48.1	667	31.5	1,095
5-6	47.7	38.9	1,220	22.4	1,977
Total	60.1	49.6	3,911	36.2	6,219

¹ Includes mothers who delivered in a health facility

² Either by herself or jointly with others

The first women's status indicator in Table 9.9 is positively related to women's empowerment and reflects the degree of decisionmaking control women are able to exercise in areas that affect their lives and environments. The second indicator reflects women's perception of sexual roles and women's rights over their bodies, and relates positively to women's sense of self and empowerment. The final indicator, which reflects women's perception of gender roles, is negatively related to women's level of empowerment. A higher value for this indicator (the number of reasons a woman believes wife beating is justified) is interpreted as indicating lower empowerment.

Table 9.9 shows that decisionmaking ability and perceptions regarding the justification of wife beating are strongly correlated with reproductive health care. The more empowered a woman, the more likely she is to receive reproductive health services. The pattern is less clear regarding the relationship between reproductive health care and reasons to refuse sex with the husband, although women who agree with at least three specified reasons are more likely to receive services than women agreeing with fewer reasons.

9.5 VACCINATION OF CHILDREN

Vaccination of children is an important part of current preventive measures designed to improve child health and reduce morbidity and mortality. According to the World Health Organization (WHO), to be considered fully vaccinated, a child should receive a dose of BCG vaccine against tuberculosis at birth or soon after; three doses of DPT for the prevention of diphtheria, pertussis (whooping cough), and tetanus; at least three doses of polio vaccine; and a vaccination against measles. The DPT and polio vaccinations should be given at approximately 4, 8, and 12 weeks of age; there is also a dose of polio vaccine that should be given at birth. Measles vaccine should be given at or soon after the child reaches nine months. WHO further recommends that children receive the complete schedule of vaccinations before 12 months of age and that the vaccinations be recorded on a health card given to the parents or caretaker.

Information on vaccination status was collected from vaccination cards shown to the interviewer and from mothers' verbal reports if no card was available. If the cards were available, the interviewers copied vaccination dates directly onto the questionnaire. If a vaccination card was presented but a vaccine had not been recorded on the card as having been given, the mother was asked to recall whether that particular vaccine had been given. The mother was then asked whether the child had received other vaccinations that were not recorded on the card, and if so, they too were noted on the questionnaire. If the mother was not able to provide a card for the child, she was asked to recall whether the child had received BCG, polio, DPT (including the number of doses for each), and measles vaccinations. The information collected covered all children under age five, although most data presented here are restricted to children age 12-23 months to better reflect children who have reached the age by which they should be fully vaccinated.

Information on vaccination coverage among children age 12-23 months is shown in Table 9.10 by source of information used to determine coverage (i.e., vaccination record or mother's report). Health cards were presented for just one-fifth (21 percent) of children age 12-23 months. The third row of the table shows the proportion of children who were immunized at any age up to the time of the survey, while the last row shows the proportion who were vaccinated by age 12 months, the age at which vaccination coverage should be complete.

Table 9.10 Vaccinations by source of information												
Percentage of children 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Nigeria 2003												
Source of information	Percentage of children who received:											Number of children
	BCG	DPT			Polio ¹				Measles	All ²	No vaccinations	
		1	2	3	0	1	2	3				
Vaccinated at any time before the survey												
Vaccination card	20.2	18.0	14.0	10.4	14.6	17.8	14.4	10.7	13.5	8.3	0.1	213
Mother's report	28.1	24.6	17.7	11.0	13.1	49.4	37.9	18.7	22.4	4.7	26.5	786
Either source	48.3	42.6	31.7	21.4	27.8	67.2	52.3	29.4	35.9	12.9	26.5	999
Vaccinated by 12 months of age ³	46.9	38.7	30.1	20.1	27.1	63.7	50.6	26.8	31.4	11.3	30.6	999

¹ Polio 0 is the polio vaccination given at birth.
² BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
³ For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

According to information from both the vaccination records and mothers' recall, only 13 percent of Nigerian children age 12-23 months can be considered fully immunized, the lowest vaccination rate among the African countries in which DHS surveys have been conducted since 1998. Less than half of children have received each of the vaccinations, with the exception of Polio 1 (67 percent) and Polio 2 (52 percent). Although 43 percent of children receive DPT 1, the proportion who go on to receive the third dose falls off to 21 percent; the dropout rate¹ is thus 50 percent, slightly lower than the dropout rate of 56 percent for polio.

WHO recommends that children receive the complete schedule of recommended vaccinations by 12 months of age. In Nigeria, however, only 11 percent of children age 12-23 months received all of the recommended vaccinations before their first birthday.

9.5.1 Vaccination by Background Characteristics

Table 9.11 presents vaccination coverage levels among children age 12-23 months by background characteristics, to provide an indication of the success of the vaccination programme in reaching all sub-groups of the population.

The data show that the percentage of female children age 12-23 months who are fully immunized is almost twice that of their male counterparts (17 versus 9 percent). There are variations in percentage of children who received specific vaccinations by urban-rural residence, region, level of education, and wealth quintile. More than three times as many urban children as rural children are fully immunized (7 and 25 percent, respectively). In general, a higher proportion of children in the southern regions were vaccinated compared with those in the north. In the northern regions, vaccination coverage ranges from 4 to 12 percent, whereas in the southern regions the lowest vaccination rate is 21 percent and the highest in 45 percent. The differentials by wealth quintile are almost as large. While less than 4 percent of children living in households in the two lowest quintiles are fully vaccinated, 40 percent of children in households in the highest quintile have received all recommended vaccinations.

¹ Dropout rate = (Dose 1 – Dose 3) * 100/Dose 1

Table 9.11 Vaccinations by background characteristics

Percentage of children 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Nigeria 2003

Background characteristic	Percentage of children who received:											Percentage with a vaccination card	Number of children
	BCG	DPT			Polio ¹				Measles	All ²	No vaccinations		
		1	2	3	0	1	2	3					
Sex													
Male	46.5	41.4	30.4	19.1	28.2	65.8	50.8	26.5	33.8	9.1	27.7	20.2	512
Female	50.2	44.0	33.1	23.8	27.3	68.6	53.9	32.5	38.1	17.0	25.3	22.5	486
Birth order													
1	59.6	51.5	39.8	29.0	37.3	68.7	54.4	32.1	43.5	17.8	19.2	33.1	188
2-3	48.0	44.5	32.5	22.3	27.0	66.0	53.8	29.2	33.8	13.4	29.8	20.6	332
4-5	52.8	42.7	34.9	24.1	30.2	71.3	54.6	32.1	39.3	14.4	22.7	21.7	220
6+	36.8	33.8	22.3	12.3	19.8	64.2	46.8	25.7	30.2	7.6	30.8	13.2	259
Residence													
Urban	70.1	63.5	51.3	40.2	40.2	75.3	64.4	42.0	52.1	25.1	16.7	35.6	312
Rural	38.4	33.1	22.9	12.8	22.1	63.5	46.8	23.7	28.5	7.4	31.0	14.8	687
Region													
North Central	63.4	54.1	33.0	23.8	36.2	70.0	52.6	36.8	44.6	12.4	20.7	22.9	149
North East	31.1	23.8	14.0	9.1	18.7	61.6	41.7	24.8	22.5	6.0	30.5	17.1	219
North West	27.5	20.9	13.2	5.8	12.0	54.4	39.9	16.4	15.6	3.7	40.5	9.6	356
South East	83.4	83.2	66.3	58.5	39.6	80.7	68.1	57.4	64.1	44.6	15.3	43.1	74
South South	76.1	74.3	63.3	32.5	47.8	86.0	77.2	40.0	66.9	20.8	6.5	37.9	120
South West	85.0	83.7	80.2	67.8	65.4	93.0	83.1	44.8	73.1	32.5	5.1	36.4	81
Mother's education													
No education	22.7	19.4	9.8	5.6	12.8	54.7	38.9	18.7	15.6	3.8	41.1	7.3	484
Primary	57.7	48.5	37.6	20.5	26.7	77.7	58.5	34.2	42.5	13.0	18.6	26.1	247
Secondary	84.1	77.8	68.4	54.0	52.5	80.4	70.9	46.8	66.2	32.4	8.4	41.5	230
Higher	(97.0)	(88.4)	(52.1)	(29.4)	(76.1)	(78.1)	(69.9)	(30.8)	(68.1)	(11.3)	(2.4)	(46.2)	38
Wealth quintile													
Lowest	22.8	21.9	15.3	7.1	12.6	61.5	43.9	20.0	15.9	3.4	36.1	11.5	206
Second	30.2	27.1	17.5	7.7	16.6	61.6	41.3	23.6	22.9	3.9	34.8	13.3	202
Middle	42.8	33.8	20.8	13.3	19.0	61.0	47.0	25.1	32.0	8.9	31.8	16.1	219
Fourth	59.6	48.5	35.3	22.2	37.0	67.3	57.2	26.3	41.9	11.0	22.9	25.9	185
Highest	91.4	86.9	74.6	60.6	57.7	86.7	74.7	54.4	70.7	39.9	4.3	42.3	187
Total	48.3	42.6	31.7	21.4	27.8	67.2	52.3	29.4	35.9	12.9	26.5	21.3	999

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

9.5.2 Vaccination in the First Year of Life

Table 9.12 shows the percentage of children age 12-59 months who received specific vaccinations during the first year of life, according to age cohort. There has been little change in vaccination coverage over time. However, the data indicate that the children age 24-35 months at the time of the survey were the most likely of all the cohorts to have received at least one vaccination by 12 months of age. For example, whereas 24 percent of these children received no vaccination during the first year of life, 31 percent of the youngest children age 12-23 months at the time of the survey received no vaccinations, indicating a slight decrease in vaccination rates. In particular, the data indicate a decline in vaccination rates for all three doses of polio.

Table 9.12 Vaccinations in first year of life

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Nigeria 2003

Current age in months	Percentage of children who received:										No vaccinations	Percentage with a vaccination card	Number of children
	BCG	DPT			Polio ¹				Measles	All ²			
		1	2	3	0	1	2	3					
12-23	46.9	38.7	30.1	20.1	27.1	63.7	50.6	26.8	31.4	11.3	30.6	21.3	999
24-35	51.4	41.8	31.5	22.9	23.4	70.8	58.5	34.8	28.6	10.3	23.9	17.2	1,050
36-47	40.5	32.8	27.1	19.8	16.3	61.4	55.8	36.2	26.6	10.3	35.8	10.1	1,067
48-59	41.4	36.3	29.0	18.1	18.2	65.8	60.1	34.6	32.0	8.7	30.0	8.5	899
12-59	46.0	38.0	30.0	20.8	21.4	66.2	56.9	33.5	30.4	10.6	29.3	14.4	4,014

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

¹ Polio 0 is the polio vaccination given at birth.

² BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

9.6 ACUTE RESPIRATORY INFECTION AND FEVER

Acute respiratory infection (ARI) is a common cause of illness and death during infancy and childhood. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2003 NDHS, the prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are consistent with ARI. It should be noted that the morbidity data collected are subjective in the sense that they are based on a mother's perception of illness without validation by medical personnel.

Table 9.13 shows that in the two weeks preceding the survey, 10 percent of children experienced symptoms of ARI and 31 percent had a fever. Prevalence peaks at age 6-11 months and then declines among older children. Children of more educated mothers and those living in more economically advantaged households are the least likely to experience these illnesses. There is significant regional variation in prevalence of fever and ARI symptoms.

Among children who experienced symptoms of ARI or fever, treatment was sought from a health facility or health care provider for almost one-third (31 percent). The likelihood of seeking treatment increases as the education of the mother and the economic index of the household increases. The proportion of children ill with fever and/or who had symptoms of ARI for whom treatment was sought ranges from a low of 20 percent in the North East to a high of 53 percent in the South West.

Table 9.13 Prevalence and treatment of symptoms of ARI and fever

Percentage of children under five years of age who had a cough accompanied by short, rapid breathing (symptoms of ARI), and percentage of children who had fever in the two weeks preceding the survey, and percentage of children with symptoms of ARI and/or fever for whom treatment was sought from a health facility or provider, by background characteristics, Nigeria 2003

Background characteristic	Percentage of children with symptoms of ARI	Percentage of children with fever	Number of children	Among children with symptoms of ARI and/or fever, percentage for whom treatment was sought from a health facility/provider ¹	Number of children
Age in months					
<6	12.6	24.3	663	24.4	196
6-11	16.3	41.2	668	34.3	303
12-23	11.8	39.5	999	34.8	429
24-35	9.9	33.4	1,050	35.8	376
36-47	7.8	26.4	1,067	29.7	316
48-59	5.9	21.7	899	21.4	210
Sex					
Male	10.5	31.0	2,717	32.1	935
Female	10.1	31.1	2,628	30.6	896
Residence					
Urban	7.8	27.0	1,620	40.0	484
Rural	11.4	32.8	3,726	28.3	1,347
Region					
North Central	6.7	23.9	781	49.5	201
North East	16.2	37.4	1,225	19.5	514
North West	8.8	35.7	1,818	33.4	682
South East	6.3	22.9	347	36.6	89
South South	12.2	29.5	684	25.1	243
South West	6.8	17.2	489	52.6	102
Mother's education					
No education	11.0	35.7	2,675	22.0	1,022
Primary	11.3	28.3	1,259	39.5	409
Secondary	8.4	24.2	1,215	46.4	343
Higher	5.4	27.6	197	51.7	57
Wealth quintile					
Lowest	11.0	32.8	1,162	18.9	419
Second	12.4	35.0	1,116	21.5	432
Middle	12.1	34.0	1,071	30.1	391
Fourth	9.2	30.5	1,024	44.5	348
Highest	6.2	21.7	972	54.2	240
Total	10.3	31.0	5,345	31.4	1,831

ARI = Acute respiratory infection

¹ Excludes pharmacy, shop, and traditional practitioner

9.7 HOUSEHOLD HYGIENE

9.7.1 Presence of Materials for Washing Hands

The connection between hand-washing and diarrhoea is well established. Increasing the frequency of hand-washing substantially decreases the occurrence of diarrhoea in young children. The proximity of the materials necessary for washing hands, such as running water, soap or cleanser, and a basin, may lead to more frequent hand-washing. Table 9.14 shows that less than half of households in the country have access to the three specified materials to wash hands (43 percent). The presence of these materials is higher in urban than rural areas (50 versus 40 percent). Prevalence by region ranges from a high of seven in ten households in the South South and South East to a low of three in ten households in the North West. It should be noted that a quarter of households do not have any hand-washing materials.

Table 9.14 Hand-washing materials in the household

Percentage of households with hand-washing materials in dwelling, yard, or plot, by background characteristics, Nigeria 2003

Background characteristic	Hand-washing materials			All three hand-washing materials	No hand-washing materials	Number of households
	Water/tap	Soap, ash, or other cleansing agent	Basin			
Residence						
Urban	64.3	66.7	66.1	49.8	22.0	2,598
Rural	63.4	55.0	53.5	39.8	27.3	4,627
Region						
North Central	55.3	51.4	56.2	36.8	32.6	1,040
North East	73.3	50.2	50.1	35.3	19.6	1,185
North West	56.9	55.4	36.3	29.0	31.0	1,911
South East	72.3	77.8	87.0	67.5	12.5	690
South South	76.8	81.2	88.8	68.6	9.6	1,315
South West	52.4	44.6	50.9	38.0	42.2	1,083
Source of drinking water						
Piped	67.6	65.8	61.9	50.0	22.5	1,249
Protected well	68.2	71.1	71.0	56.1	18.8	1,737
Open well	60.4	47.4	40.3	30.8	32.8	2,058
Surface	58.6	52.9	60.0	38.0	27.9	1,597
Other	68.0	68.7	68.0	50.3	18.2	579
Time to get water						
In dwelling/yard/plot	69.1	65.3	62.2	51.5	23.1	2,046
<5 minutes	63.1	64.8	55.0	38.8	21.6	319
5 to 9 minutes	64.9	62.8	63.7	47.0	22.8	866
10 to 29 minutes	59.3	54.1	53.5	38.1	29.5	1,780
30 to 59 minutes	58.9	51.3	50.9	35.7	29.3	1,142
60+ minutes	65.6	59.6	61.6	43.3	21.7	1,011
Total	63.8	59.2	58.0	43.4	25.4	7,225

Note: Total includes 5 cases with data missing on source of water and 60 cases with data missing on time to get water.

9.7.2 Disposal of Children's Stools

The proper disposal of children's faeces is extremely important in preventing the spread of disease. If faeces are left uncontained, disease may be spread by direct contact or through animal contact. Table 9.15 presents information on the disposal of faecal matter of children under age five, by background characteristics. Two-thirds of children's stools are usually contained. Children's stools are more likely to be contained in urban than rural areas (83 and 61 percent, respectively). There is a positive relationship between mothers' education and children's stool containment.

Table 9.15 Disposal of child's stools

Percent distribution of mothers whose youngest child under five years is living with her by way in which child's faecal matter is disposed of, according to background characteristics and type of toilet facilities in household, Nigeria 2003

Background characteristic	Stools contained			Stools uncontained			Uses diapers			Total	Number of mothers	
	Child always uses toilet/latrine	Thrown into toilet/latrine	Buried in yard	Thrown outside dwelling	Thrown outside yard	Rinsed away	Disposable	Washable	Other			
Residence												
Urban	9.2	72.3	1.1	4.0	5.3	3.2	1.1	1.4	0.5	1.8	100.0	1,068
Rural	5.2	52.5	3.5	15.4	16.8	2.6	0.4	1.5	0.4	1.8	100.0	2,532
Region												
North Central	7.8	37.0	1.5	19.1	22.5	2.9	1.7	6.8	0.5	0.3	100.0	531
North East	3.4	69.2	0.9	8.2	15.2	1.2	0.5	0.5	0.1	0.8	100.0	793
North West	4.1	69.5	3.5	9.1	8.6	1.2	0.0	0.0	0.2	3.8	100.0	1,251
South East	15.3	54.7	1.0	10.6	7.3	6.3	1.4	1.1	0.8	1.4	100.0	209
South South	6.7	40.6	7.9	22.3	10.6	6.5	0.8	1.9	1.6	1.0	100.0	473
South West	13.9	52.5	0.3	7.4	20.3	4.4	0.3	0.3	0.0	0.6	100.0	343
Mother's education												
No education	4.6	59.7	3.3	12.6	14.8	1.7	0.0	0.8	0.3	2.3	100.0	1,833
Primary	4.8	52.5	2.7	16.1	18.4	2.9	0.1	2.0	0.4	0.1	100.0	836
Secondary	10.2	61.4	2.2	8.0	7.0	5.1	1.4	1.6	0.9	2.1	100.0	798
Higher	18.8	59.2	0.0	2.3	1.9	2.2	5.8	5.9	0.0	3.9	100.0	134
Toilet facilities												
None	2.5	9.3	5.3	33.5	41.2	3.5	0.4	1.9	0.5	1.9	100.0	828
Pit latrine	6.0	76.2	2.0	5.2	5.8	1.4	0.2	1.3	0.2	1.7	100.0	2,238
Improved pit latrine	2.9	72.1	1.1	6.8	2.0	8.4	1.6	0.0	5.0	0.0	100.0	87
Flush toilet	18.7	62.6	0.9	4.2	0.8	6.1	2.7	1.7	0.5	1.8	100.0	398
Other	(0.0)	(12.5)	(14.3)	(34.3)	(14.1)	(17.8)	(0.0)	(0.0)	(1.4)	(5.5)	(100.0)	48
Total	6.4	58.4	2.8	12.0	13.4	2.8	0.6	1.4	0.4	1.8	100.0	3,601

Note: Figures in parentheses are based on 25-49 unweighted cases. Total includes one case with data missing on toilet facilities.

9.8 DIARRHOEA

Dehydration from diarrhoea is a major cause of death among young children in Nigeria. In the 2003 NDHS, mothers were asked whether any of their children under five years of age had diarrhoea at any time during the two-week period prior to the survey. If any child had diarrhoea, the mother was asked about feeding practices during the diarrhoeal episode and about what actions were taken to treat the diarrhoea. Table 9.16 shows percentage of children less than five years with diarrhoea in the preceding two weeks before the survey, by background characteristics. Nearly one-fifth of children had diarrhoea in the two weeks preceding the survey.

Table 9.16 Prevalence of diarrhoea

Percentage of children under five years with diarrhoea in the two weeks preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Diarrhoea in the two weeks preceding the survey	Number of children
Age in months		
<6	12.8	663
6-11	26.6	668
12-23	27.2	999
24-35	22.8	1,050
36-47	14.4	1,067
48-59	8.8	899
Sex		
Male	19.3	2,717
Female	18.3	2,628
Residence		
Urban	14.5	1,620
Rural	20.7	3,726
Region		
North Central	14.9	781
North East	35.1	1,225
North West	18.9	1,818
South East	8.6	347
South South	8.0	684
South West	6.4	489
Mother's education		
No education	24.0	2,675
Primary	17.2	1,259
Secondary	11.2	1,215
Higher	6.4	197
Hand-washing materials in household		
Water/tap	19.8	3,478
Soap/ash/other cleansing agent	18.2	3,157
Basin	16.3	2,951
All three hand-washing materials	15.9	2,193
None	16.9	1,288
Source of drinking water		
Piped	17.3	801
Protected well	12.6	1,107
Open well	23.9	1,921
Surface	17.2	1,112
Other	19.2	402
Wealth quintile		
Lowest	21.7	1,162
Second	23.6	1,116
Middle	19.6	1,071
Fourth	18.9	1,024
Highest	9.0	972
Total	18.8	5,345

Note: Total includes 2 cases with data missing on source of drinking water.

Children age 6-11 and 12-23 months have the highest prevalence of diarrhoea (27 percent each). Rural children are more likely than urban children to have diarrhoea. The likelihood of children in the North East having diarrhoea is more than five times that of children in the South West (35 versus 6 percent). Incidence of diarrhoea is inversely related to educational attainment. There is little variation by the economic status of the household, with the exception of children in households in the highest wealth quintile, who are the least likely to have had diarrhoea.

9.8.1 Knowledge of ORS Packets

A simple and effective response to dehydration associated with diarrhoea is a prompt increase in the child's fluid intake through food and oral rehydration therapy (ORT). ORT may include the use of a solution prepared from commercially produced packets of oral rehydration salts (ORS) or a homemade mixture usually prepared from sugar, salt, and water. Table 9.17 shows the proportion of women with children under five years of age who know about ORS packets.

Two-thirds of mothers (65 percent) know about ORS packets. There is significant variation by background characteristics. The most striking variation is observed at the regional level: knowledge ranges from a low of 37 percent in the South East to a high of 80 percent in the North West.

9.8.2 Diarrhoea Treatment

Mothers of children who had diarrhoea in the two weeks preceding the survey were asked what was done to manage or treat the illness. The results are shown in Table 9.18. Twenty-two percent of mothers reported their children with diarrhoea were taken to a health facility. Less than one-fifth of children (18 percent) were given a solution made from ORS. Twenty-nine percent, however, received either ORS or recommended home fluids (RHF), which are either cereal-based liquids or a mixture of sugar, salt, and water. Forty percent received ORS, RHF, or increased fluids. Other treatments were also common. In particular, half of all children received a pill or syrup, and 15 percent received some other home treatment. One in five children with diarrhoea were given no treatment at all.

The small number of children in the sample who had diarrhoea in the two weeks before the survey makes comparisons by region or mother's education difficult. There is a significant differential, however, by residence, with urban children more likely than rural children to have gone to a health facility. For example, 30 percent of urban children were taken to a health care facility compared with just 19 percent of rural children. There is generally a positive correlation between treatment of diarrhoea and the economic status of the household.

Table 9.17 Knowledge of ORS packets

Percentage of mothers with births in the five years preceding the survey who know about oral rehydration salts (ORS) packets for treatment of diarrhoea in children, by background characteristics, Nigeria 2003

Background characteristic	Percentage of mothers who know about ORS packets	Number of mothers
Age		
15-19	54.1	356
20-24	62.5	850
25-29	67.1	1,055
30-34	68.7	713
35-49	65.6	936
Residence		
Urban	75.5	1,144
Rural	60.5	2,766
Region		
North Central	57.0	575
North East	67.7	862
North West	79.7	1,341
South East	36.7	222
South South	38.6	544
South West	72.5	367
Education		
No education	65.2	1,989
Primary	60.3	918
Secondary	67.1	862
Higher	76.1	143
Wealth quintile		
Lowest	50.0	852
Second	58.4	846
Middle	70.0	808
Fourth	73.9	735
Highest	75.7	670
Total	64.9	3,911

ORS = Oral rehydration salts

Table 9.18 Diarrhoea treatment

Percentage of children under five years of age who had diarrhoea in the two weeks preceding the survey taken for treatment to a health provider, percentage who received oral rehydration therapy (ORT), and percentage given other treatments, by background characteristics, Nigeria 2003

Background characteristic	Percent-age taken to a health provider ¹	Oral rehydration therapy					Other treatments					Number of children with diarrhoea	
		ORS packets	RHF	Either ORS or RHF	In-creased fluids	ORS, RHF or in-creased fluids	Pill or syrup	Injec-tion	Intra-venous solution	Home remedy/ other	Missing		No treat-ment
Age in months													
<6	20.1	14.4	12.2	22.4	9.5	27.2	35.4	1.1	0.0	21.1	1.1	27.6	85
6-11	27.4	20.6	14.8	31.5	16.5	39.2	45.8	0.4	0.0	11.2	0.0	27.4	178
12-23	18.8	17.2	18.3	28.6	26.8	43.5	47.8	2.4	0.2	13.1	0.5	23.3	272
24-35	27.8	25.0	22.2	38.1	20.2	46.6	64.5	3.7	0.2	10.0	0.5	12.7	239
36-47	10.3	8.6	11.3	17.9	19.8	31.6	48.6	1.0	0.0	20.5	2.3	15.7	153
48-59	21.3	18.9	20.9	31.0	21.1	42.4	48.2	2.0	0.0	21.1	2.3	11.6	79
Sex													
Male	23.9	19.8	16.5	30.1	18.8	40.2	52.9	1.8	0.1	13.9	1.1	19.1	524
Female	18.8	16.5	18.0	28.7	22.2	40.2	48.0	2.2	0.1	15.1	0.7	20.5	482
Residence													
Urban	30.3	22.9	17.1	34.3	25.1	49.0	58.9	4.5	0.0	7.2	0.5	17.5	235
Rural	18.8	16.8	17.2	27.9	19.0	37.5	48.0	1.3	0.1	16.7	1.0	20.5	771
Region													
North Central	39.7	22.3	27.3	47.0	36.0	59.9	46.4	3.6	0.5	20.7	0.0	11.4	116
North East	7.6	13.8	8.9	19.7	13.9	29.0	48.9	0.2	0.0	13.9	0.6	26.3	430
North West	29.8	20.5	20.0	30.5	18.0	41.8	53.1	3.1	0.0	15.2	1.9	16.8	343
South East	(24.9)	(17.4)	(25.3)	(33.7)	(15.3)	(39.4)	(63.8)	(12.1)	(1.6)	(5.0)	(0.0)	(11.4)	30
South South	(26.8)	(27.7)	(29.9)	(49.1)	(31.1)	(56.9)	(43.0)	(0.0)	(0.0)	(7.3)	(0.0)	(19.0)	55
South West	(38.9)	(23.3)	(33.4)	(46.6)	(65.1)	(74.3)	(60.1)	(2.4)	(0.0)	(13.3)	(0.0)	(3.4)	31
Mother's education													
No education	16.6	13.2	15.0	22.5	17.3	33.9	47.1	1.4	0.1	16.8	0.8	22.7	641
Primary	24.7	22.4	18.2	35.0	23.8	45.3	54.3	2.2	0.0	10.9	0.0	17.5	216
Secondary	35.3	31.1	24.4	48.0	25.9	57.7	60.0	3.9	0.4	8.9	2.6	11.7	137
Higher	*	*	*	*	*	*	*	*	*	*	*	*	13
Wealth quintile													
Lowest	10.3	12.6	8.6	17.2	17.9	29.5	45.8	1.4	0.0	15.3	0.7	27.2	252
Second	13.1	14.8	15.7	24.1	15.2	31.2	45.4	0.9	0.0	16.7	0.9	24.4	263
Middle	22.5	18.5	28.0	38.4	22.4	48.1	50.4	2.4	0.2	20.3	0.0	14.5	210
Fourth	39.2	21.1	16.8	33.8	23.2	48.6	59.5	1.2	0.3	4.7	2.5	16.3	194
Highest	36.8	37.7	21.7	49.3	32.6	60.8	60.2	7.9	0.0	13.3	0.0	5.0	87
Total	21.5	18.2	17.2	29.4	20.4	40.2	50.5	2.0	0.1	14.5	0.9	19.8	1,006

Note: Oral rehydration therapy (ORT) includes solution prepared from oral rehydration salts (ORS) packets, recommended home fluids (RHF), or increased fluids. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.

¹ Excludes pharmacy, shop and traditional practitioner

9.8.3 Feeding Practices During Diarrhoea

Mothers are encouraged to continue feeding their children normally when the children suffer from diarrhoea and to increase the amount of fluids children are given. These practices help to reduce the likelihood the child will become dehydrated and also minimize the adverse consequences of diarrhoea on the child's nutritional status.

Table 9.19 presents data on feeding practices when a child has diarrhoea. Just one-fifth of children are given more fluids than usual, as recommended. The most common practice is to give the same amount of fluids as usual (41 percent). However, a significant proportion of children are offered less fluid than usual: 22 percent are offered somewhat less and 16 percent are offered much less.

Regarding intake of foods when children are sick with diarrhoea, 37 percent of children are offered the same amount of food, and 8 percent are offered more food than usual. Almost half of children with diarrhoea are offered somewhat less or much less food than usual, or no food at all.

Table 9.19 Feeding practices during diarrhoea	
Percent distribution of children under five years who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, Nigeria 2003	
Liquid/food offered	Percent
Amount of liquids offered	
Same as usual	40.8
More	20.4
Somewhat less	21.6
Much less	15.5
None	1.1
Don't know/missing	0.6
Total	100.0
Amount of food offered	
Same as usual	36.9
More	8.2
Somewhat less	25.8
Much less	16.1
None	5.2
Never gave food	7.6
Don't know/missing	0.3
Total	100.0
Number of children	1,006

9.9 CHILDREN HEALTH CARE BY WOMEN'S STATUS

Status and self-respect can be major determinants of a mother's ability to obtain adequate health care for her children. Table 9.20 shows utilization of child health care services by the mother's level of empowerment, as measured by the three indicators of women's status defined in Chapter 3.

The data indicate that decisionmaking ability has a generally positive relationship with children's access to health care. The more empowered a woman, the more likely her child is to receive services. Justification of wife-beating exhibits a strong negative correlation with access to child health services. There is no clear pattern, however, in the relationship between child's health care and reasons to refuse sex with husband.

Table 9.20 Child health care by women's status

Percentage of children age 12-23 months fully vaccinated, and percentage of children under five years who were ill with a fever, symptoms of ARI and/or diarrhoea, in the two weeks preceding the survey taken to a health provider for treatment, by women's status indicators, Nigeria 2003

Women's status indicator	Percentage of children 12-23 months fully vaccinated ¹	Number of children	Percentage of children with fever and/or symptoms of ARI taken to a health provider ²	Number of children	Percentage of children with diarrhoea taken to a health provider ²	Number of children
Number of decisions in which woman has final say³						
0	7.9	408	28.9	801	21.8	490
1-2	13.2	362	32.5	630	19.6	357
3-4	24.7	104	35.9	192	22.0	91
5	18.6	125	33.6	206	28.4	68
Number of reasons to refuse sex with husband						
0	10.4	87	34.3	136	29.3	74
1-2	9.8	263	30.4	473	24.2	258
3-4	14.5	649	31.5	1,221	19.5	674
Number of reasons wife beating is justified						
0	23.8	323	42.1	433	30.0	178
1-2	9.8	198	33.5	398	33.2	228
3-4	9.1	181	28.9	324	18.1	184
5-6	5.5	297	24.5	676	12.8	415
Total	12.9	999	31.4	1,831	21.5	1,006

¹ Those who have received BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

² Excludes pharmacy, shops, and traditional practitioner

³ Either by herself or jointly with others

9.10 PERCEIVED PROBLEMS IN ACCESSING HEALTH CARE

The 2003 NDHS included a series of questions aimed at obtaining information on the problems women perceive as barriers to accessing health care for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care in general. To obtain this information, all respondents were asked whether each of the following factors would be a big problem or not for them in obtaining medical advice or treatment when they are sick: knowing where to go, getting permission to go, getting money for treatment, distance to the health facility, availability of transport, not wanting to go alone, and concern that there may not be a female provider.

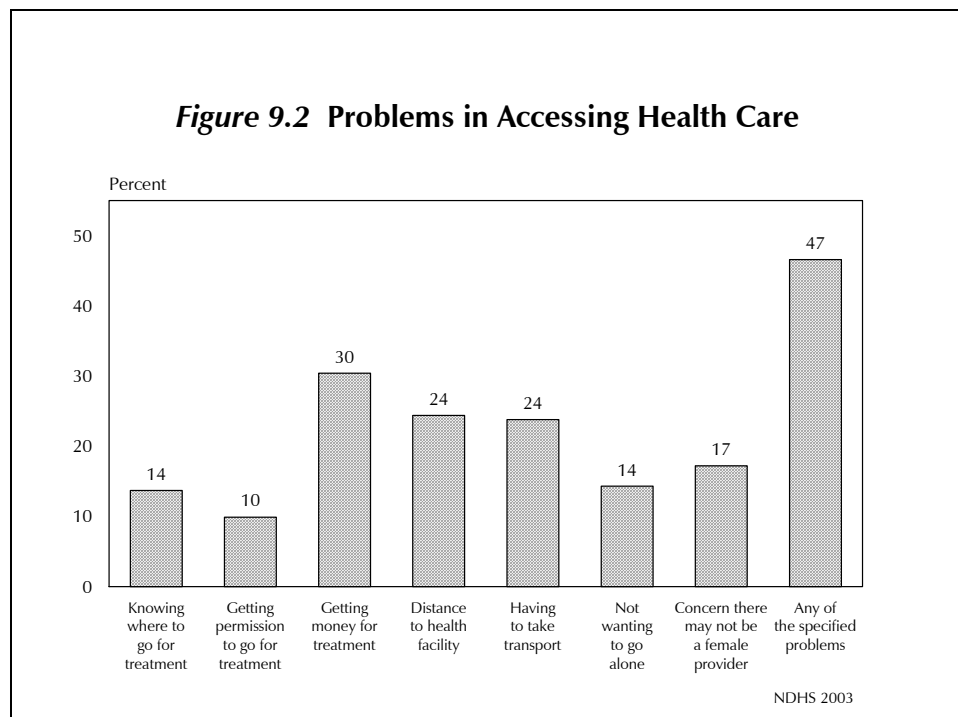
Almost half of women cite at least one problem in accessing health care (Table 9.21). The most commonly cited problem is getting money for treatment (30 percent), followed by distance to health facility and having to take transport (24 percent each). Less than one in five women reported the other three problems: concern that there may not be a female provider (17 percent), not wanting to go alone (14 percent), and knowing where to go for treatment (14 percent). One in ten women say that getting permission to go is a problem (Figure 9.2).

Table 9.21 Problems in accessing health care

Percentage of women who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Nigeria 2003

Background characteristic	Problems in accessing health care								Number of women
	Knowing where to go for treatment	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern there may not be a female provider	Any of the specified problems	
Age									
15-19	15.3	11.9	29.5	23.9	23.0	18.3	19.2	48.8	1,716
20-29	13.2	9.6	28.7	23.0	22.4	13.4	16.5	44.8	2,876
30-39	13.5	9.5	30.7	25.0	24.7	12.3	17.5	45.7	1,757
40-49	13.1	8.3	35.2	27.3	26.5	13.4	15.5	49.0	1,271
Number of living children									
0	12.6	8.8	29.8	22.4	21.4	15.3	16.0	44.7	2,499
1-2	15.1	11.3	28.2	24.7	23.9	14.5	18.0	46.2	2,009
3-4	15.5	10.2	30.7	25.2	25.1	13.6	18.1	48.6	1,526
5+	12.1	9.5	34.0	26.5	26.1	13.0	17.1	47.9	1,586
Marital status									
Never married	9.6	7.7	31.6	19.5	19.2	12.2	10.2	41.5	1,926
Married or living together	15.3	11.0	29.4	26.0	25.4	15.2	20.0	48.1	5,336
Divorced, separated, widowed	12.7	4.7	40.2	26.2	24.0	11.7	12.6	51.7	358
Residence									
Urban	5.1	4.0	16.9	9.5	8.5	6.0	7.8	25.6	2,629
Rural	18.3	13.0	37.6	32.2	31.8	18.6	22.1	57.6	4,991
Region									
North Central	5.2	4.7	32.7	18.6	18.7	7.2	6.0	39.5	1,121
North East	20.6	15.5	29.1	25.7	26.5	18.9	19.8	50.2	1,368
North West	20.1	15.5	27.1	29.4	29.0	20.6	33.5	54.3	2,095
South East	10.4	4.5	35.1	21.8	14.8	3.7	4.0	43.4	737
South South	13.8	8.8	47.1	34.8	35.3	19.4	16.5	60.4	1,342
South West	2.5	1.3	10.1	5.6	5.0	2.8	2.0	15.7	958
Education									
No education	22.4	16.9	34.1	32.0	31.8	20.8	28.3	58.6	3,171
Primary	10.7	6.6	37.1	25.9	25.5	13.1	12.3	48.8	1,628
Secondary	6.5	4.5	24.6	16.1	14.8	8.2	8.5	34.3	2,370
Higher	1.7	0.3	11.4	9.0	8.1	4.1	2.8	18.5	451
Employment									
Not employed	16.1	11.9	31.2	24.6	24.7	17.5	19.9	48.4	3,177
Working for cash	11.5	8.5	26.4	22.2	21.1	11.2	15.2	42.3	3,744
Working, not for cash	13.8	7.9	49.1	35.1	34.6	14.9	14.2	60.4	673
Wealth quintile									
Lowest	29.7	19.3	48.9	47.8	48.9	27.8	28.7	75.1	1,414
Second	19.6	15.1	39.4	33.6	33.4	20.1	26.4	62.2	1,439
Middle	12.9	10.7	32.2	23.2	21.8	14.3	18.1	47.5	1,513
Fourth	6.1	4.6	22.8	13.5	12.3	8.0	10.1	33.7	1,526
Highest	3.1	1.7	13.1	8.2	7.0	3.8	5.4	20.8	1,728
Total	13.7	9.9	30.4	24.4	23.8	14.3	17.2	46.6	7,620

Note: Total includes 26 cases with missing information on education.



Getting money for treatment was the problem most commonly reported by women of all backgrounds. The likelihood of citing at least one problem varies by background characteristics. In particular, there is a strong negative correlation between both level of education and wealth quintile and citing at least one problem accessing health care. Furthermore, there are large differentials by residence and region. For example, rural women are more than twice as likely to report at least one of the specified problems as urban women.

9.11 USE OF SMOKING TOBACCO

Tobacco smoking during pregnancy increases the risk of having babies with small or low birth weight. Its use at other times adversely affects women's health status and may also adversely affect children's health, particularly in terms of respiratory illness. Table 9.22 shows that smoking is not common among Nigerian women. Ninety-nine percent of women report that they do not use any kind of smoking tobacco, and there is no significant variation by background characteristics.

Table 9.22 Use of smoking tobacco

Percentage of women who smoke cigarettes or tobacco, by background characteristics and maternity status, Nigeria 2003

Background characteristic	Uses tobacco			Does not use tobacco	Number of women
	Cigarettes	Pipe	Other tobacco		
Age					
15-19	0.3	0.0	0.0	99.6	1,716
20-34	0.3	0.0	0.1	99.4	3,817
35-49	0.9	0.3	1.4	97.3	2,087
Residence					
Urban	0.3	0.0	0.4	99.3	2,629
Rural	0.6	0.1	0.5	98.7	4,991
Region					
North Central	0.2	0.1	0.4	99.3	1,121
North East	0.9	0.2	0.0	98.8	1,368
North West	1.1	0.1	0.3	98.4	2,095
South East	0.0	0.1	2.1	97.7	737
South South	0.0	0.0	0.3	99.7	1,342
South West	0.1	0.0	0.5	99.3	958
Education					
No education	0.8	0.2	0.8	98.0	3,171
Primary	0.4	0.1	0.3	99.2	1,628
Secondary	0.2	0.0	0.1	99.7	2,370
Higher	0.0	0.0	0.5	99.5	451
Maternity status					
Pregnant	0.4	0.0	0.2	99.2	868
Breastfeeding (not pregnant)	0.5	0.0	0.3	99.0	1,985
Neither	0.5	0.1	0.6	98.8	4,767
Total	0.5	0.1	0.5	98.9	7,620

Malaria is a major public health concern in Nigeria. According to recent estimates, half of the Nigerian population has at least one episode of malaria annually, and the majority of outpatient visits can be attributed to malaria (FMOH, 2001). *Plasmodium falciparum*, transmitted by the anopheles mosquito, is responsible for the majority of malaria deaths in Nigeria, and the groups most at risk are children under five years of age and pregnant women. Pregnant women are vulnerable because their natural immunity is reduced; thus, they are four times more likely to suffer from complications of malaria than nonpregnant women. Malaria is a cause of pregnancy loss, stillbirth, low birth weight, and neonatal mortality (Jamison et al., 1993). Individuals with sickle cell and other low immune groups are also at higher risk.

Malaria negatively impacts the social and economic development of communities in Nigeria. It is responsible for school absenteeism and low productivity at workplaces and on farms. The Federal Government policy on malaria control in Nigeria focuses on the following main interventions: 1) management of cases, 2) prevention of malaria with insecticide-treated nets (ITN), and 3) use of intermittent preventive treatment (IPT) during pregnancy. Health promotion monitoring and evaluation are cross-cutting activities.

10.1 MOSQUITO NETS

Ownership of Mosquito Nets

All households in the 2003 Nigeria Demographic and Health Survey (NDHS) were asked whether they own a mosquito net, and if so, how many. Table 10.1 shows the percentage of households with at least one, and more than one, mosquito net (treated or untreated), and the percentage of households that have at least one, and more than one ITN, by background characteristics.

Table 10.1 shows that ownership of mosquito nets is not widespread in Nigeria. Only 12 percent of households report that they own at least one net. Two percent of households report that they own an ITN. Prevalence of mosquito net ownership varies greatly by residence and region. Rural households are three times as likely as urban households to own at least one mosquito net. Furthermore, ownership ranges from less than 1 percent in the South West to 22 percent in the North East. It is notable that the least advantaged household (in terms of the wealth index) have the highest levels of mosquito net ownership. Whereas 23 percent of the households in the lowest quintile own at least one net, only 3 percent of households in the highest quintile report ownership.

Use of Mosquito Nets

In the 2003 Nigeria NDHS, respondents to the Household Questionnaire were asked about the use of mosquito nets by household members during the previous night. The use of mosquito nets by children under five and pregnant women is of special interest for public health purposes.

Since the prevalence of malaria-carrying mosquitoes varies seasonally, with a peak during and immediately following periods of rainfall, use of mosquito nets may be expected to follow a similar seasonal pattern. The 2003 NDHS fieldwork was conducted from March to August, which is the rainy season in most areas of Nigeria. Thus, the data collection coincided with the period when mosquito nets are most likely to be used.

Table 10.1 Ownership of mosquito nets

Percentage of households with at least one and more than one mosquito net (treated or untreated), and percentage of household that have at least one and more than one insecticide treated net (ITN), by background characteristics, Nigeria 2003

Background characteristic	Percentage of households that have:				Number of households
	At least one net	More than one net	At least one ITN ¹	More than one ITN ¹	
Residence					
Urban	5.4	2.7	1.0	0.4	2,598
Rural	15.5	8.7	2.9	1.5	4,627
Region					
North Central	14.9	9.6	3.9	2.7	1,040
North East	22.1	12.3	1.3	0.8	1,185
North West	13.3	7.8	3.1	1.5	1,911
South East	5.8	2.1	2.4	0.8	690
South South	10.5	4.9	2.0	0.7	1,315
South West	0.5	0.1	0.3	0.0	1,083
Wealth quintile					
Lowest	23.0	13.9	4.5	3.1	1,413
Second	15.5	8.9	1.3	0.3	1,347
Middle	10.8	5.2	2.4	1.0	1,408
Fourth	8.0	4.1	2.1	1.0	1,446
Highest	3.3	1.6	1.0	0.3	1,611
Total	11.8	6.6	2.2	1.1	7,225

¹ An insecticide treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained in the past six months, or a net that has been soaked with insecticide in the past six months.

Tables 10.2 and 10.3 show the percentages of children under five years of age, all women age 15-49, and pregnant women who slept under a mosquito net the night before the survey and the percentage who slept under an ITN, by background characteristics. Six percent of children under five slept under a mosquito net including 1 percent of children who slept under an ITN. Approximately twice as many rural as urban children slept under a mosquito net (7 and 4 percent, respectively). There are marked differences by region; for example, whereas 9 percent of children in the South South and in the North Central slept under a net the night preceding the survey, no children in the South West were reported to have slept under a net.

Six percent of all women and 5 percent of pregnant women slept under a mosquito net the night before the survey, approximately one-fourth of them under an ITN (Table 10.3). Similar to children, women in rural areas are several times more likely than their urban counterparts to have slept under a net. There are also significant differences by region.

Table 10.2 Use of mosquito nets by children

Percentage of children under five years who slept under a mosquito net the night before the survey and percentage who slept under an insecticide treated net (ITN), by background characteristics, Nigeria 2003

Background characteristic	Percentage of children who slept under a mosquito net the night before the survey		Number of children
	Any net	ITN ¹	
Age			
<1	6.7	1.3	1,412
1	6.9	1.5	1,078
2	5.2	0.9	1,171
3	6.5	1.4	1,192
4	4.1	0.7	1,008
Sex			
Male	6.3	1.1	2,986
Female	5.6	1.2	2,875
Residence			
Urban	3.6	0.6	1,787
Rural	7.0	1.4	4,074
Region			
North Central	8.9	2.7	854
North East	6.8	0.4	1,349
North West	5.0	1.7	1,965
South East	4.4	1.3	365
South South	8.6	0.5	774
South West	0.0	0.0	554
Total	5.9	1.2	5,861

¹ An insecticide treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained in the past six months, or a net that has been soaked with insecticide in the past six months.

Table 10.3 Use of mosquito nets by pregnant women

Percentage of all women and pregnant women age 15-49 who slept under a mosquito net (treated or untreated) the night before the survey, and the percentage who slept under an insecticide treated net (ITN), by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who slept under a mosquito net the night before the survey		Number of women	Percentage of pregnant women who slept under a mosquito net the night before the survey		Number of pregnant women
	Any net	ITN ¹		Any net	ITN ¹	
Residence						
Urban	2.6	0.5	2,801	3.2	0.4	254
Rural	7.1	1.8	5,340	6.2	1.6	629
Region						
North Central	8.2	2.6	1,207	9.2	1.6	108
North East	8.4	0.5	1,468	8.4	1.7	197
North West	5.0	2.1	2,235	4.0	1.1	352
South East	2.9	1.4	774	2.0	1.5	51
South South	6.6	1.0	1,434	5.0	1.5	115
South West	0.3	0.1	1,023	0.0	0.0	60
Total	5.6	1.4	8,141	5.4	1.3	883

¹ An insecticide treated net (ITN) is a permanent net that does not require any treatment, a pretreated net obtained in the past six months, or a net that has been soaked with insecticide in the past six months.

10.2 ANTIMALARIAL DRUG USE DURING PREGNANCY

Pregnant women who carry the malaria parasite may be at risk of serious problems that jeopardize their own health, that compromise the health of the foetus, and that increase the likelihood of adverse pregnancy outcomes such as stillbirth, spontaneous abortion, and low birth weight. As a protective measure, in 2001 the Federal Ministry of Health recommended that pregnant women receive IPT using two doses of sulfadoxine-pyrimethamine (SP) during the second and early in the third trimester of pregnancy.

In reference to the pregnancy leading to their last live birth, women in the 2003 NDHS were asked whether any antimalarials were taken during the pregnancy and which drug(s) was taken. Table 10.4 presents the percentage of women who had a birth in the last five years preceding the survey who took an antimalarial or other drug during the most recent pregnancy for prevention, and the percentage who received IPT as part of their antenatal care, by background characteristics.

Twenty percent of women report that they took an antimalarial during their last pregnancy. Another 17 percent report that they took an unknown drug, and 4 percent took paracetamol or herbs to prevent malaria. Only 1 percent received IPT during an antenatal care visit.

Among women who took an antimalarial for prevention during pregnancy, there are significant differentials by background characteristics. Urban women are more than twice as likely as rural women to have taken an antimalarial. By region, prevalence ranges from a low of 8 percent in the North East to a high of 32 percent in the South East.

Table 10.4 Use of intermittent preventive treatment (IPT) by pregnant women

For the last birth in the five years preceding the survey, percentage for which the mother took antimalarial drugs for prevention during the pregnancy and percentage for which the mother got intermittent preventive treatment (IPT) during an antenatal visit, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who:				Number of pregnant women
	Took anti-malarial for prevention during last pregnancy	Took unknown drug during last pregnancy	Took Paracetamol or herbs during last pregnancy	Received IPT ¹ during ANC visit	
Residence					
Urban	34.0	19.3	5.7	2.0	1,144
Rural	14.8	15.7	3.4	0.6	2,766
Region					
North Central	17.1	19.2	5.3	0.7	575
North East	7.9	19.8	5.1	0.9	862
North West	21.4	4.0	0.8	1.2	1,341
South East	31.9	32.9	2.6	0.2	222
South South	29.2	30.4	3.6	1.3	544
South West	31.4	22.2	13.3	1.1	367
Total	20.4	16.7	4.1	1.0	3,911

¹ Intermittent preventive treatment is preventive treatment with sulfadoxine-pyrimethamine (SP/Fansidar) during an antenatal visit.

Table 10.5 shows the different antimalarial drugs that were taken by the 20 percent of pregnant women who reported preventive use of antimalarials. More than half (58 percent) of these women used Daraprim/Metaprim, which has been found to be ineffective as a chemoprophylaxis during pregnancy (FMOH, 2001). Additionally, 39 percent used chloroquine, which was the chemoprophylactic drug of choice until the introduction of IPT in 2001. Although it is only two years since the introduction of the new IPT recommendation, it is worthy of note that 12 percent of the women who took an antimalarial for prevention used SP/Fansidar. Other antimalarials, Halfan and Amodiaquine, were used by 2 and 1 percent of women, respectively. A larger percentage of urban women than rural women used each of the drugs with the exception of chloroquine. More than 4 in 10 women in all regions use Daraprim/Metaprim. Use of Daraprim/Metaprim is highest in the North West, North East, and South South (74, 63, and 51 percent, respectively).

Table 10.5 Use of specific drugs for Intermittent Preventive Treatment (IPT)

For mothers who took antimalarial drugs for prevention during the last pregnancy leading to a live birth in the five years preceding the survey, percentage who took a specific drug, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who took:					Number of women who took antimalarial drug
	SP/Fansidar	Chloroquine	Halfan	Daraprim/Metaprim	Amodiaquine	
Residence						
Urban	14.1	31.6	3.1	63.5	1.2	390
Rural	9.1	46.4	1.4	51.7	0.4	408
Region						
North Central	6.8	55.1	1.8	40.1	0.0	99
North East	17.7	25.5	0.0	63.1	0.0	68
North West	15.3	26.1	2.6	74.1	0.8	286
South East	13.3	36.6	8.1	41.9	0.5	71
South South	6.7	46.6	1.8	51.4	0.9	159
South West	8.3	58.0	0.0	45.6	2.1	115
Total	11.6	39.2	2.2	57.5	0.8	798

10.3 TREATMENT OF CHILDREN WITH FEVER OR CONVULSIONS

Since the major manifestations of malaria are fever and convulsions or fits, mothers were asked whether their children under age five had had a fever, convulsions, or fit in the two weeks preceding the survey. If reported, the mother was asked if the child was given any drugs.

Table 10.6 shows that 32 percent of children under age five had a fever and/or convulsions in the two weeks preceding the survey. Among those sick with fever/convulsions, one-third took antimalarial drugs, and one-quarter received the drugs the same day as the onset of the fever/convulsions or the following day. There are striking differences in both morbidity and treatment by region. Children in the North East and North West were the most likely to have been ill during the two weeks preceding the survey (39 and 36 percent, respectively), while children in the South West were the least likely (18 percent). Although children in the South West were least likely to be sick, they were most likely to have received an antimalarial in response to their symptoms. Forty-three percent of sick children in the South West took an antimalarial compared with 27 percent in the North East, one of the regions with the highest levels of morbidity, and just 15 percent in the South East.

Table 10.6 Prevalence and prompt treatment of fever/convulsions

Percentage of children under age five with fever and/or convulsions in the two weeks preceding the survey, and among children with fever and/or convulsions, percentage who took antimalarial drugs and who took the drugs the same/next day, by background characteristics, Nigeria 2003

Background characteristic	Percentage of children with fever/convulsions	Number of children	Among children with fever and/or convulsions, percentage who:		Number of children with fever/convulsions
			Took antimalarial drugs	Took antimalarial drugs same/next day	
Age					
<1	33.4	1,331	29.3	19.5	445
1	40.0	999	36.3	23.8	399
2	34.0	1,050	41.7	32.3	356
3	27.4	1,067	32.3	25.3	292
4	21.9	899	27.1	23.2	196
Sex					
Male	31.6	2,717	32.5	22.9	858
Female	31.6	2,628	35.2	26.4	832
Residence					
Urban	27.8	1,620	38.5	30.1	450
Rural	33.3	3,726	32.2	22.7	1,239
Region					
North Central	24.2	781	32.2	23.6	189
North East	38.5	1,225	27.0	17.9	471
North West	36.0	1,818	39.6	31.7	654
South East	23.6	347	14.8	13.6	82
South South	30.0	684	36.2	18.8	206
South West	18.0	489	43.2	34.6	88
Total	31.6	5,345	33.9	24.6	1,689

Table 10.7 presents the percentage of children under five who took antimalarial drugs for fever and/or convulsions in the two weeks preceding the survey, by background characteristics. Ninety-seven percent took the first line drug, chloroquine, 1 percent took the second line drug, Fansidar/SP, and 4 percent took other antimalarials. The data show that children of all age groups received the antimalarials, indicating that equal care is given to children of all ages under five. Almost three-quarters of children received the antimalarial the same day as the onset of symptoms or the next day. Promptness of treatment varies significantly by region.

Table 10.7 Type and timing of antimalarial drugs

Among children under age five who took antimalarial drugs for fever and/or convulsions in the two weeks preceding the survey, percentage who took first-line drug, second-line drug, or other antimalarial drugs and percentage who took each type of drug the same/next day after developing fever and/or convulsions, by background characteristics, Nigeria 2003

Background characteristic	Percentage who took:						Number of children who took antimalarial drugs
	First-line drug	First-line drug same/next day	Second-line drug	Second-line drug same/next day	Other antimalarial	Other antimalarial drug same/next day	
Age in years							
<1	98.4	66.0	0.4	0.0	1.6	0.5	130
1	95.7	63.2	2.0	0.0	5.8	3.3	145
2	96.7	75.2	1.5	1.0	5.9	3.1	149
3	98.7	77.0	1.0	1.0	1.3	1.3	95
4	94.7	81.2	1.0	0.0	4.3	4.3	53
Sex							
Male	97.2	68.8	1.2	0.0	3.1	2.0	279
Female	96.8	73.0	1.3	0.8	4.8	2.8	293
Residence							
Urban	97.8	76.5	1.5	0.4	3.9	3.2	173
Rural	96.6	68.5	1.1	0.4	4.0	2.0	399
Region							
North Central	94.3	68.5	1.3	1.3	4.5	3.5	61
North East	96.4	63.1	0.4	0.0	4.0	3.0	127
North West	99.4	79.2	0.7	0.7	3.5	2.2	259
South East	(91.7)	(83.3)	(0.0)	(0.0)	(8.3)	(8.3)	12
South South	92.9	50.6	4.8	0.0	5.7	1.2	75
South West	(96.7)	(80.2)	(1.3)	(0.0)	(1.9)	(0.0)	38
Total	97.0	70.9	1.2	0.4	4.0	2.4	572

Note: According to national policy, chloroquine is the first-line drug and SP/Fansidar is the second-line drug. Figures in parentheses are based on 25-49 unweighted cases.

Nutritional deficiencies have been found to contribute to the high rates of disability, morbidity, and mortality in Nigeria, especially among infants and young children (NPC and UNICEF, 2001). Thus, the importance of adequate nutrition for women and children cannot be overemphasized and remains a great concern in the country.

The 2003 Nigeria Demographic and Health Survey (NDHS) collected data on various factors related to the nutrition of women and children. This chapter examines infant feeding practices, including duration of breastfeeding, use of a feeding bottle with a nipple, introduction of complementary foods, and the intake of micronutrients, such as vitamin A, iron supplements, and iodized salt. The nutritional status of all children under age five and all women age 15-49 is analyzed using anthropometric indices (height and weight measures).

11.1 BREASTFEEDING

Initiation of breastfeeding at birth is crucial for the health of both child and mother. Suckling at the breast immediately after birth aids the expulsion of the placenta and reduces the risk of postpartum haemorrhage in the mother, helps maintain the body temperature of the baby, and encourages bonding between the mother and child, which enhances their physical and psychological well-being.

Breast milk, a good source of nutrients and natural immunity for infants, is sufficient for newborns; they need not be given anything else to eat or drink besides breast milk. Giving the newborn the first breast milk, which contains colostrum, and exclusive breastfeeding during the first six months of a child's life are recommended because they protect the infant from disease agents as well as provide all required nutrients.

Table 11.1 shows the percentage of children who were ever breastfed, and among children ever breastfed, the proportion who started breastfeeding within one hour and within one day of birth, and those who received a prelacteal feed. Breastfeeding is almost universal in Nigeria, with 97 percent of children born in the five years preceding the survey having been breastfed. However, just one-third of children were given breast milk within one hour of birth (32 percent), and less than two-thirds were given breast milk within 24 hours of birth (63 percent), indicating a delay in the initiation of breastfeeding.

Initiation of breastfeeding in the first hour and in the first 24 hours after birth varies by background characteristics. Women who delivered in a health facility and those assisted at delivery by health professionals are more likely to initiate breastfeeding early (within 1 hour or within 24 hours of delivery). There is considerable variation by region, ranging from a low of 13 percent of women in the South West initiating breastfeeding within one hour of giving birth to a high of 58 percent of women in the South East. Only about half of women in the North West and North East start breastfeeding within the first day (48 and 55 percent, respectively), compared with more than seven in ten women in other regions. Furthermore, women with the least education and women in households that are in the lowest quintile of the wealth index initiate breastfeeding later than those with at least some education and those living in households that are ranked higher on the wealth index.

Table 11.1 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and among children ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth, and percentage who received a prelacteal feed, by background characteristics, Nigeria 2003

Background characteristic	Among all children:		Among children ever breastfed, percentage who:			
	Percentage ever breastfed	Number of children	Started breastfeeding within 1 hour of birth	Started breastfeeding within 1 day of birth ¹	Received a prelacteal feed ²	Number of children ever breastfed
Sex						
Male	97.0	3,186	30.9	61.2	69.7	3,090
Female	97.7	3,033	32.9	64.4	67.2	2,965
Residence						
Urban	97.6	1,795	34.7	73.6	63.5	1,752
Rural	97.3	4,424	30.8	58.4	70.5	4,303
Region						
North Central	97.9	897	46.6	83.5	39.8	878
North East	96.3	1,472	25.9	54.6	83.2	1,418
North West	98.1	2,161	27.1	48.3	78.7	2,121
South East	97.1	371	57.5	81.9	53.6	360
South South	96.8	789	40.3	77.9	49.0	763
South West	97.4	529	12.7	73.4	74.2	515
Mother's education						
No education	97.9	3,224	27.0	50.7	78.4	3,156
Primary	96.7	1,465	35.9	72.2	63.4	1,417
Secondary	97.0	1,316	35.9	78.0	54.4	1,277
Higher	95.8	215	53.9	88.5	39.6	206
Assistance at delivery						
Health professional ³	96.9	2,253	40.0	79.7	55.8	2,182
Traditional birth attendant	97.8	1,268	29.9	49.8	77.5	1,240
Other	97.4	1,593	26.0	57.4	74.7	1,552
No one	97.6	1,051	27.0	52.5	77.5	1,027
Place of delivery						
Health facility	97.1	2,025	40.3	80.9	55.2	1,967
At home	97.4	4,129	28.1	54.3	75.9	4,024
Other	(100.0)	22	(29.1)	(80.0)	(38.3)	22
Wealth quintile						
Lowest	97.7	1,394	22.4	46.8	77.8	1,363
Second	96.7	1,379	30.6	54.6	72.9	1,334
Middle	96.7	1,255	36.8	65.5	67.2	1,214
Fourth	97.7	1,157	35.4	75.8	64.4	1,131
Highest	98.2	1,033	36.5	77.2	56.2	1,014
Total	97.4	6,219	31.9	62.8	68.5	6,055

Note: Table is based on all births in the past five years whether the children were living or dead at the time of interview. Total includes 54 and 43 children with data missing on assistance at delivery and place of delivery, respectively. Figures in parentheses are based on 25-49 unweighted cases.

¹ Includes children who started breastfeeding within one hour of birth

² Children given something other than breast milk during the first three days of life before the mother started breastfeeding regularly

³ Doctor, nurse/midwife, or auxiliary midwife, or CHEW

The practice of giving something other than breast milk in the first three days of life (prelacteal feeding) is discouraged because it limits the frequency of suckling by the infant and exposes the baby to infections. Prelacteal feeding is widely practiced in Nigeria. Approximately seven in ten newborns receive a prelacteal feed. There are differences in prelacteal feeding practices by region, level of education, place of delivery, assistance at delivery, and wealth quintile. The practice is more common among women with little or no education and those living in households in the lowest wealth quintile than among women with higher education and those in households in the highest wealth quintile. In addition, women who received delivery assistance from a health professional and those who delivered in a health facility are less likely to give prelacteal feeds than those who delivered at home or without the assistance of a trained medical professional. These differentials may be due in part to the Baby-Friendly Hospital Initiative, which promotes exclusive breastfeeding and policies that support breastfeeding in hospitals.

11.1.1 Age Pattern of Breastfeeding

UNICEF and WHO recommend that children be exclusively breastfed (receive only breast milk) during the first six months of life and that children be given solid and/or semisolid complementary food starting at age six months (WHO and UNICEF, 1998). Children require adequate complementary foods to follow normal growth patterns. Lack of complementary foods (given at the appropriate age) may lead to malnutrition, frequent illness, and even death. However, even after complementary foods have been introduced, UNICEF recommends that breastfeeding continue for at least the first two years of the child's life (NPC and UNICEF, 2001).

Table 11.2 shows the percent distribution of youngest children under age three living with the mother, by breastfeeding status, according to age. In Nigeria, exclusive breastfeeding of infants is not practiced in compliance with the WHO/UNICEF recommendations. The data show that only 17 percent of infants below six months are exclusively breastfed. Indeed, just one-quarter of infants under two months of age are exclusively breastfed. Among children 4-5 months of age, fewer than one in ten is exclusively breastfed. This is a result of early supplementation of breast milk with plain water. Almost half (48 percent) of newborns under two months of age receive plain water as well as breast milk. An additional 19 percent receive other milk or liquids.

Complementary feeding also starts early. Among children age 4-5 months, more than one-third (36 percent) receive complementary food in addition to breast milk (Table 11.2). Although complementary feeding is introduced early in Nigeria, not all children are in compliance with UNICEF's recommendation of introducing semisolid and/or solid complementary food at six months of age. One in four children age 6-9 months is either exclusively breastfed or receives breast milk and plain water only. Regarding the duration of any breastfeeding, two-thirds of children age 20-23 months have discontinued breastfeeding.

The use of a bottle with a nipple regardless of the content (formula or other liquid) requires attention in terms of hygiene and handling. Because of inadequate and insufficient cleaning and ease of contamination after cleaning, the nipple may house disease-causing agents. Bottle-feeding is common in Nigeria, even among children who should be exclusively breastfed; 23 percent of children under two months and one-quarter of children age 2-3 months drink from a bottle with a nipple.

Table 11.2 Breastfeeding status by child's age

Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Nigeria 2003

Age in months	Breastfeeding and consuming:						Total	Number of children	Using a bottle with a nipple ¹	Number of living children
	Not breast-feeding	Exclusively breast-fed	Plain water only	Water-based liquids/juice	Other milk	Complementary foods				
<2	4.0	26.2	47.5	8.9	8.6	4.7	100.0	182	22.5	183
2-3	0.9	19.3	49.2	6.5	14.1	10.0	100.0	230	25.1	231
4-5	0.6	8.7	38.1	9.9	7.1	35.6	100.0	247	17.6	250
6-7	1.3	3.9	26.5	4.4	7.3	56.6	100.0	230	14.4	239
8-9	1.2	1.6	17.8	1.6	6.9	70.8	100.0	231	16.3	240
10-11	4.5	2.6	10.1	2.3	0.2	80.4	100.0	184	14.7	189
12-15	10.1	3.8	3.9	0.6	1.3	80.2	100.0	387	10.4	403
16-19	33.7	2.1	2.3	1.6	0.4	59.9	100.0	313	6.3	323
20-23	65.9	0.9	0.4	0.9	0.0	31.9	100.0	248	8.3	272
24-27	90.9	0.3	0.0	0.0	0.0	8.8	100.0	361	12.6	441
28-31	90.5	0.0	0.3	0.0	0.0	9.1	100.0	210	5.0	303
32-35	94.8	0.0	0.5	0.0	0.0	4.7	100.0	154	3.2	305
<6	1.7	17.2	44.6	8.4	10.0	18.1	100.0	659	21.6	663
6-9	1.3	2.8	22.1	3.0	7.1	63.7	100.0	460	15.3	478

Note: Breastfeeding status refers to a 24-hour period (yesterday and last night). Children classified as *breastfeeding and consuming plain water only* consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding, and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

¹ Based on all children under three years

11.1.2 Duration and Frequency of Breastfeeding

Table 11.3 shows the median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey. The percentages of breastfeeding children under six months who were breastfed at least six times in the 24 hours preceding the survey and mean number of daytime and nighttime feeds, by background characteristics, are also presented.

At the national level, the median duration of any breastfeeding among children born in the three years preceding the survey is 18.6 months (Figure 11.1). The median duration of exclusive breastfeeding is half a month, while the median duration of predominant feeding is 4.6 months (Table 11.3). Predominant breastfeeding refers to either exclusive breastfeeding or receiving plain water, water-based liquids, and/or juice in addition to breast milk.

Table 11.3 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, Nigeria 2003

Background characteristic	Median duration (months) of breastfeeding ¹				Breastfeeding children under six months ²			
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding ³	Number of children	Percentage breastfed 6+ times in last 24 hours	Mean number of day feeds	Mean number night feeds	Number of children
Sex								
Male	18.6	0.5	4.7	1,947	96.5	7.8	6.0	326
Female	18.6	0.5	4.4	1,867	98.2	7.5	5.6	306
Residence								
Urban	17.2	0.5	3.8	1,137	96.7	8.0	6.5	179
Rural	19.2	0.5	4.8	2,677	97.5	7.5	5.5	453
Region								
North Central	19.0	0.7	3.8	553	97.6	7.8	5.3	85
North East	20.5	0.4	6.6	875	99.2	7.7	6.0	143
North West	19.9	0.4	5.4	1,310	96.5	7.8	4.9	220
South East	13.3	0.4	0.5	245	97.7	6.8	7.8	33
South South	15.8	0.6	2.9	503	97.8	7.7	6.6	82
South West	15.9	0.7	3.4	328	94.5	7.4	6.7	68
Mother's education								
No education	20.0	0.4	5.5	1,893	97.7	8.0	5.6	315
Primary	18.4	0.5	3.7	901	97.6	7.7	6.3	145
Secondary	16.9	0.6	3.3	887	95.9	6.8	5.8	157
Higher	15.7	2.5	4.7	134	100.0	8.6	5.2	15
Wealth quintile								
Lowest	20.2	0.5	5.4	811	96.0	8.4	5.7	135
Second	20.0	0.4	4.9	831	97.0	7.5	5.5	133
Middle	19.1	0.5	3.6	758	96.8	7.3	5.2	105
Fourth	18.4	0.7	4.4	736	99.5	7.7	5.9	135
Highest	14.3	0.5	3.7	679	96.9	7.3	6.4	123
Total	18.6	0.5	4.6	3,815	97.3	7.7	5.8	632
Mean for all children	18.2	2.0	6.3	na	na	na	na	na

Note: Median and mean durations are based on current status.

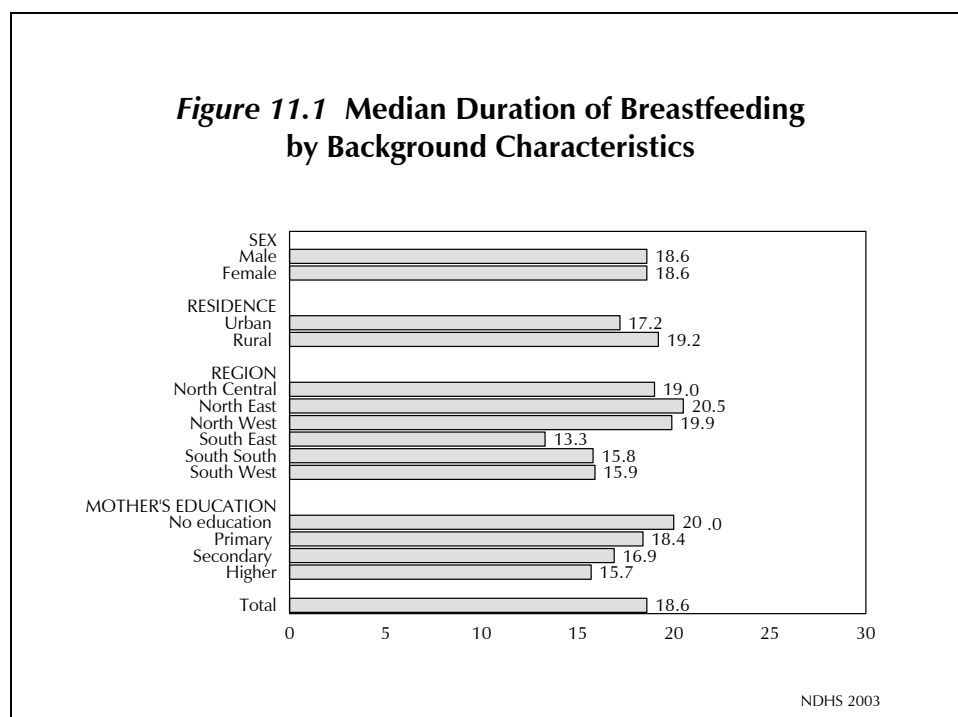
na = Not applicable

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

² Excludes children who do not have a valid answer on the number of times breastfed

³ Either exclusively breastfed or received breast milk and plain water, water-based liquids, and/or juice only (excludes other milk)

There is little variation in exclusive breastfeeding: women of all backgrounds exclusively breastfeed for a median of less than one month, with the exception of women with higher education who exclusively breastfeed for 2.5 months. The median duration of any breastfeeding varies by region, education, and household economic status. The results of the 2003 NDHS confirm the findings of the 1999 NDHS, which followed a similar pattern.



Mothers were asked about the frequency of breastfeeding among children under six months of age in the preceding 24 hours. Table 11.3 shows that almost all children under six months of age are breastfed at least six times per day in Nigeria, which meets the international recommendation (NPC and UNICEF, 2001). The mean number of feeds is eight in the daytime and six at night.

11.2 TYPES OF FOOD CONSUMED BY CHILDREN

Table 11.4 shows the percentage of youngest children under three years of age living with the mother who consumed specific foods during the day or night preceding interview. The table shows that 13 percent of breastfeeding infants under six months of age consume infant formula, 11 percent consume milk or other dairy products, and 18 percent consume other liquids. Breastfeeding children under six months also commonly eat food made from grains (15 percent). At age 6-9 months, when complementary foods should be introduced, three-quarters of breastfeeding infants receive solid or semisolid foods; 56 percent receive food made from grains; 25 percent receive meat, fish, shellfish, poultry, or eggs; and 24 percent receive fruits or vegetables. Fruits and vegetables rich in vitamin A are consumed by one-fifth of breastfeeding infants 6-9 months old.

At almost one year of age (10-11 months), a higher proportion of breastfeeding children receive these complementary foods. By 20-23 months of age, three in ten breastfeeding children receive other milk products, nine in ten eat foods made from grains, six in ten receive fruits and vegetables, and the same proportion gets eggs and animal products. Less than half receive food with oil or butter added.

Table 11.4 Foods consumed by children in the day or night preceding the interview

Percentage of children under three years of age living with the mother who consumed specific foods in the day or night preceding the interview, by breastfeeding status and age, Nigeria 2003

Child's age in months	Solid/semisolid foods										Any solid or semi-solid food	Number of children
	Infant formula	Other milk/cheese/yogurt	Other liquids ¹	Food made from grains	Fruits/vegetables ²	Food made from roots/tubers	Food made from legumes	Meat/fish/shellfish/poultry/eggs	Food made with oil/fat/butter	Fruits and vegetables rich in vitamin A ³		
BREASTFEEDING CHILDREN												
<2	5.5	7.2	11.9	4.2	2.0	1.7	1.3	0.3	1.8	2.0	11.6	175
2-3	14.6	7.3	14.5	8.9	2.0	0.8	0.9	1.2	1.9	2.0	15.2	227
4-5	15.7	16.5	25.1	27.1	15.1	6.5	6.3	10.3	7.3	13.5	50.2	246
6-7	11.3	15.6	25.5	49.6	17.6	8.5	13.4	16.6	18.7	14.2	69.1	227
8-9	14.1	21.7	25.5	61.5	30.8	10.4	14.1	32.8	27.3	26.0	83.0	228
10-11	12.3	26.4	30.6	78.3	41.3	26.9	27.5	47.0	33.0	39.4	89.3	176
12-15	10.6	30.8	36.1	83.6	57.6	26.7	29.3	55.2	45.0	52.9	96.4	348
16-19	6.0	26.5	36.5	81.4	64.2	27.2	32.5	58.2	42.6	56.6	96.2	208
20-23	8.5	30.3	36.7	89.3	59.6	26.9	30.1	56.6	45.6	53.6	98.8	85
24-35	16.0	30.5	47.1	89.5	73.1	35.0	31.3	55.3	37.6	73.1	98.9	61
<6	12.6	10.7	17.8	14.5	6.9	3.2	3.1	4.4	3.9	6.3	27.5	648
6-9	12.7	18.7	25.5	55.6	24.2	9.5	13.8	24.7	23.1	20.1	76.1	455
NONBREASTFEEDING CHILDREN												
16-19	11.0	37.4	57.3	83.7	78.2	37.7	35.6	79.4	40.1	72.0	99.5	105
20-23	3.7	32.5	40.5	86.5	74.8	46.2	39.6	73.0	50.3	66.9	99.6	163
24-35	9.5	40.1	51.6	88.2	75.8	40.7	36.6	71.3	57.0	71.7	99.6	664

Note: Breastfeeding status and food consumed refer to a 24-hour recall period (yesterday and last night).

¹ Does not include plain water

² Includes fruits and vegetables rich in vitamin A

³ Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

As previously shown in Table 11.2, few children under age 16 months are not breastfed in Nigeria. Table 11.4 shows that among those who are not breastfed by age 20-23 months, the proportion receiving milk products is almost the same as among children who are breastfeeding and receiving other milk products. There are only slight differences between breastfeeding and nonbreastfeeding children receiving food made from grains, but the proportion of children receiving other complementary foods is higher among the latter group of children.

Table 11.5 presents the frequency of consumption of specific foods by children less than three years of age in the day or night preceding the interview. Among breastfeeding children age 6-9 months, who should be receiving complementary foods, grains are consumed slightly more than once a day. All other foods are consumed less than once a day. Beginning at age two, grains are received twice a day, as are fruits and vegetables. The frequency of foods consumed by nonbreastfeeding children is similar to that of breastfeeding children.

Table 11.5 Frequency of foods consumed by children in the day or night preceding the interview

Mean number of times specific foods were consumed in the day or night preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Nigeria 2003

Child's age in months	Solid/semisolid foods										Number of children
	Infant formula	Other milk/cheese/yogurt	Other liquids ¹	Food made from grains	Fruits/vegetables ²	Food made from roots/tubers	Food made from legumes	Meat/fish/shellfish/poultry eggs	Food made with oil/fat/butter	Fruits and vegetables rich in vitamin A ³	
BREASTFEEDING CHILDREN											
<2	0.1	0.2	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	175
2-3	0.4	0.1	0.2	0.2	0.1	0.0	0.0	0.0	0.0	0.1	227
4-5	0.3	0.3	0.5	0.6	0.5	0.1	0.1	0.2	0.2	0.4	246
6-7	0.3	0.3	0.5	1.0	0.4	0.1	0.2	0.2	0.3	0.3	227
8-9	0.3	0.4	0.6	1.2	0.7	0.1	0.2	0.5	0.5	0.5	228
10-11	0.3	0.5	0.6	1.7	1.0	0.4	0.3	0.8	0.6	0.8	176
12-15	0.2	0.6	0.8	1.7	1.4	0.4	0.4	0.9	0.7	1.1	348
16-19	0.1	0.5	0.8	1.8	1.6	0.4	0.4	1.0	0.7	1.1	208
20-23	0.2	0.6	0.7	2.0	1.3	0.4	0.4	0.8	0.7	1.0	85
24-35	0.3	0.4	0.7	2.1	2.3	0.4	0.4	0.7	0.6	1.8	61
<6	0.3	0.2	0.3	0.3	0.2	0.1	0.0	0.1	0.1	0.2	648
6-9	0.3	0.4	0.5	1.1	0.6	0.1	0.2	0.4	0.4	0.4	455
NONBREASTFEEDING CHILDREN											
16-19	0.2	0.7	1.3	1.6	2.0	0.7	0.4	1.5	0.8	1.5	105
20-23	0.1	0.5	0.9	1.9	2.1	0.7	0.5	1.3	1.1	1.5	163
24-35	0.2	0.7	1.1	1.9	2.1	0.5	0.4	1.2	1.0	1.6	664

Note: Breastfeeding status and food consumed refer to a 24-hour recall period (yesterday and last night).

¹ Does not include plain water

² Includes fruits and vegetables rich in vitamin A

³ Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mangoes, papayas, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.6 shows the average number of days specific foods were consumed by youngest children under age three in the seven days preceding the survey. Among breastfeeding children, less than age six months, plain water is consumed about six days a week. Food from grains is given one day a week. All other types of food or drink were given less than one day a week. Breastfeeding children age 6-9 months drank plain water daily in the week preceding the interview. They consumed food made from grains almost four days a week. Meat, fish, shellfish, poultry or eggs were consumed less than two days a week, as were foods made with oil, fat, or butter.

The mean number of days that various nutritious foods are consumed by children who are no longer breastfeeding should be higher than for children who are breastfeeding. Among children 16 months and older, most semisolid or solid foods and fruits and vegetables rich in vitamin A are consumed with greater frequency among nonbreastfeeding than breastfeeding children.

Table 11.6 Frequency of foods consumed by children in preceding seven days

Mean number of days specific foods were consumed in the seven days preceding the interview by youngest children under three years of age living with the mother, according to breastfeeding status and age, Nigeria 2003

Child's age in months	Solid/semisolid foods																	Number of children
	Liquids						Fruit and vegetables rich in vitamin A											
	Plain water	Infant formula	Other milk	Fruit juice	Herbal tea	Other liquids	Food made from grains	Food made from roots/tubers	Fruits and vegetables not rich in vitamin A	Food made from legumes	Cheese/yogurt	Meat/fish/shellfish/poultry/eggs	Food made with oil/fat/butter	Pumpkin/red or yellow yams or squash/carrots/red sweet potatoes	Green leafy vegetables	Mango/papaya/other local fruits rich in vitamin A		
BREASTFEEDING CHILDREN																		
<2	5.0	0.4	0.5	0.1	0.8	0.1	0.3	0.1	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	175
2-3	5.7	1.0	0.4	0.0	0.6	0.2	0.6	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	227
4-5	6.4	1.0	0.8	0.2	0.9	0.6	1.9	0.3	0.2	0.3	0.2	0.5	0.4	0.3	0.4	0.3	0.3	246
6-7	6.7	0.8	0.7	0.3	0.7	0.6	3.2	0.4	0.4	0.6	0.2	1.0	1.1	0.2	0.6	0.3	0.3	227
8-9	6.8	0.9	0.8	0.5	0.8	1.0	4.1	0.6	0.8	1.1	0.4	1.7	1.6	0.4	0.9	0.6	0.6	228
10-11	6.8	0.8	1.1	0.4	0.9	1.0	5.3	1.3	1.1	1.3	0.6	2.7	2.1	0.7	1.7	0.8	0.8	176
12-15	6.8	0.5	0.7	0.6	0.7	1.4	5.6	1.3	1.2	1.4	1.0	3.0	2.6	1.1	1.5	1.4	1.4	348
16-19	6.8	0.3	0.8	0.5	0.8	1.7	5.6	1.4	1.5	1.6	1.0	3.3	2.7	1.2	1.9	1.7	1.7	208
20-23	6.8	0.6	0.7	0.6	0.8	1.4	6.0	1.3	1.1	1.7	0.9	2.8	2.7	0.7	2.0	1.2	1.2	85
24-35	6.8	0.7	0.9	0.6	0.9	1.9	6.6	1.3	1.3	1.3	1.1	3.1	2.4	0.8	2.6	2.1	2.1	61
<6	5.8	0.8	0.6	0.1	0.8	0.3	1.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.1	648
6-9	6.8	0.9	0.8	0.4	0.8	0.8	3.7	0.5	0.6	0.8	0.3	1.4	1.4	0.3	0.7	0.5	0.5	455
NONBREASTFEEDING CHILDREN																		
16-19	6.4	0.9	1.7	0.8	0.9	2.7	5.2	2.2	2.1	1.8	0.9	4.9	2.3	1.8	2.4	1.7	1.7	105
20-23	6.7	0.2	1.1	1.0	0.7	1.9	5.4	2.3	1.9	2.2	0.6	4.4	3.0	1.5	2.4	1.9	1.9	163
24-35	6.6	0.5	1.3	0.9	0.7	2.5	5.9	2.1	2.0	1.8	1.2	4.1	3.5	1.4	2.7	2.1	2.1	664
Total	6.6	0.5	1.3	0.9	0.7	2.4	5.6	2.1	2.0	1.9	1.0	4.2	3.3	1.5	2.6	2.0	2.0	997

Note: Breastfeeding status refers to a 24-hour recall period (yesterday and last night).

11.3 MICRONUTRIENT SUPPLEMENTATION

Micronutrients are necessary for normal body function and play a vital role in ensuring good health. Children can receive micronutrients from foods, food fortification, and direct supplementation. Deficiency of these elements contributes to childhood morbidity and mortality. The 2003 NDHS collected various data useful for assessing the intake of micronutrients by women and young children.

11.3.1 Use of Iodized Salt in Households

Disorders induced by dietary iodine deficiency constitute a major global nutrition concern. A lack of sufficient iodine can lead to goiter, hypothyroidism, impaired mental and physical development, and diminished school performance. Iodine deficiency in the fetus leads to increased rates of abortion, stillbirths, congenital anomalies, cretinism, psychomotor defects, and neonatal mortality. Iodine deficiency can be avoided by using salt that has been fortified with iodine (iodized salt). Fortified salt, which contains 15 parts per million of iodine, prevents iodine deficiency.

The survey undertook a rapid test, using a test kit supplied by UNICEF, to assess whether the household was using iodized salt for cooking. The data presented in Table 11.7 are based on the 94 percent of households where salt was tested. Almost all households in Nigeria use adequately iodized salt (97 percent). The region with the lowest prevalence of adequately iodized salt is North Central (93 percent).

Table 11.7 Iodization of household salt

Percent distribution of households by level of iodine in salt (parts per million), according to background characteristics, Nigeria 2003

Background characteristic	Level of iodine in household salt:			Total	Number of households tested	Percentage of households tested	Percentage of households with no salt	Number of households
	None (0 ppm)	Inadequate (<15 ppm)	Adequate (15+ ppm)					
Residence								
Urban	0.9	0.6	98.5	100.0	2,398	92.3	5.3	2,598
Rural	2.2	1.2	96.7	100.0	4,354	94.1	2.9	4,627
Region								
North Central	5.7	1.6	92.7	100.0	966	92.9	4.4	1,040
North East	0.9	0.3	98.8	100.0	1,095	92.4	5.2	1,185
North West	0.7	1.1	98.2	100.0	1,758	92.0	3.1	1,911
South East	2.6	0.4	97.0	100.0	640	92.6	3.3	690
South South	1.0	1.0	98.0	100.0	1,261	95.9	3.4	1,315
South West	0.9	1.1	98.0	100.0	1,032	95.3	3.4	1,083
Total	1.7	1.0	97.3	100.0	6,752	93.5	3.8	7,225

11.3.2 Micronutrient Status of Young Children

Vitamin A is a micronutrient that is essential for the proper development of children's immune and visual systems. It is present in certain fruits and vegetables, such as pumpkin, red or yellow yams or squash, carrots, green leafy vegetables, mango, and paw-paw. Women in Nigeria should receive vitamin A supplements after childbirth. This enhances the micronutrient status of the mothers and their breastfeeding children and, consequently, the survival status of the child.

Table 11.8 shows the percentage of the youngest children under three years of age who consumed fruits and vegetables rich in vitamin A in the seven days preceding the survey. The data show that 43 percent of children ate such foods. The consumption of fruits and vegetables rich in vitamin A varies considerably by the age of the child and breastfeeding status. Although children under six months are recommended to receive no complementary foods, 6 percent received fruits and vegetables rich in vitamin A. The proportion increases from 21 percent among children age 6-9 months to 72 percent among children age 24-35 months. Nonbreastfeeding children are more than twice as likely to consume fruits and vegetables rich in vitamin A as breastfeeding children. This is expected since nonbreastfeeding children are older and should receive more complementary foods than the younger breastfeeding children. The consumption of fruits and vegetables rich in vitamin A is lowest in North Central (29 percent) and highest in South East (56 percent).

Table 11.8 Micronutrient intake among children

Percentage of youngest children under age three living with the mother who consumed fruits and vegetables rich in vitamin A in the seven days preceding the survey, and percentage of children age 6-59 months who received vitamin A supplements in the six months preceding the survey, by background characteristics, Nigeria 2003

Background characteristic	Children under age three living with the mother		Children age 6-59 months	
	Percentage who consumed fruits and vegetables rich in vitamin A ¹	Number of children	Percentage who received vitamin A supplements	Number of children
Age in months				
<6	6.4	659	na	na
6-9	20.8	460	30.8	478
10-11	40.1	184	32.6	189
12-23	58.7	949	31.2	999
24-35	71.8	724	40.0	1,050
36-47	na	na	31.2	1,067
48-59	na	na	34.1	899
Sex				
Male	40.7	1,497	34.3	2,370
Female	46.0	1,480	33.2	2,312
Birth order				
1	43.0	597	36.5	939
2-3	41.2	907	36.2	1,471
4-5	44.7	675	37.7	1,046
6+	44.7	798	25.3	1,226
Breastfeeding status				
Breastfeeding	30.0	1,980	27.8	1,397
Not breastfeeding	70.3	980	36.5	3,229
Missing	*	16	23.7	55
Residence				
Urban	49.4	907	48.9	1,438
Rural	40.7	2,070	27.0	3,244
Region				
North Central	29.2	437	32.4	693
North East	43.3	671	25.1	1,075
North West	44.7	1,046	15.2	1,584
South East	55.6	175	60.4	312
South South	50.5	378	55.8	597
South West	42.8	269	76.4	421
Mother's education				
No education	41.3	1,501	16.8	2,340
Primary	41.8	685	40.4	1,106
Secondary	47.6	690	58.8	1,053
Higher	53.7	101	65.6	182
Mother's age at birth				
<20	44.2	540	24.0	816
20-24	43.6	720	35.4	1,310
25-29	42.0	799	39.6	1,185
30-34	42.1	470	32.2	712
35-49	45.6	448	33.5	660
Wealth quintile				
Lowest	40.5	644	22.6	1,013
Second	42.6	630	18.4	977
Middle	46.3	599	24.5	959
Fourth	40.2	568	43.6	887
Highest	47.7	536	64.9	847
Total	43.3	2,977	33.7	4,682

Note: Information on vitamin A supplements is based on mother's recall. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. na = Not applicable

¹ Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A

Table 11.8 also shows that one-third of children age 6-59 months received vitamin A supplements in the six months preceding the survey. Children residing in urban areas and in the south are much more likely to receive vitamin A supplementation than those in rural areas and in the north. There is a positive relationship between mother's education and supplementation. Vitamin A supplementation ranges from a low of 17 percent for children of women with no education to a high of 66 percent for children of the most educated mothers. Less than one-quarter of children living in households in the three lowest wealth quintiles receive vitamin A supplementation, compared with 44 percent of children in the fourth quintile and 65 percent of children in the highest quintile.

11.3.3 Micronutrient Intake Among Women

A mother's nutritional status during pregnancy is important both for the child's intrauterine development and for protection against maternal morbidity and mortality. Table 11.9 shows that only one-fifth of women who gave birth in the five years preceding the survey received a vitamin A dose within two months of giving birth. There is variation in postpartum vitamin A supplementation by age at birth, residence, region, level of education, and wealth quintile. Supplementation is higher among women over 20 years of age than among younger women and much higher among women in the south than in the north. Urban women are more than twice as likely as rural women to have received a postpartum vitamin A dose. Furthermore, there is a positive relationship between education and household economic status and postpartum vitamin A supplementation.

Night blindness is an indicator of severe vitamin A deficiency, and pregnant women are especially prone to suffer from it. Table 11.9 shows that 8 percent of women with a recent birth reported that they experienced night blindness. After adjusting for women who also reported vision problems during the day, an estimated 2 percent of women suffered from night blindness. The small percentages make it difficult to examine variation among subgroups of Nigeria's population.

Anaemia usually results from a nutritional deficiency of iron, folate, vitamin B₁₂, or some other nutrients. Anaemia may have detrimental effects on the health of women and children and may become an underlying cause of maternal mortality and perinatal mortality. Anaemia also results in an increased risk of premature delivery and low birth weight. Early detection of anaemia can help to prevent complications related to pregnancy and delivery, as well as child-development problems. Anaemia is a serious concern for young children because it can result in impaired cognitive performance, behavioural and motor development, coordination, language development, and scholastic achievement, as well as increased morbidity from infectious diseases. It is recommended that iron tablets be taken daily for at least three months during pregnancy. Thus, information on the prevalence of iron supplementation can be useful for the development of health-intervention programs, such as iron-fortification programs, designed to prevent anaemia.

The 2003 NDHS asked women who had a recent birth whether they received or purchased any iron tablets during the last pregnancy. If so, the woman was asked to report the number of days that the tablets were actually taken during that pregnancy. Table 11.9 shows that one-fifth of women (21 percent) reported taking iron supplements for at least 90 days during the pregnancy, which is the recommended supplementation. Forty percent of women received no iron at all.

There is significant variation by background characteristics. Almost half of women in rural areas did not receive any iron supplementation, which is more than twice the proportion in urban areas. Pregnant women living in the South West are the most likely subgroup to have taken iron for at least 90 days (63 percent). This compares with just 10 percent of women in the North West. Iron supplementation is positively correlated with education and household economic status.

Table 11.9 Micronutrient intake among mothers

Among women who gave birth in the five years preceding the survey, percentage who received a vitamin A dose in the two months after delivery, percentage who had night blindness during pregnancy, and percent distribution by whether iron tablets or syrup were taken during pregnancy for specific numbers of days, by background characteristics, Nigeria 2003

Background characteristic	Received vitamin A dose post-partum ¹	Suffered night blindness during pregnancy		Number of days took iron tablets or syrup during pregnancy					Total	Number of women
		Reported	Adjusted ²	None	<60	60-89	90+	Don't know/missing		
Age at birth										
<20	11.1	7.3	2.7	48.5	25.4	5.1	13.6	7.4	100.0	719
20-24	18.4	7.5	3.1	40.5	23.9	6.6	20.9	8.1	100.0	921
25-29	24.2	7.1	1.5	34.7	25.7	6.2	24.1	9.3	100.0	965
30-34	20.3	8.9	1.4	37.5	25.4	4.8	23.3	9.0	100.0	628
35-49	23.2	8.0	2.1	38.8	25.6	3.4	23.5	8.7	100.0	678
Number of children ever born										
1	19.4	5.6	1.1	37.5	26.9	6.0	20.9	8.7	100.0	803
2-3	21.1	7.2	2.4	36.6	25.6	6.5	24.4	6.8	100.0	1,102
4-5	23.4	8.9	2.7	37.5	25.3	5.6	22.4	9.1	100.0	874
6+	15.4	8.5	2.4	46.1	23.5	3.7	17.3	9.5	100.0	1,132
Residence										
Urban	33.0	5.6	0.9	19.7	28.1	6.2	35.2	10.7	100.0	1,144
Rural	14.1	8.5	2.7	48.1	24.0	5.0	15.4	7.6	100.0	2,766
Region										
North Central	18.5	5.6	0.1	29.8	23.8	6.5	17.1	22.8	100.0	575
North East	11.5	11.1	3.8	45.2	25.0	6.7	20.6	2.6	100.0	862
North West	6.5	4.9	2.4	58.8	23.2	3.4	9.5	5.0	100.0	1,341
South East	51.7	5.3	0.3	4.0	39.4	5.3	30.9	20.4	100.0	222
South South	33.6	11.0	1.9	29.7	34.1	5.6	22.9	7.8	100.0	544
South West	48.0	9.3	2.3	9.4	13.1	7.4	63.4	6.7	100.0	367
Education										
No education	8.1	7.4	2.8	58.8	20.8	3.8	10.3	6.4	100.0	1,989
Primary	25.5	9.0	1.5	27.5	29.1	6.8	25.7	10.9	100.0	918
Secondary	34.7	7.5	2.0	14.0	29.5	7.1	38.1	11.3	100.0	862
Higher	51.1	3.8	0.0	8.3	36.0	8.0	42.2	5.5	100.0	143
Wealth quintile										
Lowest	10.3	15.5	5.5	61.0	21.0	3.2	8.1	6.7	100.0	852
Second	10.4	5.4	1.6	61.1	19.3	3.2	11.2	5.2	100.0	846
Middle	13.7	5.8	1.2	39.4	28.5	6.7	15.2	10.3	100.0	808
Fourth	24.2	5.0	1.1	21.8	30.3	6.8	29.0	12.1	100.0	735
Highest	45.2	5.6	1.0	6.0	28.4	7.8	49.1	8.8	100.0	670
Total	19.6	7.7	2.2	39.8	25.2	5.4	21.2	8.5	100.0	3,911

Note: For women with two or more live births in the five-year period, data refer to the most recent birth.

¹ In the first two months after delivery

² Women who reported night blindness but did not report difficulty with vision during the day

11.4 Nutritional Status of Children

Malnutrition places children at increased risk of morbidity and mortality and has also been shown to be related to impaired mental development. Anthropometry provides one of the most important indicators of children's nutritional status. Height and weight measurements were obtained for all children born in the five years preceding the 2003 NDHS. The height and weight data are used to compute the following three summary indices of nutritional status: height-for-age, weight-for-height, and weight-for-age. The indices are expressed as standardized scores (Z-scores) or standard deviation units from the median for the international reference population recommended by WHO. Children who fall more than two stan-

standard deviations below the reference median (-2 SD) are regarded as undernourished, while those who fall more than three standard deviations below the reference median (-3 SD) are considered severely undernourished. Table 11.10 shows the nutritional status of children under five years of age, by background characteristics.

Children whose height-for-age is below -2 SD from the median of the reference population are considered *stunted* or short for their age. Stunting is the outcome of failure to receive adequate nutrition over an extended period and is also affected by recurrent or chronic illness. Almost two in five children are short for their age; half of these undernourished children are severely stunted.

Children whose weight-for-height is below -2 SD from the median of the reference population are considered *wasted* (or thin). Wasting represents the failure to receive adequate nutrition in the period immediately before the survey and typically is the result of a recent episode of illness, especially diarrhoea, or a rapid deterioration in the food supply. Almost one in ten children is wasted.

Children whose weight-for-age is below -2 SD from the median of the reference population are considered *underweight*. The measure reflects the effects of both acute and chronic malnutrition. Twenty-nine percent of all children are underweight; almost one in three of these children is severely underweight.

Nutritional status varies substantially by background characteristics. The impact of weaning can be seen in younger children, whose nutritional status deteriorates after six months of age, when children are being weaned. Rural children and children of younger or less educated mothers are disadvantaged in terms of nutritional status. Children living in the North West stand out as being particularly disadvantaged in terms of nutritional status (Figure 11.2).

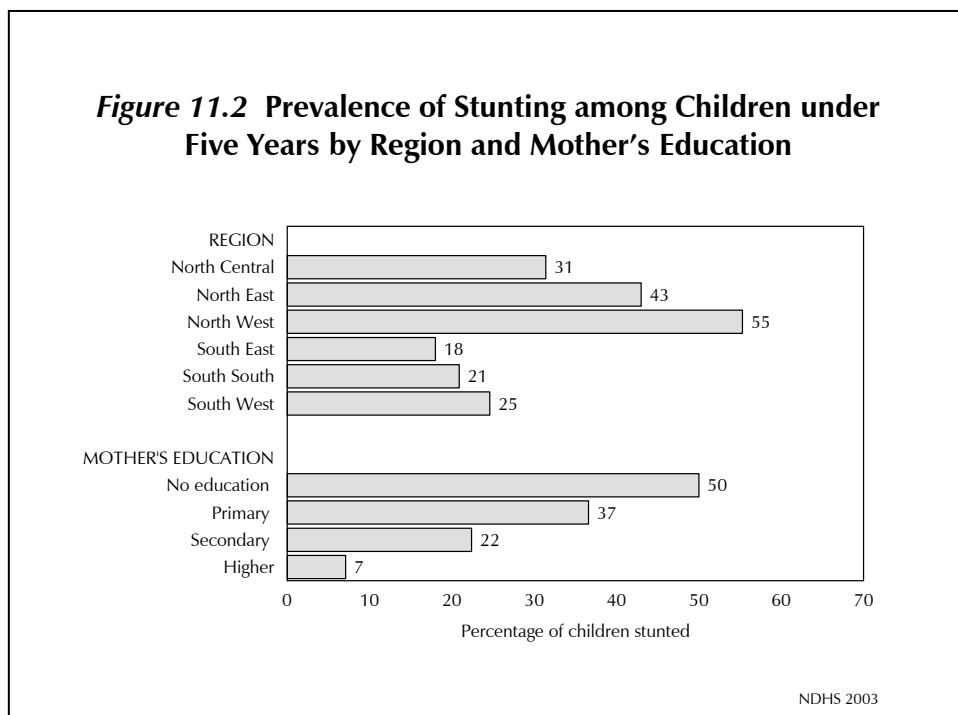


Table 11.10 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Nigeria 2003

Background characteristic	Height-for-age (stunted)			Weight-for-height (wasted)			Weight-for-age (underweight)			Number of children
	Percent-age below -3 SD	Percent-age below -2 SD ¹	Mean z-score -SD	Percent-age below -3 SD	Percent-age below -2 SD ¹	Mean z-score -SD	Percent-age below -3 SD	Percent-age below -2 SD ¹	Mean z-score -SD	
Age in months										
<6	2.7	7.4	-0.0	2.9	7.9	0.1	0.5	6.6	0.2	527
6-9	9.3	24.7	-0.9	3.5	14.2	-0.5	6.8	20.4	-1.1	425
10-11	17.1	36.2	-1.4	1.6	9.8	-0.3	10.9	31.7	-1.4	179
12-23	24.9	49.4	-2.0	4.0	15.0	-0.7	15.6	41.4	-1.8	889
24-35	21.7	43.3	-1.6	1.5	5.9	-0.4	11.3	34.8	-1.3	972
36-47	21.7	43.9	-1.7	1.7	8.0	-0.3	8.0	26.6	-1.3	985
48-59	23.6	41.3	-1.7	0.7	6.4	-0.3	5.8	27.9	-1.3	812
Sex										
Male	20.3	40.8	-1.5	2.2	9.3	-0.4	9.3	29.2	-1.2	2,390
Female	18.2	35.9	-1.4	2.2	9.2	-0.4	8.4	28.1	-1.2	2,399
Birth order²										
1	16.3	36.9	-1.4	2.2	9.3	-0.4	8.2	28.5	-1.2	885
2-3	18.9	36.1	-1.4	1.9	9.6	-0.3	9.3	28.5	-1.2	1,392
4-5	20.2	35.7	-1.4	2.0	8.0	-0.4	9.1	28.1	-1.2	1,009
6+	22.0	45.0	-1.7	2.6	10.0	-0.4	9.4	29.9	-1.3	1,143
Birth interval in months²										
First birth ³	16.3	36.8	-1.4	2.2	9.4	-0.4	8.2	28.6	-1.2	888
<24	27.1	44.5	-1.8	2.1	9.1	-0.4	12.1	33.0	-1.4	808
24-47	19.1	38.8	-1.5	2.1	8.7	-0.4	8.8	29.1	-1.2	2,092
48+	15.7	32.1	-1.2	2.4	11.0	-0.3	7.2	22.7	-1.0	641
Size at birth²										
Very small	27.7	50.4	-1.9	2.6	15.0	-0.6	16.6	42.2	-1.6	243
Small	21.4	42.2	-1.6	2.4	12.3	-0.7	13.8	37.9	-1.6	353
Average or larger	18.9	37.4	-1.4	2.2	8.6	-0.3	8.1	27.1	-1.2	3,801
Residence										
Urban	12.9	28.8	-1.1	1.6	8.3	-0.4	6.8	22.2	-1.0	1,553
Rural	22.3	42.9	-1.6	2.5	9.7	-0.4	9.9	31.8	-1.3	3,236
Region										
North Central	11.3	31.4	-1.1	1.2	5.5	-0.4	4.9	19.6	-1.0	758
North East	21.6	43.0	-1.6	1.2	7.9	-0.4	9.5	33.1	-1.4	1,089
North West	34.4	55.3	-2.2	3.8	12.5	-0.3	14.7	42.9	-1.6	1,452
South East	5.3	19.7	-0.5	0.7	4.9	0.0	2.1	8.5	-0.3	338
South South	6.3	20.9	-0.7	2.5	11.1	-0.5	6.4	18.0	-0.9	643
South West	8.6	24.6	-1.0	2.1	8.6	-0.4	4.7	19.1	-1.0	510
Mother's education⁴										
No education	28.7	50.0	-2.0	2.2	10.2	-0.4	11.7	37.6	-1.5	2,172
Primary	15.9	36.6	-1.4	2.6	9.4	-0.4	8.6	26.1	-1.2	1,105
Secondary	7.3	22.4	-0.8	2.3	6.9	-0.3	5.3	16.9	-0.8	1,068
Higher	2.3	7.1	-0.3	0.6	10.3	-0.3	2.1	8.9	-0.5	194
Mother's age⁴										
15-19	18.0	40.8	-1.5	4.1	12.0	-0.4	10.6	31.2	-1.3	294
20-24	23.9	41.8	-1.7	2.2	8.5	-0.4	11.3	34.5	-1.4	913
25-29	18.4	36.7	-1.4	2.6	9.1	-0.3	8.8	27.9	-1.1	1,389
30-34	19.7	37.7	-1.4	1.8	9.6	-0.4	8.8	29.2	-1.2	903
35-49	17.0	37.5	-1.4	1.9	9.0	-0.4	7.1	23.5	-1.2	1,039
Mother's status										
Mother interviewed	19.5	38.5	-1.5	2.2	9.3	-0.4	9.0	28.8	-1.2	4,429
Mother not interviewed but in household	16.4	34.8	-1.4	5.9	8.4	-0.3	8.3	26.4	-1.1	110
Mother not interviewed and not in the household ⁵	16.1	38.1	-1.2	0.8	8.1	-0.4	6.4	27.2	-1.1	247
Wealth quintile										
Lowest	26.4	48.8	-1.8	2.4	10.4	-0.4	10.8	34.8	-1.4	977
Second	26.0	47.7	-1.9	2.8	11.2	-0.4	12.0	37.5	-1.5	971
Middle	22.5	44.2	-1.6	2.6	8.1	-0.3	10.3	30.7	-1.3	954
Fourth	15.8	32.5	-1.3	1.6	8.2	-0.4	7.8	26.6	-1.2	934
Highest	5.2	17.9	-0.6	1.6	8.2	-0.3	3.4	13.4	-0.7	952
Total	19.2	38.3	-1.5	2.2	9.2	-0.4	8.9	28.7	-1.2	4,789

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation (SD) units from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the reference population (-3 SD and -2 SD) are considered malnourished. Table is based on children with valid dates of birth (month and year) and valid measurements (height and weight). Total includes 25 cases with missing information on size at birth.

¹ Includes children who are below -3 SD

² Excludes children whose mothers were not interviewed

³ First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

⁴ For women who were not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers were not listed in the household schedule.

⁵ Includes children whose mothers are dead

11.5 NUTRITIONAL STATUS OF WOMEN

The 2003 NDHS collected anthropometric data from all women age 15-49. Women's nutritional status is important both as an indicator of overall health and as a predictor of pregnancy outcome for both mother and child. Two indices of women's nutritional status—height and body mass index (BMI)—are presented in Table 11.11.

Maternal height is a measure of past nutritional status and reflects in part the cumulative effect of social and economic outcomes on access to nutritional foods during childhood and adolescence. It can be used to predict the risks associated with difficult deliveries since small stature is often associated with small pelvis size and a greater likelihood of obstructed labor. Short stature is also correlated with low birth weight in infants, high risk of stillbirths, and high rates of miscarriage. The height below which a woman is considered to be at nutritional risk is in the range of 140 to 150 centimeters. The mean height of Nigerian women is 158 centimeters, and varies little by background characteristics. However, short stature is more prevalent among teenagers, with 5 percent of women age 15-19 below 145 centimeters tall.

The BMI, which incorporates both height and weight and provides a better measure of thinness and obesity than weight alone, is defined as weight in kilograms divided by the square of the height in meters (kg/m^2). For the BMI, a cutoff of 18.5 has been recommended for indicating chronic energy deficiency among nonpregnant women. To avoid bias in the measurement of women's nutritional status, pregnant women and women who had given birth in the two months preceding the survey were excluded from the calculation of weight and body mass measures. Table 11.11 shows that the mean BMI of Nigerian women (22.3) falls well within the internationally accepted normal range. Almost two-thirds of women (64 percent) have BMIs in the normal range, 15 percent are thin, and 2 percent are severely thin. The youngest women are the most likely subgroup to be thin; one-quarter of women age 15-19 have a BMI of less than 18.5. There is significant regional variation, with the prevalence of thinness ranging from 7 percent in the North Central to 23 percent in the North East.

The BMI is also used to evaluate the proportion of women who are overweight or obese. A cutoff point of 25.0 has been recommended for defining overweight, while 30.0 is the cutoff point for defining obesity. According to the 2003 NDHS, one-fifth of Nigerian women weigh more than they should: 15 percent are overweight, and 6 percent are obese. There is a strong relationship between age and high BMI. For example, only 7 percent of women age 15-19 are overweight or obese, compared with one-third (34 percent) of women age 45-49. There are marked variations by residence, education, and household economic status.

Table 11.11 Nutritional status of women by background characteristics

Among women age 15-49, mean height, percentage under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, by background characteristics, Nigeria 2003

Background characteristic	Height			Body mass index BMI ¹ (kg/m ²)									
	Mean height in cm	Percent-age below 145 cm	Number of women	Normal		Thin			Overweight/obese			Number of women	
				Mean BMI	18.5-24.9 (normal)	<18.5 (thin)	17.0-18.4 (mildly thin)	16.0-16.9 (moderately thin)	<16.0 (severely thin)	≥25.0 (over-weight/obese)	25.0-29.9 (over-weight)		30.0 or higher (obese)
Age													
15-19	155.8	4.5	1,641	20.5	69.0	24.5	17.5	4.0	3.0	6.5	5.5	0.9	1,504
20-24	158.4	1.1	1,461	21.8	71.2	14.4	10.2	3.1	1.2	14.3	11.3	3.1	1,201
25-29	159.0	0.9	1,347	22.6	65.0	11.9	8.7	2.4	0.8	23.1	17.6	5.5	1,080
30-34	158.9	1.5	924	23.2	62.7	10.4	7.4	1.9	1.2	26.9	18.2	8.6	746
35-39	159.0	1.0	795	23.7	55.0	12.7	10.0	1.3	1.4	32.3	21.8	10.5	664
40-44	158.8	0.7	667	23.5	56.2	13.1	9.0	3.4	0.7	30.7	20.9	9.8	620
45-49	157.8	2.3	559	23.8	57.4	9.2	4.5	2.7	2.0	33.5	22.2	11.3	546
Residence													
Urban	159.0	1.3	2,544	23.2	59.2	13.1	9.1	2.4	1.6	27.7	18.1	9.6	2,258
Rural	157.6	2.2	4,850	21.8	67.1	16.3	11.6	3.1	1.6	16.6	13.0	3.6	4,105
Region													
North Central	157.8	1.5	1,086	23.1	70.3	6.6	5.3	1.0	0.3	23.1	16.9	6.2	944
North East	158.2	1.6	1,320	21.4	62.9	23.0	16.1	4.3	2.7	14.1	10.4	3.7	1,095
North West	157.2	2.5	2,022	21.5	65.3	19.7	12.9	4.3	2.5	15.0	10.7	4.2	1,630
South East	158.8	2.9	707	23.6	57.9	8.2	6.2	1.4	0.5	33.9	25.5	8.4	648
South South	158.3	1.3	1,308	22.9	64.2	11.1	8.7	1.6	0.8	24.7	16.8	8.0	1,173
South West	159.1	1.6	950	22.3	62.5	16.7	11.9	3.1	1.7	20.8	15.0	5.9	872
Education													
No education	157.5	2.1	3,052	21.6	65.4	19.8	13.5	4.2	2.1	14.8	11.2	3.5	2,503
Primary	157.3	2.5	1,606	22.6	64.8	12.8	9.4	1.9	1.4	22.4	16.4	6.0	1,385
Secondary	158.7	1.7	2,312	22.5	64.6	13.1	9.6	2.2	1.2	22.3	16.1	6.2	2,080
Higher	161.1	0.0	425	25.0	53.7	4.9	2.9	0.8	1.2	41.4	24.7	16.7	394
Wealth quintile													
Lowest	157.2	3.6	1,364	21.1	67.8	21.5	14.6	4.1	2.8	10.7	8.6	2.1	1,141
Second	157.4	1.3	1,386	21.3	70.0	18.2	12.8	3.6	1.8	11.8	9.0	2.8	1,155
Middle	157.4	2.1	1,464	22.0	66.7	16.0	11.2	3.4	1.3	17.4	12.7	4.6	1,238
Fourth	158.1	1.6	1,492	22.5	65.2	13.1	9.8	1.8	1.5	21.7	15.9	5.8	1,300
Highest	159.7	1.1	1,688	24.0	54.7	9.2	6.5	1.8	0.9	36.1	24.5	11.6	1,528
Total	158.0	1.9	7,394	22.3	64.3	15.2	10.7	2.9	1.6	20.5	14.8	5.8	6,362

¹ Excludes pregnant women and women with a birth in the preceding 2 months

Acquired immunodeficiency syndrome (AIDS) is one of the world's most serious public health concerns, and it poses an enormous challenge to most countries, especially developing countries such as Nigeria. The first case of human immunodeficiency virus (HIV) infection in Nigeria was recorded in 1986, and since then, rates of infection have been increasing.

Estimates of HIV prevalence have increased from 1.8 percent in 1991 to 4.5 percent in 1996, and the 2001 National HIV/Syphilis Sentinel Survey estimated a national HIV seroprevalence rate of 5.8 percent (FMOH, 2001). Regional prevalence rates varied significantly, from a high of 7.7 percent in the South South to a low of 3.3 percent in the North West.

The greatest concern is the projected mortality due to AIDS over the next few years and its socio-economic consequences. Projections of annual deaths caused by AIDS have increased in Nigeria from less than 50,000 in 1999 to about 350,000 by 2003-2004. The number of Nigerian children orphaned as a result of parental AIDS deaths is projected to be near 2 million in 2003-2004. AIDS deaths have economic, health, and social consequences for everyone in the country. The magnitude of the problem has renewed the vigour of the Federal Government of Nigeria to review the national HIV/AIDS policy.

The future course of the Nigerian AIDS epidemic will depend on the efforts of individuals, development partners, local and international nongovernmental organizations (NGOs), religious groups, and traditional institutions to curb the pandemic. A three-year HIV/AIDS Emergency Action Plan (HEAP) was initiated by the Federal Government of Nigeria (FGN) in 2001. The FGN has created the National Action Committee on AIDS (NACA) to do extensive work in collaboration with international development partners and local and international NGOs to mitigate the effects of HIV/AIDS. Strategies employ a multisectoral approach, working at national, state, and local government levels.

Data obtained from the 2003 Nigeria Demographic and Health Survey (NDHS) provide an invaluable resource for witnessing levels and trends of important factors related to HIV/AIDS. These data are intended to inform policy makers and programme planners in their strategies for programme planning and evaluation. This chapter presents information about knowledge, attitudes, and practices related to prevention and control of HIV/AIDS and care of people living with the virus.

12.1 KNOWLEDGE OF WAYS TO AVOID HIV/AIDS

Table 12.1 shows that awareness of AIDS in Nigeria is higher among men than women, with 97 percent of men and 86 percent of women reporting that they have "heard of AIDS." There is little variation in knowledge among men by background characteristics; however, there are significant differences among women. The lowest level of AIDS awareness is among women living in households ranked lowest on the wealth index (70 percent). Knowledge of AIDS among women ranges from a low of 76 percent in the North East to a high of 96 percent in the South East. Awareness of AIDS is universal for men and women with higher education (100 percent).

Two aspects of AIDS-related behaviour that AIDS prevention programmes focus their messages on are the use of condoms and limiting the number of sexual partners or staying faithful to one partner. These are considered programmatically important ways to prevent HIV transmission. To ascertain whether programmes have effectively communicated these messages, interviewers asked respondents

Table 12.1 Knowledge of AIDS

Percentage of women and men who have heard of AIDS, by background characteristics, Nigeria 2003

Background characteristic	Women		Men	
	Has heard of AIDS	Number of respondents	Has heard of AIDS	Number of respondents
Age				
15-19	82.8	1,716	92.9	453
20-24	87.4	1,494	97.8	426
25-29	89.7	1,382	98.2	328
30-39	87.9	1,757	99.0	519
40-49	84.0	1,271	97.4	367
15-24	84.9	3,210	95.3	880
Marital status				
Never married	88.4	1,926	95.7	1,048
Ever had sex	94.5	838	98.9	489
Never had sex	83.6	1,087	93.0	559
Married/living together	85.4	5,336	98.4	1,006
Divorced/separated/widowed	88.1	358	(96.4)	40
Residence				
Urban	94.7	2,629	99.0	792
Rural	81.9	4,991	95.9	1,301
Region				
North Central	84.5	1,121	97.1	313
North East	75.7	1,368	97.3	377
North West	86.6	2,095	99.3	529
South East	95.5	737	99.3	192
South South	90.3	1,342	92.1	385
South West	90.3	958	97.7	296
Education				
No education	77.9	3,171	95.9	385
Primary	86.6	1,628	92.8	519
Secondary	94.8	2,370	99.0	932
Higher	100.0	451	100.0	257
Wealth quintile				
Lowest	69.6	1,414	92.3	362
Second	79.9	1,439	95.8	360
Middle	88.5	1,513	99.1	392
Fourth	92.8	1,526	97.2	452
Highest	97.7	1,728	99.5	527
Total	86.3	7,620	97.0	2,093

Note: Figures in parentheses are based on 25-49 unweighted cases.

about these behaviours as ways of avoiding AIDS. If respondents reported that AIDS could be avoided, they were asked how “a person could avoid getting the HIV virus.” Two types of questions were asked about ways to avoid getting infected. First, an open-ended question was asked, and respondents were allowed to give all of the ways to avoid HIV/AIDS that they know of without prompting. Next, women and men were asked specific questions on whether condom use and (in a separate question) whether limiting their sexual activity to just one partner can reduce their chances of getting AIDS. Results are presented in Table 12.2.

Table 12.2 Knowledge of HIV prevention methods

Percentage of women and men who, in response to a prompted question, say that people can reduce the risk of getting the AIDS virus by using condoms and by having sex with just one partner who is not infected and who has no other partners, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Knowledge of HIV prevention by:			Number of women	Knowledge of HIV prevention by:			Number of men
	Using condoms	Limiting sex to one uninfected partner	Using condoms and limiting sex to one uninfected partner ¹		Using condoms	Limiting sex to one uninfected partner	Using condoms and limiting sex to one uninfected partner ¹	
Age								
15-19	38.6	53.3	36.5	1,716	58.2	64.8	52.0	453
20-24	47.8	63.0	44.9	1,494	67.8	80.6	65.1	426
25-29	51.3	64.4	49.3	1,382	69.2	86.7	65.4	328
30-39	46.6	61.4	44.1	1,757	67.2	87.3	64.0	519
40-49	39.1	58.0	37.1	1,271	54.1	82.8	52.1	367
15-24	42.9	57.8	40.4	3,210	62.8	72.4	58.4	880
Marital status								
Never married	47.9	63.0	45.6	1,926	65.9	75.6	61.3	1,048
Ever had sex	59.7	72.9	57.2	838	77.7	84.7	74.1	489
Never had sex	38.7	55.4	36.7	1,087	55.5	67.7	50.1	559
Married/living together	43.3	58.7	41.1	5,336	60.3	84.6	57.7	1,006
Divorced/separated/ widowed	46.8	60.4	43.7	358	(74.8)	(87.5)	(72.5)	40
Residence								
Urban	57.5	73.0	54.5	2,629	70.6	83.1	65.3	792
Rural	37.8	53.0	35.9	4,991	59.0	78.4	56.4	1,301
Region								
North Central	34.7	55.6	33.8	1,121	68.1	83.8	66.6	313
North East	34.7	50.6	34.0	1,368	47.5	80.2	45.7	377
North West	48.8	59.8	44.7	2,095	69.8	83.1	62.0	529
South East	43.6	77.3	42.2	737	79.4	85.1	75.5	192
South South	48.8	58.0	47.1	1,342	50.4	68.2	49.8	385
South West	56.3	67.4	52.4	958	73.5	83.4	69.0	296
Education								
No education	33.0	48.0	30.8	3,171	44.9	73.0	41.9	385
Primary	43.3	56.1	40.8	1,628	54.2	74.8	52.2	519
Secondary	55.6	72.5	53.4	2,370	71.4	82.4	66.7	932
Higher	73.7	91.1	70.5	451	80.5	93.8	76.4	257
Wealth quintile								
Lowest	25.0	37.1	23.6	1,414	42.1	66.5	40.4	362
Second	31.1	46.5	29.1	1,439	57.5	79.0	54.7	360
Middle	47.5	61.9	45.2	1,513	68.4	86.5	65.3	392
Fourth	53.4	67.9	50.3	1,526	64.4	82.2	61.8	452
Highest	61.8	80.7	59.2	1,728	77.4	84.0	70.6	527
Total	44.6	59.9	42.3	7,620	63.4	80.2	59.8	2,093

Note: Figures in parentheses based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Knowledge Indicator 1 "Knowledge of HIV prevention methods"

Knowledge of prevention of AIDS is not quite as widespread as knowledge of the disease itself. Limiting the number of sexual partners is acknowledged by more Nigerians of all backgrounds as a means to avoid AIDS, compared with use of condoms. Forty-five percent of women and 63 percent of men report knowledge of condom use for HIV/AIDS protection. On the other hand, six in ten women and eight in ten men report knowing that limiting the number of sexual partners is a way to avoid HIV/AIDS.

More men than women know about condom use and limiting partners as ways to avoid AIDS, although patterns of knowledge by background characteristics are similar for both women and men. The youngest women and men (age 15-19) are somewhat less likely than older women and men to know these specific ways to avoid transmission of HIV. This is important because sexual debut often occurs before age 20. Variation by education is particularly striking among both women and men. Knowledge of condom use to avoid AIDS ranges from a low of 33 percent among women with no education to a high of 74 percent among those with higher education. Knowledge among men increases steadily with education as well, from a low of 45 percent among men with no education to a high of 81 percent among men with higher education.

12.2 BELIEFS ABOUT AIDS

The 2003 NDHS also inquired about common misconceptions regarding AIDS and HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have the AIDS virus; results are presented in Tables 12.3.1 and 12.3.2 by background characteristics. The tables also present the percentage of the population who know that the common misconceptions regarding transmission of AIDS are not true, in particular, that a person cannot get AIDS from mosquito bites, from witchcraft or other supernatural means, or from sharing food with a person who has AIDS. The tables also show the percentage of the population who know both that it is possible for a healthy-looking person to have AIDS and that the two most common misconceptions regarding transmission (AIDS can be transmitted via mosquito bites or by supernatural means) are not true.

Once again, levels of knowledge are higher among men than among women, and the greatest variability in knowledge is seen by level of education. Overall, about half of women (53 percent) and nearly three-quarters of men (73 percent) know that a healthy-looking person can have AIDS. There are greater gaps in knowledge regarding modes of transmission than knowledge of whether or not a healthy-looking person can have the AIDS virus. For each of the misconceptions regarding transmission of AIDS, approximately four in ten women know that it is not really a mode of transmission; the percentages for men are slightly higher. Respondents who know that a healthy-looking person can have the AIDS virus and who also reject the two most common misconceptions regarding transmission of the AIDS virus are in the minority: 21 percent of women and 28 percent of men. There is room for growth in educating the population about the modes of transmission of the AIDS virus. The lowest levels of knowledge are among persons with no education or primary education.

Table 12.3.1 Beliefs about AIDS: women

Percentage of women who, in response to a prompted question, correctly reject local misconceptions about AIDS transmission or prevention, and who know that a healthy-looking person can have the AIDS virus, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who know that:				Percentage who reject two most common misconceptions and say that a healthy-looking person can have the AIDS virus ¹	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by witchcraft or other supernatural means	A person cannot become infected by sharing food with someone with AIDS		
Age						
15-19	46.3	32.1	36.0	40.5	17.0	1,716
20-24	59.4	41.9	42.3	50.6	24.8	1,494
25-29	59.0	40.3	43.8	49.6	22.7	1,382
30-39	53.0	36.8	41.2	43.8	20.7	1,757
40-49	50.6	33.6	36.7	40.8	19.1	1,271
15-24	52.4	36.7	38.9	45.2	20.6	3,210
Marital status						
Never married	58.8	41.2	43.4	51.8	23.7	1,926
Ever had sex	69.2	45.8	46.9	59.5	28.0	838
Never had sex	50.7	37.7	40.7	45.9	20.4	1,087
Married/living together	51.4	35.5	39.3	42.3	19.9	5,336
Divorced/separated/widowed	54.3	33.1	32.2	46.6	17.6	358
Residence						
Urban	68.6	49.8	51.1	59.0	29.9	2,629
Rural	45.4	30.0	34.1	37.5	15.9	4,991
Region						
North Central	43.3	26.3	29.8	35.6	11.9	1,121
North East	45.4	25.5	35.2	35.0	16.6	1,368
North West	52.3	43.2	42.5	48.0	23.7	2,095
South East	67.1	52.7	57.4	64.8	33.5	737
South South	53.6	31.3	30.3	42.2	14.3	1,342
South West	68.4	47.3	53.3	52.0	29.9	958
Education						
No education	40.4	28.1	31.8	32.7	14.9	3,171
Primary	48.4	30.5	35.0	36.0	15.8	1,628
Secondary	66.9	45.7	48.7	59.4	25.7	2,370
Higher	92.2	75.1	69.5	87.2	54.3	451
Wealth quintile						
Lowest	33.0	19.1	21.0	23.3	9.7	1,414
Second	41.4	25.3	30.4	31.2	14.2	1,439
Middle	51.8	34.5	41.3	42.2	18.0	1,513
Fourth	57.6	43.3	44.1	52.8	22.5	1,526
Highest	77.8	57.4	58.6	69.5	36.2	1,728
Total	53.4	36.9	40.0	44.9	20.8	7,620

Note: The two most common local misconceptions involve transmission by mosquito bites and by witchcraft or other supernatural means.
¹ Corresponds to UNAIDS Knowledge Indicator 2 "No incorrect beliefs about AIDS"

Table 12.3.2 Beliefs about AIDS: men

Percentage of men who, in response to a prompted question, correctly reject local misconceptions about AIDS transmission or prevention, and who know that a healthy-looking person can have the AIDS virus, by background characteristics, Nigeria 2003

Background characteristic	Percentage of men who know that:				Percentage who reject two most common misconceptions and say that a healthy-looking person can have the AIDS virus ¹	Number of men
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by witchcraft or other supernatural means	A person cannot become infected by sharing food with someone with AIDS		
Age						
15-19	55.8	32.9	47.9	45.2	17.3	453
20-24	74.2	44.4	55.7	64.1	29.1	426
25-29	82.6	49.4	58.6	67.7	33.2	328
30-39	81.9	53.5	54.8	65.0	35.1	519
40-49	72.6	42.7	53.9	53.6	25.3	367
15-24	64.7	38.5	51.7	54.4	23.0	880
Marital status						
Never married	69.7	43.7	54.9	61.0	27.6	1,048
Ever had sex	79.8	52.0	59.5	70.5	34.0	489
Never had sex	60.9	36.5	50.8	52.7	21.9	559
Married/living together	76.5	45.1	53.3	56.4	28.5	1,006
Divorced/separated/ widowed	(80.5)	(55.5)	(45.4)	(68.3)	(27.2)	40
Residence						
Urban	82.1	55.0	59.0	68.4	37.5	792
Rural	67.8	38.3	50.8	53.2	22.2	1,301
Region						
North Central	67.9	35.7	47.0	53.1	18.2	313
North East	69.5	47.5	44.5	51.4	20.0	377
North West	77.5	38.9	59.3	56.5	25.2	529
South East	82.3	42.6	47.4	73.9	28.5	192
South South	64.4	46.5	52.8	60.3	33.1	385
South West	81.3	59.6	69.3	67.8	46.6	296
Education						
No education	59.2	30.4	45.7	44.5	14.8	385
Primary	67.1	38.0	43.5	46.2	19.6	519
Secondary	77.7	46.9	56.9	64.9	29.9	932
Higher	89.8	71.1	76.5	84.8	58.0	257
Wealth quintile						
Lowest	55.9	26.5	40.0	36.8	11.7	362
Second	67.2	34.7	45.5	47.8	18.8	360
Middle	72.3	39.9	58.0	61.1	23.2	392
Fourth	80.0	54.8	56.7	64.7	34.1	452
Highest	83.9	58.7	63.8	75.3	43.9	527
Total	73.2	44.6	53.9	59.0	28.0	2,093

Note: The two most common local misconceptions involve transmission by mosquito bites and by witchcraft or other supernatural means. Figures in parentheses are based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Knowledge Indicator 2 "No incorrect beliefs about AIDS"

12.3 STIGMA AND DISCRIMINATION

Knowledge and beliefs about AIDS affect how people treat others whom they know to be living with HIV. To ascertain the level to which people are accepting of others who are living with HIV, the 2003 NDHS asked several questions regarding behavioural treatment of persons with AIDS. Results are presented in Tables 12.4.1 and 12.4.2, which excludes the 14 percent of women and 3 percent of men who reported that they have never heard of an illness called AIDS. Respondents were asked whether or not they would be willing to take on the care of a relative with HIV in their own household. Overall, four in ten respondents reported that they would be willing to care for a sick relative in their own household. Only one-quarter of respondents in the South West reported that they would do so.

Table 12.4.1 Accepting attitudes towards those living with HIV: women

Percentage of women expressing accepting attitudes toward people with HIV, by background characteristics, Nigeria 2003

Background characteristic	Percentage of women who:					Number of women who have heard of HIV/AIDS
	Are willing to care for a family member with HIV at home	Would buy fresh vegetables from shopkeeper with AIDS	Believe HIV-positive female teacher should be allowed to keep teaching	Believe HIV-positive status of a family member does not need to remain a secret	Percentage expressing accepting attitudes on all four measures ¹	
Age						
15-19	41.8	19.3	23.6	54.2	2.1	1,420
20-24	45.8	21.8	24.7	56.7	3.0	1,305
25-29	41.4	21.2	25.3	63.0	4.4	1,240
30-39	45.5	19.1	22.0	64.5	3.6	1,545
40-49	44.6	15.8	18.5	67.1	3.4	1,067
15-24	43.7	20.5	24.2	55.4	2.5	2,725
Marital status						
Never married	47.3	26.3	27.4	55.3	4.5	1,702
Ever had sex	51.0	31.6	32.3	56.1	6.1	793
Never had sex	44.0	21.8	23.2	54.6	3.2	909
Married/living together	42.3	17.3	21.6	62.7	2.7	4,559
Divorced/separated/widowed	47.1	15.5	19.3	64.1	4.5	316
Residence						
Urban	46.1	26.1	27.7	59.0	4.1	2,490
Rural	42.5	15.6	20.1	62.0	2.8	4,087
Region						
North Central	47.5	18.5	16.9	58.5	2.9	947
North East	51.0	12.7	20.3	68.3	3.6	1,036
North West	47.5	18.7	25.9	55.5	2.6	1,813
South East	59.8	26.7	29.2	49.8	2.7	704
South South	32.5	22.2	23.7	68.1	5.2	1,212
South West	26.4	21.2	20.6	64.6	2.5	865
Education						
No education	43.7	12.1	18.7	61.9	2.1	2,470
Primary	38.8	16.1	18.2	64.4	2.2	1,410
Secondary	44.5	25.8	27.3	58.2	4.3	2,246
Higher	57.3	40.4	39.9	57.1	8.4	451
Wealth quintile						
Lowest	37.1	10.6	14.2	62.7	1.1	984
Second	44.0	12.2	19.4	63.9	3.2	1,150
Middle	42.6	15.3	22.6	66.9	2.5	1,339
Fourth	45.3	22.2	23.2	61.1	3.6	1,415
Highest	47.3	30.9	30.6	52.7	4.9	1,689
Total	43.8	19.6	23.0	60.9	3.3	6,577

¹ Corresponds to UNAIDS Stigma and Discrimination Indicator 1 "Accepting attitudes towards those living with HIV"

To assess personal attitudes towards others known to be living with AIDS, the 2003 NDHS asked respondents whether they would be willing to purchase fresh vegetables from a seller who has the AIDS virus, whether they believe a female teacher who has the AIDS virus should be permitted to continue teaching, and whether or not they would want the status of a family member with the AIDS virus to remain a secret. These results are also presented in Tables 12.4.1 and 12.4.2. Only 20 percent of women and 28 percent of men say that they would purchase fresh vegetables from a person with the AIDS virus. Only 23 percent of women and 27 percent of men believe that a female teacher with the AIDS virus should be allowed to continue teaching in school. A majority of respondents (61 percent of women and 70 percent of men), however, say that they believe that the HIV-positive status of a family member does not need to remain a secret.

Table 12.4.2 Accepting attitudes towards those living with HIV: men

Percentage of men expressing accepting attitudes toward people with HIV, by background characteristics, Nigeria 2003

Background characteristic	Percentage of men who:					Number of men who have heard of HIV/AIDS
	Are willing to care for a family member with HIV at home	Would buy fresh vegetables from shopkeeper with AIDS	Believe HIV-positive female teacher should be allowed to keep teaching	Believe HIV-positive status of a family member does not need to remain a secret	Percentage expressing accepting attitudes on all four measures ¹	
Age						
15-19	34.8	19.3	15.5	59.4	3.1	421
20-24	39.8	30.4	27.5	73.3	5.9	417
25-29	43.4	36.3	32.0	72.0	7.8	322
30-39	44.4	29.6	33.2	74.2	9.1	514
40-49	36.7	26.6	25.4	71.8	6.6	357
15-24	37.3	24.8	21.5	66.3	4.5	838
Marital status						
Never married	39.6	29.1	24.7	66.6	6.2	1,003
Ever had sex	45.1	35.4	28.8	74.5	9.3	484
Never had sex	34.6	23.2	20.9	59.3	3.3	519
Married/living together	40.2	27.0	29.0	73.4	7.0	990
Divorced/separated/ widowed	(42.3)	(32.2)	(24.0)	(81.6)	(4.9)	38
Residence						
Urban	35.1	34.2	32.3	68.0	7.1	784
Rural	43.0	24.3	23.4	71.6	6.2	1,247
Region						
North Central	56.6	21.3	20.0	73.0	5.7	304
North East	31.4	31.7	25.0	72.3	6.3	367
North West	42.1	27.9	31.5	63.6	5.0	525
South East	36.0	24.3	33.7	58.8	4.6	191
South South	46.9	33.0	29.2	69.6	13.9	355
South West	23.3	28.0	20.3	84.6	2.8	289
Education						
No education	35.1	18.6	22.0	67.2	2.8	369
Primary	36.3	22.0	20.5	71.7	4.4	482
Secondary	40.6	26.9	26.9	71.2	6.3	923
Higher	51.4	58.1	45.0	68.1	16.8	257
Wealth quintile						
Lowest	36.4	13.3	16.4	67.9	1.2	334
Second	40.6	25.5	22.8	74.8	5.9	345
Middle	48.6	28.8	26.8	73.4	7.3	388
Fourth	32.6	30.5	24.4	70.2	6.6	439
Highest	41.4	36.9	38.1	66.2	9.8	524
Total	39.9	28.2	26.8	70.2	6.6	2,031

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Stigma and Discrimination Indicator 1 "Accepting attitudes towards those living with HIV"

The percentage of the population expressing the most accepting attitudes towards persons living with the AIDS virus is presented in the last percentage column of the table. This is the percentage of respondents who reported in the affirmative for all four behaviours presented in the table: they would care for an HIV-positive family member in their own home, they would buy fresh vegetables from a shopkeeper with AIDS, they would allow an HIV-positive teacher to continue teaching, and they would not keep the HIV-positive status of a family member a secret. Only 3 percent of women and 7 percent of men report acceptance on all four indicators.

12.4 KNOWLEDGE OF MOTHER-TO-CHILD TRANSMISSION

AIDS education programmes include not only informing the population on how to avoid becoming infected with HIV, but also informing them what people living with the illness can do to prevent its transmission to other people. Table 12.5 shows the percentage of respondents who know that HIV can be transmitted from a mother to her child via breastfeeding. Overall, about half of the population know that mother-to-child transmission of HIV is possible through breastfeeding. This knowledge increases with increasing education. Few people (less than one in ten) know that a woman living with HIV can take drugs during pregnancy to reduce the risk of transmission.

Table 12.5 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of women and men who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by the mother taking special drugs during pregnancy, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking drugs during pregnancy ¹	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking drugs during pregnancy ¹	Number of men
Age								
15-19	40.8	5.2	4.5	1,716	44.6	3.7	3.2	453
20-24	48.9	7.0	5.9	1,494	62.3	6.2	5.5	426
25-29	50.8	7.7	6.6	1,382	65.0	6.1	3.9	328
30-39	45.5	5.6	4.4	1,757	60.3	10.4	8.3	519
40-49	44.7	5.4	4.7	1,271	50.9	10.7	9.6	367
15-24	44.6	6.1	5.1	3,210	53.2	4.9	4.3	880
Marital status								
Never married	53.1	6.3	5.1	1,926	55.0	5.9	4.7	1,048
Ever had sex	62.8	7.4	5.6	838	64.9	6.3	5.1	489
Never had sex	45.7	5.4	4.7	1,087	46.4	5.7	4.3	559
Married/living together	43.4	6.0	5.2	5,336	57.7	9.2	7.8	1,006
Divorced/separated/widowed	45.1	7.1	5.1	358	(57.5)	(4.3)	(4.3)	40
Residence								
Urban	57.1	8.2	6.7	2,629	57.4	8.4	7.4	792
Rural	40.1	5.0	4.4	4,991	55.8	6.9	5.4	1,301
Region								
North Central	48.3	7.7	7.4	1,121	70.2	8.5	7.9	313
North East	34.6	5.3	4.5	1,368	50.5	10.5	8.4	377
North West	33.0	7.3	6.0	2,095	56.5	7.9	6.5	529
South East	64.2	6.9	4.8	737	58.8	8.8	5.4	192
South South	58.8	5.5	4.5	1,342	60.9	2.9	2.9	385
South West	55.8	3.3	2.8	958	41.7	6.9	5.6	296
Education								
No education	28.9	4.1	3.6	3,171	42.4	4.7	4.3	385
Primary	45.2	4.7	4.2	1,628	45.7	5.1	3.4	519
Secondary	63.5	7.6	6.3	2,370	64.4	5.7	5.0	932
Higher	76.3	18.0	13.4	451	69.6	23.0	18.8	257
Wealth quintile								
Lowest	26.6	2.2	1.7	1,414	41.5	4.7	4.6	362
Second	34.0	3.4	3.1	1,439	51.8	6.4	6.4	360
Middle	45.4	6.1	5.2	1,513	62.3	8.8	5.5	392
Fourth	52.0	7.0	6.0	1,526	58.9	5.9	4.9	452
Highest	66.9	10.9	8.9	1,728	63.2	10.4	8.5	527
Total	45.9	6.1	5.2	7,620	56.4	7.5	6.2	2,093

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Knowledge Indicator 5 "Knowledge of prevention of mother to child transmission of HIV"

12.5 HIV TESTING AND COUNSELLING

The 2003 NDHS asked all respondents who have heard of AIDS whether or not they have ever been tested for the illness, how long ago they were tested, and whether they received the test results the most recent time they were tested. Table 12.6 shows that 6 percent of women and 14 percent of men have ever been tested and received the results of their HIV test. Only 3 percent of women and 6 percent of men have been tested and received results during the 12 months preceding the survey. The likelihood of having been tested and receiving the results has a strong positive correlation with education and the wealth index. The vast majority of the population (approximately eight in ten) have never been tested for HIV.

Table 12.6 Population who had an HIV test and received test results

Percent distribution of women and men by HIV testing status, and percentage of women and men who were tested for HIV and received test results in the past 12 months, according to background characteristics, Nigeria 2003

Background characteristic	Women							Men						
	Ever tested		Never tested	Don't know/missing	Total	Percentage who were tested and received results in past 12 months	Number of women	Ever tested		Never tested	Don't know/missing	Total	Percentage who were tested and received results in past 12 months	Number of men
	Received results	No results						Received results	No results					
Age														
15-19	2.5	0.4	80.0	17.2	100.0	1.7	1,716	3.2	1.1	88.6	7.1	100.0	1.3	453
20-24	6.9	0.5	79.9	12.7	100.0	3.3	1,494	10.5	0.8	86.5	2.2	100.0	7.5	426
25-29	11.4	1.1	77.0	10.5	100.0	5.3	1,382	12.5	0.5	85.2	1.8	100.0	7.1	328
30-39	6.9	0.9	79.9	12.3	100.0	3.2	1,757	22.0	0.6	76.3	1.2	100.0	8.1	519
40-49	5.0	0.4	78.6	16.0	100.0	1.8	1,271	19.1	1.5	76.9	2.6	100.0	5.6	367
15-24	4.5	0.4	79.9	15.1	100.0	2.5	3,210	6.7	0.9	87.6	4.7	100.0	4.3	880
Marital status														
Never married	6.7	0.5	81.1	11.6	100.0	3.8	1,926	9.2	0.9	85.6	4.4	100.0	5.2	1,048
Ever had sex	12.8	0.9	80.9	5.5	100.0	7.3	838	17.0	1.0	80.8	1.3	100.0	10.0	489
Never had sex	2.1	0.3	81.3	16.4	100.0	1.0	1,087	2.3	0.8	89.9	7.0	100.0	1.0	559
Married/living together	6.1	0.7	78.5	14.7	100.0	2.6	5,336	18.1	0.9	79.4	1.6	100.0	6.4	1,006
Divorced/separated/widowed	8.6	0.6	79.0	11.9	100.0	4.9	358	(16.3)	(0.0)	(80.1)	(3.6)	(100.0)	(9.2)	40
Residence														
Urban	11.8	0.7	82.1	5.4	100.0	5.3	2,629	16.3	0.8	81.7	1.2	100.0	7.5	792
Rural	3.6	0.6	77.6	18.2	100.0	1.8	4,991	11.9	0.9	83.0	4.1	100.0	4.9	1,301
Region														
North Central	5.3	0.5	78.7	15.5	100.0	3.2	1,121	18.9	1.0	77.1	2.9	100.0	9.6	313
North East	1.3	0.1	74.3	24.3	100.0	0.7	1,368	12.6	1.8	82.8	2.7	100.0	6.0	377
North West	1.1	0.1	85.0	13.8	100.0	0.4	2,095	4.2	0.8	94.2	0.7	100.0	1.2	529
South East	22.9	0.2	72.4	4.5	100.0	9.3	737	25.4	0.4	73.5	0.7	100.0	11.5	192
South South	9.3	1.6	79.4	9.7	100.0	5.3	1,342	13.8	0.2	78.0	7.9	100.0	5.7	385
South West	9.8	1.7	78.7	9.7	100.0	4.0	958	17.8	0.7	78.8	2.7	100.0	6.6	296
Education														
No education	0.8	0.2	76.7	22.2	100.0	0.3	3,171	2.0	1.0	93.0	4.1	100.0	1.1	385
Primary	3.7	1.0	81.7	13.6	100.0	2.0	1,628	11.2	1.1	80.5	7.2	100.0	4.6	519
Secondary	12.2	0.7	81.8	5.2	100.0	5.5	2,370	14.6	0.8	83.7	1.0	100.0	6.1	932
Higher	25.0	2.2	72.8	0.0	100.0	12.7	451	32.3	0.8	66.5	0.4	100.0	15.0	257
Wealth quintile														
Lowest	1.2	0.1	68.2	30.6	100.0	0.4	1,414	6.1	1.5	84.7	7.7	100.0	2.9	362
Second	1.6	0.7	77.6	20.1	100.0	1.0	1,439	5.9	0.6	89.3	4.2	100.0	2.3	360
Middle	2.3	0.6	85.5	11.5	100.0	1.3	1,513	9.2	1.7	88.1	0.9	100.0	3.7	392
Fourth	6.5	0.7	85.6	7.2	100.0	2.5	1,526	15.7	0.0	81.4	2.8	100.0	6.7	452
Highest	18.2	1.1	78.2	2.5	100.0	8.9	1,728	25.3	0.8	73.2	0.7	100.0	11.4	527
Total	6.4	0.7	79.2	13.8	100.0	3.0	7,620	13.6	0.9	82.5	3.0	100.0	5.9	2,093

Note: Figures in parentheses are based on 15-49 unweighted cases.

An appropriate opportunity for educating women about HIV/AIDS arises when they go for an antenatal visit during pregnancy. Table 12.7 shows the percentage of women who received any information or counselling regarding AIDS during an antenatal visit, among women who gave birth during the two years preceding the survey. Overall, almost one-quarter of women received counselling about HIV/AIDS during an antenatal care visit. A majority of women in the South East and South West (about six in ten) received AIDS counselling. Among women in other regions, those who received any information were in the minority, especially in the North East and North West, where less than two in ten women received counselling about HIV/AIDS regarding AIDS. The percentage of women who received information or counseling during an antenatal care visit rises steadily with increasing education and increasing wealth quintile.

12.6 SEXUAL NEGOTIATION, ATTITUDES, AND COMMUNICATION

In an effort to assess the ability of women to negotiate safer sex with a spouse who has a sexually transmitted infection (STI), all respondents were asked two attitudinal questions. They were asked whether a wife is justified in refusing to have sex with her husband if she knows her husband has an STI and whether such a wife is justified in asking that her husband use a condom. Overall, about nine in ten Nigerians report that a woman may either refuse to have sex with her husband or ask him to wear a condom if she knows he has an STI (Table 12.8). More men than women report that a woman is justified in either behaviour, although both men and women are more likely to report that a woman may refuse to have sex than to propose using a condom. While there is no particular pattern in attitudes by education, the percentage of people who believe that a woman can propose condom use increases with increasing the education. Regions in which people are the least likely to believe a woman can propose condom use are in South South among men and in the North Central among women.

Table 12.7 Pregnant women counselled about HIV

Among women who gave birth in the two years preceding the survey, percentage who were counselled about HIV during antenatal care visit for the most recent birth, by background characteristics, Nigeria 2003

Background characteristic	Counselled about HIV during antenatal visit	Number of women who gave birth in the past 2 years
Age		
15-19	11.9	271
20-24	19.7	589
25-29	29.4	709
30-39	28.2	721
40-49	22.0	157
15-24	17.2	860
Marital status		
Never married	23.3	71
Married/living together	24.4	2,321
Divorced/separated/ widowed	22.6	55
Residence		
Urban	44.4	701
Rural	16.2	1,746
Region		
North Central	22.8	361
North East	14.9	554
North West	11.4	863
South East	58.8	137
South South	38.1	308
South West	59.9	223
Education		
No education	8.4	1,239
Primary	28.4	588
Secondary	49.5	542
Higher	71.3	78
Wealth quintile		
Lowest	8.7	530
Second	11.1	538
Middle	18.9	487
Fourth	32.0	477
Highest	58.9	414
Total	24.3	2,447

Table 12.8 Attitudes toward negotiating safer sex with husband

Percentage of women and men who believe that, if a husband has an STI, his wife can either refuse to have sex with him or propose condom use, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Woman is justified to:				Woman is justified to:			
	Refuse sex	Propose condom use	Refuse sex or propose condom use ¹	Number of women	Refuse sex	Propose condom use	Refuse sex or propose condom use ¹	Number of men
Age								
15-19	73.5	64.3	81.1	1,716	80.9	70.3	87.0	453
20-24	84.1	76.5	90.9	1,494	90.8	84.8	96.0	426
25-29	88.3	79.7	93.2	1,382	93.5	85.0	97.1	328
30-39	87.0	74.4	90.8	1,757	96.9	84.9	98.4	519
40-49	85.9	70.4	91.0	1,271	94.2	78.3	95.9	367
15-24	78.5	70.0	85.6	3,210	85.7	77.3	91.4	880
Marital status								
Never married	75.3	69.7	84.1	1,926	86.9	78.7	91.9	1,048
Ever had sex	87.2	82.2	95.3	838	90.4	87.2	96.6	489
Never had sex	66.2	60.1	75.5	1,087	83.9	71.2	87.8	559
Married/living together	86.0	73.9	90.8	5,336	95.5	82.3	97.7	1,006
Divorced/separated/ widowed	89.1	74.4	90.7	358	(95.4)	(87.3)	(97.8)	40
Residence								
Urban	86.3	80.4	92.4	2,629	93.5	86.1	97.1	792
Rural	82.0	68.9	87.3	4,991	89.8	77.2	93.4	1,301
Region								
North Central	77.1	55.2	80.6	1,121	93.5	84.7	98.2	313
North East	90.1	74.0	92.2	1,368	96.7	79.2	98.6	377
North West	83.6	76.6	89.5	2,095	93.6	85.4	96.8	529
South East	71.5	70.8	85.8	737	94.1	91.7	99.3	192
South South	86.2	79.0	92.2	1,342	77.1	64.1	81.0	385
South West	86.3	76.6	91.8	958	94.0	83.6	97.8	296
Education								
No education	83.1	66.6	87.2	3,171	92.4	69.8	94.7	385
Primary	81.5	71.3	86.9	1,628	88.4	78.3	91.7	519
Secondary	83.3	79.4	91.4	2,370	91.5	83.2	95.5	932
Higher	93.9	88.3	97.7	451	93.8	91.7	98.6	257
Wealth quintile								
Lowest	81.2	62.1	85.6	1,414	88.7	69.8	90.8	362
Second	82.0	66.9	87.1	1,439	91.5	72.3	94.2	360
Middle	81.4	71.8	86.6	1,513	93.4	85.4	97.3	392
Fourth	86.4	78.7	91.5	1,526	88.2	81.4	92.2	452
Highest	85.7	82.4	93.7	1,728	93.6	89.4	98.3	527
Total	83.5	72.8	89.1	7,620	91.2	80.6	94.8	2,093

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Sexual Negotiation Indicator 1 "Women's ability to negotiate safer sex with husband"

Men's attitudes towards condoms directly affect their inclination to use them. Men were asked whether they agree with a series of statements regarding condoms; results are presented in Table 12.9. Thirty percent of men agreed with the statement that condoms are inconvenient to use, and thirty-seven percent agreed with the statement that condoms reduce sexual pleasure. Most men know that condoms cannot be reused, although one-quarter agreed with the statement that condoms break easily. Thirty percent of men agreed with the statement that a woman has no right to tell a man to use a condom. Sixty-three percent of men agree with the statement that a condom protects against disease. These questions were asked regardless of whether or not the respondent had ever used a condom.

Table 12.9 Men's attitude toward condoms

Percentage of men who agree with specific statements about condoms, by background characteristics, Nigeria 2003

Background characteristic	Percentage of men who agree with the following statements:							Number of men
	Condoms diminish a man's sexual pleasure	A condom is very inconvenient to use	A condom can be reused	A condom protects against disease	A woman has no right to tell a man to use a condom	Condoms break easily	Condoms are expensive	
Age								
15-19	23.5	16.4	5.8	46.4	23.9	16.1	6.9	453
20-24	38.1	30.0	9.8	68.1	37.1	23.3	10.9	426
25-29	47.6	38.5	9.4	74.4	33.4	31.8	16.9	328
30-39	42.8	36.1	8.6	69.9	28.5	30.2	10.1	519
40-49	37.2	27.7	7.9	58.5	26.2	20.4	6.7	367
Residence								
Urban	36.0	26.3	7.1	67.8	26.3	24.3	7.7	792
Rural	38.3	31.4	9.0	60.4	31.6	24.3	11.4	1,301
Region								
North Central	32.9	24.2	6.6	68.7	15.0	20.2	7.7	313
North East	42.5	32.3	3.1	59.4	25.5	19.6	5.0	377
North West	52.1	53.3	23.1	76.0	72.8	39.0	18.9	529
South East	34.2	19.9	1.4	51.5	10.0	27.4	19.1	192
South South	27.8	15.6	3.2	50.7	11.7	17.9	4.2	385
South West	24.2	13.2	1.1	63.1	9.2	14.6	4.9	296
Education								
No education	36.6	36.0	14.7	52.5	44.2	22.1	12.8	385
Primary	36.2	30.6	8.1	59.8	33.2	24.0	9.8	519
Secondary	35.9	25.6	6.3	64.8	24.1	23.9	8.5	932
Higher	46.8	31.6	6.0	79.9	20.6	29.6	11.7	257
Condom use								
Used at last sex	47.5	27.3	5.4	96.5	20.2	26.2	13.6	253
Ever used (not at last sex)	65.8	41.3	6.5	93.0	19.6	39.0	11.5	310
Never used	30.0	27.5	9.1	51.6	33.2	21.0	9.1	1,530
Marital status								
Never married	32.5	24.2	6.4	59.4	26.3	20.4	9.0	1,048
Ever had sex	46.9	31.0	7.2	76.6	21.2	25.4	12.0	489
Never had sex	19.9	18.2	5.7	44.3	30.7	16.0	6.4	559
Married or living together	42.3	35.1	10.1	66.4	33.4	28.3	11.2	1,006
Divorced/separated/ widowed	(44.3)	(27.2)	(11.3)	(81.4)	(20.1)	(25.3)	(6.5)	40
Wealth quintile								
Lowest	33.5	29.1	13.7	49.7	33.5	24.4	14.0	362
Second	39.8	33.0	11.1	59.7	38.7	26.2	11.4	360
Middle	43.9	38.6	8.1	70.9	41.1	26.4	11.8	392
Fourth	33.6	27.6	5.6	63.3	25.9	19.9	5.2	452
Highest	37.0	22.2	5.0	68.8	15.3	25.2	9.2	527
Total	37.4	29.5	8.3	63.2	29.6	24.3	10.0	2,093

Note: Figures in parentheses are based on fewer than 25-49 unweighted cases.

In addition to asking about attitudes, the 2003 NDHS also directly asked respondents whether or not they have ever discussed ways to prevent getting the virus that causes AIDS with their partners. Table 12.10 presents these data for women and men who are currently married or living with a partner. Nationally, 36 percent of married women and 58 percent of married men say that they have discussed prevention of AIDS with their partners. In all regions, percentages reporting AIDS prevention discussion with their partners are higher among men than among women.

Although discussion of AIDS with partners is far from universal, Nigerians are accepting of communication regarding AIDS. Nine in ten Nigerians report that discussion of AIDS in the media and other venues is acceptable (data not shown). This is true for women and men and across educational and regional characteristics. People overwhelmingly approve (over 90 percent) discussion of AIDS in the newspaper, on the radio, on television, in churches, in mosques, at home, and in schools.

Table 12.10 Discussion of HIV/AIDS with partner

Percent distribution of women and men who are currently married or living with a partner by whether they ever discussed HIV/AIDS prevention with their husband/partner, according to background characteristics, Nigeria 2003

Background characteristic	Women					Men						
	Ever discussed HIV/AIDS prevention	Never discussed HIV/AIDS prevention	Don't know/missing	Has not heard of AIDS	Total	Number of women	Ever discussed HIV/AIDS prevention	Never discussed HIV/AIDS prevention	Don't know/missing	Has not heard of AIDS	Total	Number of men
Age												
15-19	23.6	55.9	0.4	20.1	100.0	545	*	*	*	*	*	5
20-24	36.6	47.2	0.3	15.8	100.0	911	52.3	44.3	0.0	3.4	100.0	60
25-29	43.1	44.9	0.5	11.5	100.0	1,146	50.7	48.5	0.0	0.8	100.0	142
30-39	36.9	50.4	0.3	12.4	100.0	1,611	61.4	37.4	0.2	1.1	100.0	447
40-49	34.2	48.5	0.6	16.7	100.0	1,123	57.0	40.7	0.2	2.2	100.0	352
Residence												
Urban	50.2	44.9	0.8	4.1	100.0	1,633	68.1	31.6	0.2	0.0	100.0	327
Rural	30.1	50.6	0.3	19.1	100.0	3,703	52.5	45.1	0.1	2.4	100.0	679
Region												
North Central	38.6	43.2	0.0	18.2	100.0	754	60.2	35.2	0.0	4.6	100.0	139
North East	23.7	52.2	0.1	24.1	100.0	1,122	45.0	53.2	0.1	1.7	100.0	241
North West	26.0	59.4	0.9	13.7	100.0	1,880	52.8	46.8	0.2	0.2	100.0	305
South East	61.9	34.6	0.6	2.8	100.0	368	72.9	26.5	0.6	0.0	100.0	85
South South	51.7	39.0	0.1	9.2	100.0	664	63.2	32.5	0.0	4.2	100.0	115
South West	58.1	34.9	0.5	6.5	100.0	548	75.4	24.6	0.0	0.0	100.0	121
Education												
No education	21.1	56.7	0.5	21.8	100.0	2,877	41.5	55.5	0.0	3.1	100.0	284
Primary	42.4	47.1	0.6	9.9	100.0	1,175	55.3	41.9	0.2	2.5	100.0	286
Secondary	61.5	35.4	0.2	2.9	100.0	1,046	69.9	29.8	0.3	0.0	100.0	300
Higher	78.6	21.4	0.0	0.0	100.0	238	68.7	31.3	0.0	0.0	100.0	136
Total	36.2	48.8	0.4	14.5	100.0	5,336	57.6	40.7	0.1	1.6	100.0	1,006

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

12.7 HIGH-RISK SEX AND CONDOM USE

Engaging in sexual intercourse with someone other than a spouse or a partner with whom one is living is considered high-risk sexual activity in terms of transmitting an STI. If a person does have sex with a nonmarital, noncohabiting partner, the risk of contracting HIV can be reduced by using condoms. Table 12.11 shows the percentage of women and men who had sex with a partner other than with whom they are married or living, among all women and men who reported having sex at some time in the 12 months preceding the survey. Those who had engaged in sex with a nonmarital, noncohabiting partner were then asked whether they used a condom the last time they engaged in sex with such a partner.

Table 12.11 High-risk sex and condom use at last high-risk sex: women and men age 15-49

Among women and men reporting sexual activity in the past 12 months, percentage who had sex with a nonmarital, noncohabiting partner (high-risk sex) in the past 12 months, and among these women and men, percentage who say they used a condom the last time they had sex with a nonmarital, noncohabiting partner, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Percentage engaging in high-risk sex in the past 12 months ¹	Number of women sexually active in the past 12 months	Percentage who used condom at last high-risk sex ²	Number of women who had high-risk sex in past 12 months	Percentage engaging in high-risk sex in the past 12 months ¹	Number of men sexually active in the past 12 months	Percentage who used condom at last high-risk sex ²	Number of men who had high-risk sex in past 12 months
Age								
15-19	34.6	819	22.0	283	94.1	83	32.8	78
20-24	25.8	1,167	26.0	301	72.4	218	53.0	158
25-29	10.6	1,243	29.3	131	55.7	254	43.8	141
30-39	4.8	1,579	14.9	76	23.3	477	48.0	111
40-49	4.0	1,045	(8.3)	42	14.4	341	56.9	49
15-24	29.4	1,987	24.0	585	78.4	301	46.3	236
Marital status								
Never married	99.5	672	25.8	669	99.5	374	45.9	372
Married/living together	1.3	4,989	6.2	64	14.6	970	50.7	141
Divorced/separated/ widowed	52.1	193	17.5	101	(81.9)	29	(40.4)	23
Residence								
Urban	19.1	1,939	30.4	371	46.3	479	59.4	222
Rural	11.8	3,915	17.5	463	35.3	894	38.2	316
Region								
North Central	15.3	755	23.8	115	52.9	216	43.0	114
North East	4.3	1,122	5.7	48	31.3	286	35.2	90
North West	1.7	1,898	(24.3)	31	6.5	317	(29.6)	21
South East	30.3	486	21.9	147	44.5	105	75.6	47
South South	36.9	988	19.6	364	60.4	247	37.8	149
South West	21.1	605	40.9	128	58.0	201	63.0	116
Education								
No education	2.4	2,795	4.2	67	10.6	293	(23.0)	31
Primary	11.6	1,209	10.9	140	32.0	354	33.3	113
Secondary	34.1	1,504	25.5	513	56.6	527	48.6	299
Higher	32.9	346	39.4	114	47.5	198	66.0	94
Wealth quintile								
Lowest	8.0	1,151	11.9	92	33.6	247	18.7	83
Second	8.4	1,176	11.6	99	23.0	244	34.7	56
Middle	11.4	1,145	14.3	130	32.6	269	47.4	88
Fourth	19.4	1,120	24.2	218	55.4	256	48.3	142
Highest	23.4	1,262	34.0	296	47.2	357	63.6	168
Total	14.2	5,855	23.2	834	39.1	1,373	46.9	537

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Sexual Behaviour Indicator 1 "High-risk sex in the last year"

² Corresponds to UNAIDS Sexual Behaviour Indicator 2 "Condom use at last high-risk sex"

A larger proportion of men than women reported having had high-risk sex at some time in the past 12 months (39 percent of men versus 14 percent of women). Less than half of all men (47 percent) and less than one-quarter (23 percent) of women reported using a condom the last time they had sex with a nonmarital, noncohabiting partner. Fifteen percent of men who are currently married or cohabiting report having had sex with a nonmarital, noncohabiting partner in the past 12 months. The percentage of respondents who have had sex with a nonmarital, noncohabiting partner increases with increasing education for both women and men, as does the percentage who used a condom the last time they had sex with such a partner.

The prevalence of high-risk sex among sexually active young people is presented in Table 12.12, along with condom use at last high-risk sex. Overall, 29 percent of women and 78 percent of men age 15-24 engaged in high-risk sex in the 12 months preceding the survey. Among young people who had high-risk sex, approximately one-quarter of women and slightly less than half of men used a condom at last high-risk sex. The percentage of young women engaging in high-risk sex increases steadily with increasing education, as does reported use of condoms. There is an insufficient number of cases of men to allow for analysis by education.

Table 12.12 High-risk sex and condom use at last high-risk sex among young women and men by background characteristics

Among women and men age 15-24 reporting sexual activity in the past 12 months, percentage who had sexual relations with a nonmarital, noncohabiting partner (high-risk sex) in the past 12 months, and among these young women and men, percentage who say they used a condom the last time they had sex with a nonmarital, noncohabiting partner, by background characteristics, Nigeria 2003

Background characteristic	Women				Men			
	Percentage engaging in high-risk sex in the past 12 months	Number of women sexually active in the past 12 months	Percentage used condom at last high-risk sex ¹	Number of women 15-24 who had high-risk sex in the past 12 months	Percentage engaging in high-risk sex in the past 12 months	Number of men sexually active in the past 12 months	Percentage used condom at last high-risk sex ¹	Number of men 15-24 who had high-risk sex in the past 12 months
Age								
15-19	34.6	819	22.0	283	94.1	83	32.8	78
20-24	25.8	1,167	26.0	301	72.4	218	53.0	158
Marital status								
Never married	99.7	533	25.3	532	99.2	232	46.5	231
Ever married	3.7	1,454	(11.4)	53	7.4	68	*	5
Residence								
Urban	40.7	588	33.5	239	85.9	115	61.7	99
Rural	24.7	1,399	17.4	345	73.7	186	35.2	137
Region								
North Central	35.1	252	20.5	88	91.7	59	41.0	54
North East	8.1	389	(5.8)	31	(70.9)	46	(25.6)	32
North West	2.0	674	*	13	(19.5)	49	*	9
South East	70.0	153	24.6	107	(98.8)	22	(71.6)	22
South South	70.6	364	19.3	257	94.5	70	39.3	66
South West	56.7	154	47.6	88	93.7	55	66.3	52
Education								
No education	3.4	874	*	30	(16.4)	24	*	4
Primary	25.4	353	11.9	90	59.4	62	(28.5)	37
Secondary	59.8	687	25.1	411	89.8	192	45.8	173
Higher	75.4	73	44.1	55	*	23	*	22
Wealth quintile								
Lowest	16.9	384	14.0	65	64.9	68	(22.8)	44
Second	20.4	376	12.6	77	68.7	46	(29.2)	32
Middle	21.8	439	12.6	96	60.3	45	(47.9)	27
Fourth	36.1	422	24.0	152	93.9	69	47.5	65
Highest	53.3	366	37.5	195	93.7	72	67.7	68
Total	29.4	1,987	24.0	585	78.4	301	46.3	236

Note: 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 Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 5 "Young people using a condom at last high-risk sex"

Substantial regional variation exists among young women who are sexually active. Most young women in the South East and the South South (seven in ten) who are sexually active have sex with noncohabiting partners. Only 19 to 25 percent of these women used a condom the last time they had sex. Women in the North East and the North West who have been sexually active with a noncohabiting partner are in a small minority. Figure 12.1 shows the distribution of young people age 15-24 with regard to sexual activity with cohabiting and noncohabiting partners. Nationally, most young women who are sexually active have a partner with whom they are living, while most young men who are sexually active are not living with their partners. On the other hand, young men who are sexually active are a smaller population than young women who are sexually active.

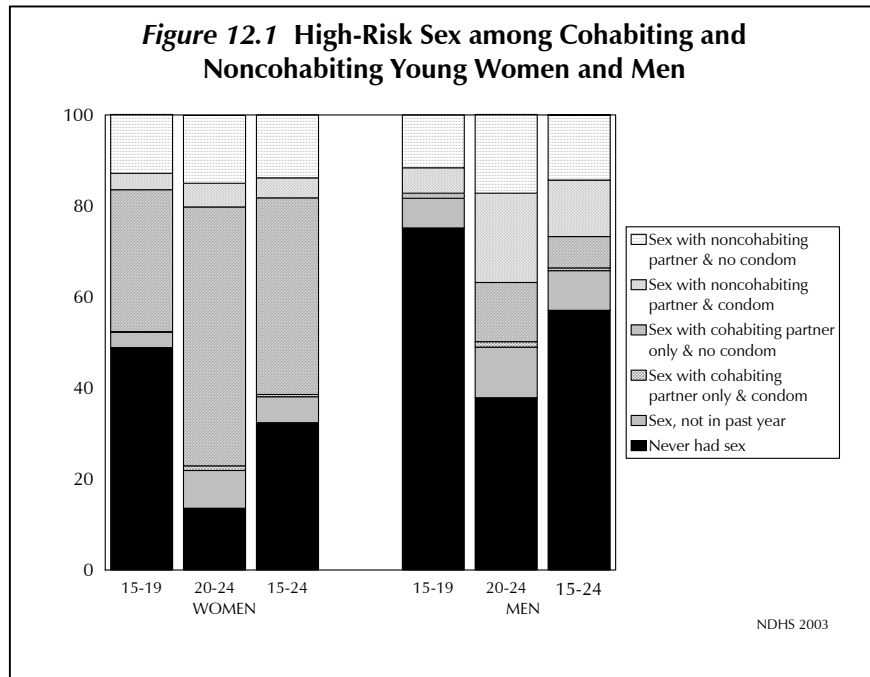


Table 12.13 shows that 3 percent of men report having had sex with a prostitute in the 12 months preceding the survey. Approximately half (48 percent) of the men who had sex with a prostitute used a condom (data not shown).

Table 12.13 Paid sex in past year
Percentage of men reporting sex with a prostitute in the past 12 months, by background characteristics, Nigeria 2003

Background characteristic	Percentage reporting sex with prostitute in past 12 months ¹	Number of men
Age		
15-19	1.8	453
20-24	3.9	426
25-29	3.3	328
30-39	3.0	519
40-49	2.5	367
15-24	2.8	880
Marital status		
Never married	2.7	1,048
Married/living together	2.4	1,006
Divorced/separated/ widowed	(17.9)	40
Residence		
Urban	1.8	792
Rural	3.5	1,301
Region		
North Central	0.7	313
North East	6.3	377
North West	1.8	529
South East	2.5	192
South South	3.8	385
South West	1.7	296
Education		
No education	2.9	385
Primary	3.2	519
Secondary	3.0	932
Higher	1.6	257
Wealth quintile		
Lowest	6.5	362
Second	2.5	360
Middle	1.9	392
Fourth	2.2	452
Highest	2.0	527
Total	2.9	2,093

Note: Figures in parentheses are based on 25-49 un-weighted cases.
¹ Corresponds to UNAIDS Sexual Behaviour Indicator 3 "Commercial sex in the last year"

12.8 SEXUAL BEHAVIOUR AMONG YOUNG PEOPLE

Promoting change in sexual behaviour is a key feature of many HIV/AIDS prevention programmes. Those who are not yet sexually active or those who have recently made their sexual debut are thought to be accepting of programmes focusing on behaviour change. Thus, the next several tables focus on young women and men age 15-24 and the sexual behaviours that affect their risk of exposure to HIV.

One of the strategies for reducing the risk of contracting an STI is for young persons to delay the age at which they become sexually active. Table 12.14 shows the percentage of young people who have had sex by exact ages 15 and 18, by background characteristics. One-fifth of women age 15-19 had sex before the age of 15, and half of women age 20-24 had sex by the time they were age 18. Proportions of

Table 12.14 Age at first sex among young women and men

Percentage of women and men age 15-24 who have had sex by exact age 15 and 18, by background characteristics, Nigeria 2003

Background characteristic	Women			Men		
	Percent who had sex by exact age		Number of women age 15-24	Percent who had sex by exact age		Number of men age 15-24
	15	18		15	18	
Age						
15-17	21.5	na	988	5.3	na	237
18-19	18.6	52.2	728	10.8	28.8	216
15-19	20.3	na	1,716	7.9	na	453
20-22	20.3	53.5	1,061	5.9	23.8	298
23-24	23.3	55.6	433	3.0	18.8	128
20-24	21.2	54.1	1,494	5.1	22.3	426
Marital status						
Never married	6.4	na	1,685	6.4	na	809
Ever married	36.5	na	1,525	8.3	na	70
Residence						
Urban	10.7	na	1,093	5.3	na	351
Rural	25.8	na	2,117	7.3	na	529
Region						
North Central	16.8	na	486	12.2	na	143
North East	31.0	na	543	3.6	na	118
North West	36.1	na	815	3.1	na	224
South East	4.3	na	332	7.5	na	82
South South	14.0	na	630	9.2	na	186
South West	4.3	na	405	4.1	na	127
Education						
No education	41.5	na	1,008	4.0	na	100
Primary	21.3	na	626	5.4	na	198
Secondary	7.7	na	1,442	7.8	na	536
Higher	0.3	na	134	1.6	na	46
Wealth quintile						
Lowest	35.2	na	537	9.4	na	166
Second	29.3	na	542	2.8	na	148
Middle	21.9	na	695	6.9	na	150
Fourth	17.1	na	707	7.8	na	224
Highest	6.0	na	729	5.1	na	192
Total	20.7	na	3,210	6.5	na	880

Note: Percentage who had sex by exact age 18 are not analyzed by background characteristics because respondents age 15-17 have not yet lived to age 18 and thus cannot contribute to the denominator.
na = Not applicable

men who initiated sexual activity by these ages are significantly lower. Over one-third (37 percent) of ever-married women age 15-24 first had sex before the age of 15. Initiation into sex at such young ages is not nearly as common among the never-married. Among the never-married, just 6 percent of both men and women had sex by age 15. The percentage of women who had sex before age 15 declines with increasing education, from 42 percent among women with no education, to less than 1 percent among women with higher education.

The 2003 NDHS asked respondents whether or not they know of a place to obtain condoms. Table 12.15 presents statistics on whether or not young women and men age 15-24 know of at least one source, other than their family or friends. Overall, young women are less than half as likely as young men to know of a source for condoms, although there is a great deal of variation by background characteristics.

Table 12.15 Knowledge of a source for condoms among young women and men

Percentage of women and men age 15-24 who know at least one source for male condoms, Nigeria 2003

Background characteristic	Women		Men	
	Know a source for male condoms	Number of women age 15-24	Know a source for male condoms	Number of men age 15-24
Age				
15-19	19.0	1,716	49.9	453
20-24	29.8	1,494	66.9	426
15-24	24.0	3,210	58.1	880
Marital status				
Never married	33.4	1,685	59.6	809
Ever had sex	52.8	646	80.0	307
Never had sex	21.3	1,039	47.1	502
Ever married	13.7	1,525	41.6	70
Residence				
Urban	35.2	1,093	67.0	351
Rural	18.3	2,117	52.2	529
Region				
North Central	21.2	486	56.2	143
North East	10.5	543	52.9	118
North West	6.2	815	42.0	224
South East	33.9	332	77.9	82
South South	38.1	630	55.7	186
South West	51.3	405	84.4	127
Education				
No education	3.5	1,008	17.5	100
Primary	14.8	626	37.9	198
Secondary	38.7	1,442	71.1	536
Higher	64.0	134	81.7	46
Wealth quintile				
Lowest	6.7	537	35.1	166
Second	11.8	542	45.5	148
Middle	16.1	695	59.6	150
Fourth	30.0	707	61.8	224
Highest	47.5	729	82.5	192
Total	24.0	3,210	58.1	880

Knowledge of a source for condoms increases greatly with increasing education among both women and men. Very few young women with no education report knowing a source (4 percent), but this figure climbs to nearly two-thirds of young women with higher education knowing of a source (64 percent). Regional variation is also significant. Twice as many young men in the South West as in the North West know of a source (84 and 42 percent, respectively). Regional variation is even more dramatic among young women, ranging from 6 percent in the North West to 51 percent in the South West.

The percentage of young people who used a condom the first time they had sex is presented in Table 12.16, among those who have ever had sexual intercourse. Only 6 percent of women and 17 percent of men age 15-24 reported using a condom the first time they had sex. Among young, never-married men, one-fifth reported using a condom the first time they had sex, even though almost half reported doing so the last time they had sex (see Table 12.17). Young women and men with higher education are the most likely to have used a condom the first time they had sex, as are women and men in the South West.

Table 12.16 Condom use at first sex among young women and men

Among women and men age 15-24 who have ever had sex, percentage who used a condom the first time they ever had sex, by background characteristics Nigeria 2003

Background characteristic	Women		Men	
	Used a condom at first sex ¹	Number of women age 15-24 who have ever had sex	Used a condom at first sex ¹	Number of men age 15-24 who have ever had sex
Age				
15-19	6.5	877	10.6	112
20-24	6.4	1,291	19.6	265
Marital status				
Never married	17.6	646	20.2	307
Ever married	1.7	1,523	2.8	70
Residence				
Urban	12.1	654	27.3	139
Rural	4.0	1,514	10.9	239
Region				
North Central	7.1	301	12.4	74
North East	0.5	411	8.2	56
North West	0.6	690	6.4	56
South East	16.9	169	27.5	36
South South	8.0	407	11.5	89
South West	26.5	191	39.9	66
Education				
No education	0.3	909	(0.0)	32
Primary	3.0	400	8.7	78
Secondary	11.8	775	17.0	242
Higher	39.3	85	(62.1)	26
Wealth quintile				
Lowest	2.0	417	7.7	84
Second	1.5	405	8.3	52
Middle	2.4	474	10.5	61
Fourth	6.8	451	18.3	87
Highest	19.8	421	33.0	94
Total	6.4	2,169	16.9	378

Note: Figures in parentheses are based on 25-49 unweighted cases.

¹ Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 6 "Condom use at first sex"

Table 12.17 presents the percentage of never-married young women and men who had sex in the 12 months preceding the survey, as well as the percentage who used a condom the last time they had sex. Three out of ten never-married respondents age 15-24 had sex in the past 12 months (32 percent of women and 29 percent of men). About half of the men reported using a condom during last sexual intercourse, and one-quarter of the women reported doing so. There are no urban-rural differences among young persons as to whether or not they have had premarital sex, but urban women and men are about twice as likely to have used a condom the last time they had sex.

Table 12.17 Prevalence of premarital sex in the past year and use of a condom during premarital sex among young women and men

Among never-married women and men age 15-24, percentage who had sex in the past 12 months, and, among those who had premarital sex in the past 12 months, percentage who used a condom at last sex, by background characteristics, Nigeria 2003

Background characteristic	Never-married women				Never-married men			
	Had sex in past 12 months ¹	Number of never-married women 15-24	Used condom at last sex ²	Number of women 15-24 sexually active in the past 12 months	Had sex in past 12 months ¹	Number of never-married men 15-24	Used condom at last sex ²	Number of men 15-24 sexually active in the past 12 months
Age								
15-19	23.3	1,145	23.0	267	17.4	448	32.8	78
20-24	49.4	540	27.0	267	42.8	361	53.7	154
Residence								
Urban	31.1	708	35.9	220	29.4	332	63.6	98
Rural	32.0	977	17.4	313	28.2	477	34.3	135
Region								
North Central	29.0	282	21.2	82	38.7	138	41.5	53
North East	15.0	162	(6.6)	24	29.6	103	(27.2)	30
North West	5.4	136	*	7	4.9	184	*	9
South East	37.1	282	24.1	104	26.8	82	(71.6)	22
South South	46.8	497	19.2	233	36.6	182	39.0	67
South West	25.3	326	50.5	83	42.3	121	65.8	51
Education								
No education	16.9	119	*	20	2.9	78	*	2
Primary	24.3	329	11.1	80	20.8	171	(24.2)	35
Secondary	33.9	1,124	25.7	381	33.5	515	46.6	172
Higher	46.0	113	46.4	52	48.9	46	*	22
Wealth quintile								
Lowest	28.9	188	14.1	54	30.6	142	(23.0)	43
Second	31.7	221	13.8	70	23.9	134	(29.2)	32
Middle	26.5	325	10.8	86	20.1	132	(46.5)	26
Fourth	33.8	405	24.5	137	28.8	217	47.4	62
Highest	34.1	545	39.4	186	36.8	186	69.2	68
Total	31.6	1,685	25.0	533	28.7	809	46.7	232

Note: 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 Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 2 "Young people having premarital sex"

² Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 3 "Young people using a condom during premarital sex"

Age-mixing in sexual relationships is a major factor in the spread of HIV/AIDS. If a younger, uninfected partner has sex with an older, infected partner, this can introduce the virus into a younger, uninfected cohort. Table 12.18 shows the percentage of teenage women who had a partner ten or more years their senior. One in five women age 15-17 who have had high-risk sexual intercourse did so with someone ten or more years their senior.

Table 12.18 Age mixing in sexual relationships

Among women age 15-19 who had nonmarital sex in the past 12 months, percentage who had nonmarital sex with a man 10 or more years older than themselves, by background characteristics, Nigeria 2003

Background characteristic	Percentage who had nonmarital sex with a man 10+ years older ¹	Number of women age 15-19 who had nonmarital sex in the past 12 months
Age		
15-17	21.3	122
18-19	4.2	161
Marital status		
Never married	10.3	265
Ever married	*	18
Residence		
Urban	14.7	110
Rural	9.6	173
Region		
North Central	(25.5)	45
North East	*	13
North West	*	5
South East	12.8	55
South South	8.7	133
South West	(4.2)	33
Education		
No education	*	14
Primary	(12.2)	48
Secondary	12.2	211
Higher	*	11
Wealth quintile		
Lowest	(10.1)	29
Second	(3.3)	42
Middle	(10.8)	46
Fourth	19.0	79
Highest	9.8	86
Total	11.6	283

Note: 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 Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 7 "Age-mixing in sexual relationships" (among the last three partners in the past 12 months)

Those who are sexually active can reduce their risk of exposure to HIV by limiting the number of partners with whom they engage in sexual contact. Table 12.19 shows the percentage of women and men age 15-24 who have had sex with more than one partner in the past 12 months. The percentage of young people with multiple partners is fairly low. Overall, 2 percent of women and 8 percent of men age 15-24 have had sex with more than one person in the past 12 months. Differentials by region are more marked: 7 percent of women in the South South and 16 percent of men in the North East have had more than one partner.

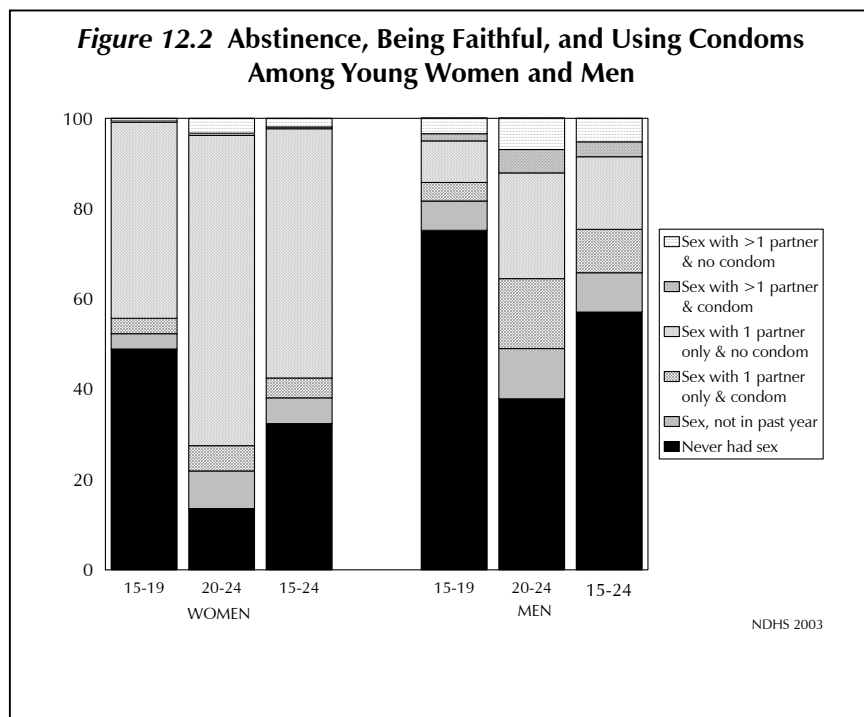
Table 12.19 Multiple sex partnerships among young women and men

Among women and men age 15-24, percentage who have had sex with more than one partner in the past 12 months, by background characteristics, Nigeria 2003

Background characteristic	Women		Men	
	Percentage who had 2+ partners in the past 12 months ¹	Number of women age 15-24	Percentage who had 2+ partners in the past 12 months ¹	Number of men age 15-24
Age				
15-19	0.9	1,716	4.9	453
20-24	3.8	1,494	12.2	426
Marital status				
Never married	2.9	1,685	8.8	809
Ever married	1.5	1,525	4.4	70
Residence				
Urban	2.5	1,093	7.2	351
Rural	2.1	2,117	9.3	529
Region				
North Central	1.1	486	9.0	143
North East	1.2	543	15.8	118
North West	0.6	815	1.8	224
South East	1.5	332	6.7	82
South South	7.2	630	9.9	186
South West	1.1	405	11.6	127
Education				
No education	0.9	1,008	1.3	100
Primary	1.7	626	5.3	198
Secondary	3.0	1,442	10.7	536
Higher	6.7	134	11.1	46
Wealth quintile				
Lowest	1.9	537	9.5	166
Second	1.5	542	10.3	148
Middle	2.0	695	6.4	150
Fourth	2.9	707	6.5	224
Highest	2.6	729	9.8	192
Total	2.2	3,210	8.4	880

¹ Corresponds to UNAIDS Young People's Sexual Behaviour Indicator 4 "Young people having multiple partners in last year"

Figure 12.2 shows the distribution of young people age 15-24 by the number of partners they had in the past 12 months and by whether or not they used a condom. Seven percent of men age 20-24 had sex with more than one partner and did not use a condom the last time they had sex; this is true for only 3 percent of women age 20-24. Two-thirds of women age 20-24 did not use a condom the last time they had sex, but they had sex with only one partner in the past 12 months. Nearly 40 percent of men age 20-24 reported that they had never had sex, and an additional 11 percent had had sex, but not in the past 12 months.



12.9 SEXUALLY TRANSMITTED INFECTIONS

It is important for people experiencing symptoms of STIs to be able to recognize them and seek appropriate treatment. People who do not know the symptoms may fail to recognize that they need treatment and, consequently, may not seek help. All 2003 NDHS respondents were asked whether they had ever heard about infections other than HIV that can be transmitted through sexual contact. Those who had heard of an STI were then asked to state what symptoms a man or a woman with an STI (other than HIV) might have.

Table 12.20.1 shows that 55 percent of women have never heard of STIs. One-fifth of all women could identify a symptom a man might have, and one-fifth could identify a symptom a woman might have. Knowledge of STIs among men is higher. Most men have heard of an STI (71 percent), although not all who have heard of STIs could identify a symptom a man or woman with an STI might experience. Thirty-five percent of all men could identify a symptom a man might experience, and 18 percent could identify a symptom a woman might experience (Table 12.20.2). Knowledge of symptoms rises with increasing education and increasing household economic status (higher wealth quintiles) among both women and men.

All 2003 NDHS respondents who had ever had sex were asked whether they had an STI in the past 12 months. They were also asked whether they had experienced any abnormal genital discharge or a genital sore or ulcer in the past 12 months. These data are likely to underestimate the true prevalence of STIs for a number of reasons. For example, if symptoms are not obvious or prolonged, they may not be recognized as an STI. Furthermore, even if a respondent knows that she or he has an STI, the respondent may be reluctant to report it, because of embarrassment or presumed stigma associated with such infections.

Table 12.20.1 Knowledge of symptoms of STIs: women

Percentage of women with knowledge of symptoms associated with sexually transmitted infections (STIs) in a man and in a woman, by background characteristics, Nigeria 2003

Background characteristic	Knowledge of symptoms of STIs in a man					Knowledge of symptoms of STIs in a woman				Number of women
	No knowledge of STIs	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	Missing	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	Missing	
Age										
15-19	70.8	13.1	7.3	8.7	0.0	14.9	5.8	8.5	0.0	1,716
20-24	53.4	18.0	11.1	17.5	0.1	19.6	8.9	18.1	0.1	1,494
25-29	46.1	16.3	12.4	25.1	0.1	15.9	11.7	26.2	0.1	1,382
30-39	51.6	14.0	12.5	21.9	0.0	13.8	12.0	22.6	0.0	1,757
40-49	51.5	13.0	11.6	23.9	0.0	14.4	9.0	25.2	0.0	1,271
Marital status										
Never married	52.1	19.5	12.5	15.9	0.0	22.2	9.5	16.1	0.0	1,926
Ever had sex	32.2	27.9	17.3	22.6	0.0	31.5	12.5	23.7	0.0	838
Never had sex	67.4	13.0	8.8	10.8	0.0	15.0	7.3	10.3	0.0	1,087
Married or living together	57.2	13.1	10.1	19.7	0.0	13.3	9.2	20.3	0.0	5,336
Divorced/separated/widowed	44.1	16.3	14.6	25.0	0.0	14.9	12.2	28.8	0.0	358
Residence										
Urban	45.8	17.4	13.6	23.1	0.0	18.8	12.1	23.3	0.0	2,629
Rural	60.3	13.5	9.5	16.8	0.0	14.0	8.0	17.7	0.0	4,991
Region										
North Central	55.4	16.6	9.3	18.6	0.0	17.8	8.3	18.4	0.0	1,121
North East	71.1	6.9	3.9	18.1	0.0	5.9	3.7	19.2	0.0	1,368
North West	71.4	6.5	6.6	15.4	0.1	6.1	5.7	16.8	0.1	2,095
South East	38.0	28.7	13.4	19.8	0.0	25.8	12.0	24.2	0.0	737
South South	35.0	22.8	19.2	23.0	0.0	27.7	12.9	24.5	0.0	1,342
South West	39.0	20.5	18.5	22.1	0.0	23.4	20.1	17.5	0.0	958
Education										
No education	74.3	7.1	5.5	13.0	0.1	6.7	5.1	13.8	0.1	3,171
Primary	53.4	16.6	11.1	18.9	0.0	16.6	10.3	19.7	0.0	1,628
Secondary	39.9	22.2	16.1	21.8	0.0	25.2	13.0	21.9	0.0	2,370
Higher	8.4	23.7	21.2	46.7	0.0	25.1	18.0	48.4	0.0	451
Wealth quintile										
Lowest	69.4	9.7	8.2	12.7	0.0	8.9	7.6	14.1	0.0	1,414
Second	66.2	12.1	6.3	15.3	0.1	12.2	6.1	15.4	0.1	1,439
Middle	62.6	12.4	8.5	16.4	0.0	13.8	6.9	16.7	0.0	1,513
Fourth	51.6	14.7	12.7	21.1	0.0	15.3	11.0	22.1	0.0	1,526
Highest	31.5	23.6	17.3	27.6	0.0	26.0	14.4	28.1	0.0	1,728
Total	55.3	14.8	10.9	19.0	0.0	15.7	9.4	19.6	0.0	7,620

Table 12.20.2 Knowledge of symptoms of STIs: men

Percentage of men with knowledge of symptoms associated with sexually transmitted infections (STIs) in a man and in a woman, by background characteristics, Nigeria 2003

Background characteristic	Knowledge of symptoms of STIs in a man				Knowledge of symptoms of STIs in a woman			Number of men
	No knowledge of STIs	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	
Age								
15-19	54.2	16.2	16.4	13.2	29.8	9.2	6.8	453
20-24	32.5	19.5	17.2	30.8	42.9	7.5	17.1	426
25-29	19.4	17.9	23.7	39.0	52.5	10.5	17.6	328
30-39	17.1	14.3	18.9	49.6	43.3	13.9	25.8	519
40-49	17.9	18.2	18.9	44.9	47.2	11.3	23.5	367
Marital status								
Never married	35.8	18.0	17.9	28.2	41.0	9.1	14.1	1,048
Ever had sex	15.8	18.9	22.1	43.3	51.3	12.5	20.4	489
Never had sex	53.3	17.3	14.3	15.0	31.9	6.1	8.6	559
Married or living together	22.2	16.3	19.6	42.0	43.6	11.9	22.4	1,006
Divorced/separated/widowed	(10.0)	(10.0)	(20.7)	(59.4)	(50.9)	(17.0)	(22.1)	40
Residence								
Urban	26.5	18.0	21.0	34.4	46.7	11.1	15.6	792
Rural	30.1	16.4	17.4	36.0	39.8	10.3	19.8	1,301
Region								
North Central	21.9	12.3	20.0	45.7	41.5	12.1	24.5	313
North East	41.6	6.2	16.1	36.0	24.9	10.3	23.2	377
North West	38.2	16.9	19.1	25.8	37.7	9.3	14.8	529
South East	14.2	21.5	17.2	47.1	45.7	3.9	36.2	192
South South	24.0	25.6	13.7	36.7	56.2	9.9	9.9	385
South West	18.3	21.9	28.0	31.8	54.1	17.0	10.5	296
Education								
No education	45.6	15.0	15.5	23.9	34.4	8.9	11.0	385
Primary	32.9	14.7	18.7	33.7	37.4	11.6	18.1	519
Secondary	24.8	18.2	19.9	37.1	45.9	9.8	19.4	932
Higher	9.4	20.6	19.9	50.2	51.7	13.9	25.0	257
Wealth quintile								
Lowest	40.3	16.5	16.8	26.3	38.0	9.3	12.4	362
Second	37.5	14.6	16.8	31.1	33.7	13.4	15.3	360
Middle	30.6	13.2	22.1	34.1	41.8	9.2	18.4	392
Fourth	27.5	15.1	16.3	41.1	40.9	9.5	22.1	452
Highest	14.6	23.6	21.1	40.8	53.2	11.5	20.8	527
Total	28.8	17.0	18.8	35.4	42.4	10.6	18.2	2,093

Note: Figures in parentheses based on 25-49 unweighted cases.

Overall, 1 percent of women and 3 percent of men reported having had an STI in the 12 months preceding the survey (Table 12.21). The percentage who reported having either an STI or one of the two STI symptoms is slightly higher: 5 percent of both women and men. Never-married women and men reported higher levels than the national average. Eight percent of never-married women and 7 percent of never-married men report having had an STI or symptom.

Table 12.21 Self-reporting of sexually transmitted infection (STI) and STI symptoms

Among women and men who ever had sex, percentage self-reporting an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Nigeria 2003

Background characteristic	Women					Men				
	Percentage with an STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/dischage/genital sore/ulcer	Number of women who ever had sex	Percentage with an STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/dischage/genital sore/ulcer	Number of men who ever had sex
Age										
15-19	0.1	2.4	2.1	3.9	877	4.8	5.1	0.0	5.6	112
20-24	1.5	4.3	4.2	7.0	1,291	2.8	3.2	1.1	3.5	265
25-29	1.7	3.1	3.3	5.5	1,344	6.6	7.4	3.9	9.5	281
30-39	0.9	2.2	2.6	3.6	1,748	3.0	2.2	0.6	4.2	510
40-49	0.8	1.4	1.9	2.7	1,269	0.8	0.9	0.0	1.5	366
Marital status										
Never married	2.8	4.6	4.0	8.3	838	5.8	5.8	2.4	7.1	489
Married/living together	0.8	2.3	2.7	4.0	5,335	2.0	1.9	0.5	3.2	1,006
Divorced/separated/widowed	1.0	3.1	3.1	4.5	357	(3.4)	(4.7)	(1.3)	(4.7)	40
Residence										
Urban	0.6	2.1	1.9	3.5	2,172	4.2	2.5	0.7	5.0	548
Rural	1.3	2.9	3.3	5.1	4,358	2.7	3.6	1.4	4.2	987
Region										
North Central	1.3	4.8	4.5	6.5	921	2.2	1.8	1.0	3.8	241
North East	0.2	1.9	1.9	2.8	1,234	4.7	4.5	1.0	4.8	306
North West	0.3	1.6	2.5	3.5	1,969	1.3	4.7	0.7	4.9	334
South East	4.3	2.4	3.8	6.7	562	7.7	1.2	1.3	8.5	145
South South	1.9	4.0	3.7	6.7	1,111	4.3	4.5	2.4	4.9	278
South West	0.4	2.1	1.6	3.0	733	0.9	0.4	0.3	1.2	230
Education										
No education	0.5	2.1	2.4	3.4	3,070	2.6	4.1	1.3	4.3	310
Primary	0.8	1.9	3.4	4.2	1,390	2.4	3.3	2.1	4.4	392
Secondary	2.1	4.1	3.6	6.8	1,682	4.4	3.4	0.8	5.5	614
Higher	1.8	3.8	2.0	4.9	388	2.2	1.1	0.0	2.2	219
Wealth quintile										
Lowest	0.4	2.5	3.0	4.1	1,292	3.7	4.6	1.7	4.8	279
Second	0.7	2.4	2.8	4.0	1,297	1.9	3.4	0.8	3.7	257
Middle	0.8	3.0	3.1	4.5	1,278	2.5	4.2	1.4	4.6	291
Fourth	1.3	1.7	2.3	4.2	1,259	3.8	2.7	1.7	5.0	293
Highest	2.0	3.5	3.1	5.9	1,404	3.8	1.8	0.3	4.4	415
Total	1.0	2.7	2.9	4.5	6,530	3.2	3.2	1.1	4.5	1,535

Note: Figures in parentheses are based on 25-49 unweighted cases.

Treatment and prevention behaviours of those who have experienced STIs are important factors in controlling the spread of STIs. Respondents who reported having an STI or abnormal genital discharge, genital sores, or ulcers in the past 12 months were asked whether they sought treatment. The results are presented in Table 12.22. Two out of three women did seek treatment, as did four out of five men; however, not everyone approached a health professional. Only 40 percent of women and 30 percent of men with an STI or symptom sought assistance from a clinic, hospital, or health professional.

Table 12.22 Women and men seeking treatment for STIs

Percentage of women and men reporting an STI or symptoms of an STI in the past 12 months who sought care, by source of advice or treatment, Nigeria 2003

Source of advice or treatment	Women	Men
Clinic/hospital/health professional ¹	40.4	30.6
Traditional healer	15.3	43.2
Advice or medicine from shop/pharmacy	31.3	54.7
Advice from friends/relatives	22.3	42.0
Advice or treatment from any source	67.6	82.7
No advice or treatment	32.4	17.3
Number with STI and/or symptoms of STI	297	69

Note: Symptoms of an STI are an abnormal genital discharge, a genital sore, or a genital ulcer.

¹ Corresponds to UNAIDS STI Service Indicator 4 "Men and women seeking treatment for STIs"

12.10 ORPHANHOOD

Repercussions of HIV infection are not limited to the persons directly infected with the virus. Children of infected parents will eventually become orphans in need of new caretakers. When a household takes in a child who has been orphaned, there are more people over whom the resources of the household have to be spread. Table 12.23 presents data on the prevalence of orphanhood in Nigeria. Overall, fewer than 1 percent of children have lost both parents; however, 6 percent of children under age 15 have lost at least one parent. Eleven percent of children in the South East have lost one or both parents—the highest prevalence in the country. Nationwide, 11 percent of children under age 15 are living with neither their mother nor their father; prevalence climbs to 18 percent among children age 10-14.

Table 12.23 Orphanhood and children's living arrangements

Percent distribution of de jure children under age 15 by survival status of parents and children's living arrangements, according to background characteristics, Nigeria 2003

Background characteristic	Both parents dead	Mother dead	Father dead	Both parents alive	Missing information on father/mother	Total	Mother, father or both dead ¹	Not living with either parent	Living with mother	Living with father	Living with both parents	Total	Number of children
Age													
0-1	0.0	0.1	0.5	99.1	0.4	100.0	0.6	1.1	12.2	1.0	85.6	100.0	2,479
2-4	0.2	0.7	1.5	96.9	0.7	100.0	2.5	6.8	10.5	3.0	79.7	100.0	3,421
5-9	0.6	2.3	3.7	92.5	1.0	100.0	6.6	12.0	9.0	6.8	72.2	100.0	5,262
10-14	1.2	3.9	6.7	85.8	2.4	100.0	11.8	18.3	11.2	9.7	60.8	100.0	4,415
0-14	0.6	2.0	3.6	92.6	1.2	100.0	6.2	10.9	10.5	5.9	72.7	100.0	15,577
Sex													
Male	0.7	2.3	3.6	92.3	1.2	100.0	6.6	10.4	10.4	6.8	72.4	100.0	7,928
Female	0.5	1.8	3.6	92.9	1.2	100.0	5.8	11.4	10.5	4.9	73.1	100.0	7,649
Residence													
Urban	0.6	2.2	4.3	92.3	0.7	100.0	7.1	13.3	12.5	6.0	68.2	100.0	4,981
Rural	0.6	2.0	3.3	92.7	1.5	100.0	5.8	9.8	9.5	5.8	74.9	100.0	10,596
Region													
North Central	0.5	1.8	4.8	91.9	1.1	100.0	7.1	11.1	12.8	5.6	70.4	100.0	2,432
North East	0.6	1.7	2.5	94.4	0.7	100.0	4.8	9.8	5.9	7.4	77.0	100.0	3,330
North West	0.6	1.5	2.1	94.7	1.1	100.0	4.2	7.5	5.8	4.7	82.0	100.0	4,803
South East	1.2	2.4	7.1	88.2	1.1	100.0	10.7	15.0	14.5	2.6	67.9	100.0	1,100
South South	0.7	3.8	5.1	88.1	2.3	100.0	9.6	16.1	18.1	7.9	57.9	100.0	2,375
South West	0.3	1.5	3.9	93.3	1.0	100.0	5.7	12.8	16.4	5.9	64.9	100.0	1,537
Wealth quintile													
Lowest	0.6	2.1	2.8	93.1	1.4	100.0	5.5	8.8	8.0	4.8	78.4	100.0	3,338
Second	0.7	1.6	2.6	93.9	1.2	100.0	5.0	11.5	8.6	5.7	74.2	100.0	3,301
Middle	0.5	2.0	5.2	91.0	1.3	100.0	7.7	10.7	13.1	6.9	69.4	100.0	3,146
Fourth	0.8	1.6	4.7	91.8	1.1	100.0	7.1	11.8	13.1	5.4	69.7	100.0	3,066
Highest	0.3	2.9	2.6	93.2	1.0	100.0	5.8	12.3	9.8	6.7	71.3	100.0	2,727
Total	0.6	2.0	3.6	92.6	1.2	100.0	6.2	10.9	10.5	5.9	72.7	100.0	15,577

¹ Corresponds to UNAIDS Indicator 14.4 "Prevalence of orphanhood—mother, father, or both dead"

Table 12.24 presents data on school attendance among children age 10-14. Nearly three-quarters of children age 10-14 whose parents are both alive and who are living with at least one of their parents are currently attending school (73 percent). This varies regionally, from just over half of the children in the North East and North West attending school, to over 90 percent in the three south regions. Children with one parent who has died, be it a mother or father, are no worse off with regard to school attendance. There are too few children who have lost both parents to provide a reliable estimate of children age 10-14 attending school. The estimate presented in the table is based on very few cases and should be used with caution.

Table 12.24 Schooling of children 10-14 by orphanhood and living arrangements

Percentage of de jure children age 10-14 who are currently attending school, by orphanhood, living arrangements, and background characteristics, Nigeria 2003

Background characteristic	Both parents alive											
	Living with at least one parent		Not living with either parent		Mother dead		Father dead		Both parents dead		Mother, father, or both dead	
	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number	Percent attending school	Number
Age												
Male	78.6	1,647	80.9	254	80.3	98	81.1	135	(52.8)	31	76.5	265
Female	68.0	1,584	74.3	305	80.8	72	81.9	162	*	23	76.9	257
Residence												
Urban	84.1	1,096	80.4	236	88.6	66	88.5	109	*	15	85.1	190
Rural	67.9	2,135	75.0	322	75.4	104	77.5	189	(44.2)	39	72.0	332
Region												
North Central	88.5	531	81.0	80	*	16	88.1	63	*	8	87.1	88
North East	51.3	630	44.7	102	(43.3)	37	47.4	35	*	9	38.4	81
North West	54.3	942	59.7	93	(70.1)	37	65.7	41	*	15	59.0	93
South East	92.5	234	87.8	80	*	13	97.0	49	*	5	96.0	67
South South	94.9	544	95.5	127	(99.0)	55	84.6	72	*	13	88.8	140
South West	95.5	351	97.1	78	*	12	93.3	39	*	4	92.4	54
Wealth quintile												
Lowest	50.8	672	66.8	76	(55.7)	32	65.8	50	*	11	56.9	93
Second	63.4	677	57.6	109	*	26	70.3	43	*	13	65.0	82
Middle	71.1	654	68.2	91	(68.4)	29	82.5	80	*	11	75.0	120
Fourth	90.4	645	87.5	121	(90.4)	33	88.2	86	*	15	87.9	134
Highest	94.8	585	93.0	162	(98.9)	50	97.9	39	*	3	93.3	92
Total	73.4	3,231	77.3	558	80.5	170	81.5	298	(49.5)	54	76.7	522

Note: 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. There are too few cases of "double orphans" to calculate the UNAIDS Indicator for ratio of orphans to non-orphans who are in school.

FEMALE CIRCUMCISION

Female genital cutting (FGC), also known as female circumcision in Nigeria, is a common practice in many societies in the northern half of sub-Saharan Africa. Nearly universal in a few countries, it is practiced by various groups in at least 25 African countries, in Yemen, and in immigrant African populations in Europe and North America. In a few societies, the procedure is routinely carried out when a girl is a few weeks or a few months old (e.g. Eritrea, Yemen), while in most others, it occurs later in childhood or adolescence. In the case of the latter, FGC is typically part of a ritual initiation into womanhood that includes a period of seclusion and education about the rights and duties of a wife.

The 2003 Nigeria Demographic and Health Survey (2003 NDHS) collected data on the practice of female circumcision in Nigeria from all women age 15-49. The 1999 NDHS collected data on female circumcision only from currently married women. In this chapter, topics discussed include knowledge, prevalence, and type; age at circumcision; person who performed the circumcision; and attitudes towards the practice.

13.1 KNOWLEDGE AND PREVALENCE OF FEMALE CIRCUMCISION

Table 13.1 presents data on women's knowledge of female circumcision. About half (53 percent) of Nigerian women age 15-49 have heard of the practice. There are marked variations in knowledge of female circumcision by residence, region, education, and ethnicity. About two-thirds of urban respondents have heard of female circumcision, compared with less than half of women in rural areas (69 versus 45 percent). In general, women in the south are more than twice as likely as women in the north to have heard of the practice. These variations by region and residence are a reflection of ethnic differentials. The Igbo and Yoruba, who are primarily resident in the South East and South West, respectively, have greater knowledge of female circumcision than the ethnic groups primarily resident in the north.

Table 13.1 also shows the prevalence of female circumcision by background characteristics, which follows the same patterns as knowledge of circumcision. The proportion of women who were circumcised at the time of the survey was greatest in the southern regions, among the Yoruba and Igbo, and among urban residents. The high prevalence of female circumcision among the Yoruba (61 percent) and Igbo (45 percent) helps to explain regional and urban-rural differentials, since the Yoruba and Igbo traditionally reside in the South West and South East, which are more urban than the north. More than twice as many of the oldest women as the youngest women are circumcised (28 versus 13 percent), suggesting that there has been a decline in the practice. Caldwell et al. (2000) have reported a decline in the prevalence of female circumcision among the Yoruba.

13.2 FLESH REMOVAL AND INFIBULATION

Questions directed at determining the type of female circumcision were asked of women who reported they had been circumcised. Table 13.1 indicates that the type of circumcision could not be determined for half of the women. However, among those women who could identify the type of procedure, circumcision that involved cutting and removal of flesh is most commonly reported (44 percent). Four percent of women reported that their vagina was sewn closed (infibulation) during their circumcision, which is the most radical procedure. It is worth noting that among the Yoruba, who have the largest proportion of women circumcised, less than 1 percent of women are infibulated. Infibulation is most prevalent in the South South region (8 percent).

Table 13.1 Knowledge and prevalence of female circumcision

Percentage of women who have heard of female circumcision, percentage of women circumcised, and the percent distribution of circumcised women by type of circumcision, according to background characteristics, Nigeria 2003

Background characteristic	Percentage of women who heard of female circumcision	Percentage of women circumcised	Number of women	Type of circumcision				Total	Number of women
				Cut, no flesh removed	Cut, flesh removed	Sewn closed	Not determined		
Age									
15-19	43.1	12.9	1,716	2.2	37.8	5.1	55.0	100.0	221
20-24	52.8	17.0	1,494	1.8	43.1	2.9	52.2	100.0	253
25-29	57.5	20.8	1,382	1.8	40.2	2.2	55.8	100.0	288
30-34	55.0	19.4	941	1.1	43.6	7.6	47.7	100.0	183
35-39	60.8	22.2	816	2.4	44.3	4.9	48.4	100.0	181
40-44	53.6	22.2	688	1.2	49.0	1.9	47.9	100.0	153
45-49	59.6	28.4	583	3.9	51.0	3.6	41.6	100.0	165
Residence									
Urban	68.7	28.3	2,629	1.5	37.6	4.0	56.9	100.0	744
Rural	45.0	14.0	4,991	2.5	49.6	3.9	44.0	100.0	701
Region									
North Central	36.0	9.6	1,121	1.2	64.6	2.5	31.7	100.0	107
North East	40.1	1.3	1,368	*	*	*	*	*	18
North West	25.1	0.4	2,095	*	*	*	*	*	9
South East	87.7	40.8	737	0.3	12.2	2.7	84.8	100.0	300
South South	82.5	34.7	1,342	3.0	66.0	7.5	23.5	100.0	466
South West	85.7	56.9	958	2.2	36.3	1.3	60.3	100.0	545
Ethnic group									
Fulani	19.4	0.6	463	*	*	*	*	*	3
Hausa	28.5	0.4	2,055	*	*	*	*	*	8
Igbo	86.5	45.1	1,037	1.3	28.3	3.1	67.3	100.0	467
Kanuri	58.5	0.5	232	*	*	*	*	*	1
Tiv	27.9	0.9	170	*	*	*	*	*	1
Yoruba	88.2	60.7	865	2.1	38.3	0.9	58.7	100.0	525
Other	54.8	15.7	2,797	2.5	66.1	7.8	23.6	100.0	439
Total	53.2	19.0	7,620	2.0	43.5	3.9	50.6	100.0	1,445

Note: Total includes 1 case with data missing on circumcision. An asterisk indicates that a figure is based on fewer than 25 un-weighted cases and has been suppressed.

13.3 AGE AT CIRCUMCISION

The percent distribution of women by age at circumcision is presented in Table 13.2. Female circumcision in Nigeria occurs mostly in infancy (i.e., before the first birthday). Three-quarters of the women who underwent circumcision were circumcised by age one. Twenty-one percent, however, were circumcised at age five or older. There are marked variations in the proportions of women circumcised in infancy by residence and ethnicity. For instance, almost nine in ten Igbo and Yoruba were circumcised during infancy compared with less than half of those in other ethnic groups (45 percent).

Infibulation, the most severe form of circumcision, is more likely to be carried out on women circumcised at a later age than on the very young. The table shows that 37 percent of those cut before the age of one had been infibulated, while 49 percent of those circumcised after the age of four were infibulated. It should be noted that the total number of respondents infibulated was 57.

Table 13.2 Age at circumcision

Percent distribution of circumcised women by age at circumcision, according to background characteristics, Nigeria 2003

Background characteristic	Age at circumcision in years				Total	Number of women
	<1	1-4	5+	Don't know/missing		
Age						
15-19	78.4	1.7	14.2	5.7	100.0	221
20-24	77.2	1.1	18.7	3.1	100.0	253
25-29	79.5	0.2	17.7	2.5	100.0	288
30-34	64.3	0.3	27.4	8.1	100.0	183
35-39	71.6	3.3	24.4	0.7	100.0	181
40-44	72.4	1.5	24.3	1.8	100.0	153
45-49	73.5	0.6	21.1	4.8	100.0	165
Residence						
Urban	79.2	0.9	16.8	3.1	100.0	744
Rural	69.6	1.5	24.4	4.5	100.0	701
Region						
North Central	51.6	1.7	42.1	4.6	100.0	107
North East	*	*	*	*	*	18
North West	*	*	*	*	*	9
South East	94.1	0.1	4.9	0.9	100.0	300
South South	55.2	2.1	38.0	4.7	100.0	466
South West	86.4	0.7	9.1	3.8	100.0	545
Ethnic group						
Igbo	88.9	0.3	9.4	1.4	100.0	467
Yoruba	87.4	1.2	7.1	4.4	100.0	525
Other	45.0	2.0	47.4	5.5	100.0	453
Type of circumcision						
Cut, no flesh removed	(69.7)	(0.0)	(30.3)	(0.0)	(100.0)	29
Cut, flesh removed	60.6	1.9	35.2	2.3	100.0	628
Sewn closed	37.4	5.0	49.2	8.4	100.0	57
Not determined	89.6	0.3	5.2	4.8	100.0	732
Total	74.6	1.2	20.5	3.8	100.0	1,445

Note: 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.

13.4 CIRCUMCISION OF DAUGHTERS

Women interviewed in the 2003 NDHS who had living daughters were asked if any of their daughters had been circumcised, and if not, whether they intended to have a daughter circumcised. Table 13.3 shows that, of women who have at least one daughter, 10 percent had circumcised a daughter, and an additional 3 percent intend to have a daughter circumcised. The proportion of women who have at least one circumcised daughter increases with age. Prevalence varies by residence and ethnicity, with women residing in urban areas, those in the south, and Yorubas and Igbos being the most likely to have circumcised daughters or intend to have their daughters circumcised.

Table 13.3 shows the percent distribution of most recently circumcised daughters by type of circumcision. The results show that circumcision involving the cutting and removal of flesh is the most common in Nigeria, accounting for two-thirds of all circumcisions. Five percent of circumcised daughters had no flesh removed, and 4 percent were infibulated.

Table 13.3 Daughter's circumcision experience and type of circumcision

Among women with at least one living daughter, percentage with at least one circumcised daughter, percentage who intend to have their daughter circumcised, and percent distribution by type of circumcision among most recently circumcised daughters, according to background characteristics, Nigeria 2003

Background characteristic	Percentage of women with at least one daughter circumcised	Percentage of women who intend to have daughter circumcised	Number of women with at least one daughter	Among circumcised daughters, type of circumcision				Total	Number of women
				Cut, no flesh removed	Cut, flesh removed	Sewn closed	Not determined		
Age									
15-19	0.5	5.0	183	*	*	*	*	*	1
20-24	4.4	3.9	538	(1.5)	(63.7)	(2.5)	(32.3)	(100.0)	23
25-29	6.9	2.3	898	12.6	54.1	5.4	27.9	100.0	62
30-34	6.4	4.4	715	4.1	71.5	2.0	22.5	100.0	45
35-39	11.3	3.5	707	3.7	69.1	4.0	23.2	100.0	80
40-44	12.9	2.7	582	2.4	77.0	3.7	16.9	100.0	75
45-49	23.8	1.4	506	4.3	64.6	3.1	28.0	100.0	120
Residence									
Urban	15.0	3.1	1,294	2.9	68.0	3.4	25.7	100.0	194
Rural	7.5	3.2	2,834	6.7	65.9	3.7	23.7	100.0	213
Region									
North Central	6.6	3.3	606	1.1	59.8	0.0	39.1	100.0	40
North East	0.2	0.4	856	*	*	*	*	*	2
North West	0.9	0.9	1,320	*	*	*	*	*	12
South East	25.7	4.9	324	7.3	42.1	9.5	41.1	100.0	83
South South	17.2	10.6	621	1.7	81.0	6.1	11.2	100.0	107
South West	40.8	3.0	401	5.2	73.0	0.0	21.9	100.0	164
Education									
No education	5.6	1.6	2,158	7.4	58.1	3.9	30.6	100.0	121
Primary	14.8	4.2	1,000	0.6	73.7	3.2	22.6	100.0	148
Secondary	14.9	5.7	786	8.6	65.1	4.3	22.0	100.0	117
Higher	11.8	4.4	185	(0.0)	(79.8)	(0.0)	(20.2)	(100.0)	22
Ethnic group									
Igbo	25.8	4.5	447	5.3	52.5	9.5	32.7	100.0	115
Yoruba	46.3	2.6	371	4.9	70.6	0.0	24.5	100.0	172
Other	3.6	3.0	3,311	4.5	75.5	2.9	17.1	100.0	120
Wealth quintile									
Lowest	6.8	3.1	903	6.7	71.5	3.1	18.7	100.0	61
Second	6.2	2.6	874	1.9	72.0	3.4	22.7	100.0	54
Middle	8.2	1.9	822	5.1	64.9	7.7	22.2	100.0	67
Fourth	11.1	4.0	770	6.1	68.9	3.0	22.0	100.0	85
Highest	18.4	4.2	759	4.4	62.7	2.1	30.8	100.0	140
Total	9.9	3.1	4,129	4.9	66.9	3.6	24.6	100.0	407

Note: Figures in parentheses are based on 26-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.4 indicates that almost all of the most recently circumcised daughters (85 percent) were circumcised before their first birthday, and 4 percent were circumcised between ages 1-4 years. Traditional circumcisers carried out 61 percent of the circumcisions. Circumcision is also commonly performed by nurses and midwives (24 percent) and traditional birth attendants (10 percent).

Table 13.4 Aspects of daughter's circumcision	
Percent distribution of most recently circumcised daughter by the age of the daughter at the time she was circumcised, and the person performing the circumcision, Nigeria 2003	
Aspects	Percent
Age of daughter when she was circumcised (in years)	
0	85.0
1-4	4.1
5-6	1.8
7-8	2.0
9-10	0.5
11-12	0.9
13+	3.9
Don't know/missing	1.8
Person who performed the circumcision	
Traditional circumciser	60.6
Traditional birth attendant	10.0
Other traditional	1.0
Doctor	2.0
Nurse/midwife	24.3
Other health professional	0.4
Don't know/missing	1.8
Total	100.0
Number	407

13.5 ATTITUDES TOWARD FEMALE CIRCUMCISION

Women and men who had heard of female circumcision were asked if they thought the practice should be continued or discontinued. Table 13.5.1 indicates that among the Nigerian women who had heard of female circumcision, two-thirds believe that the practice should be discontinued, while 21 percent believe the practice should be continued. Approximately one in ten of this group of women expressed conditional approval or was unsure of her opinion. Continuation of female circumcision finds greater support among southerners than northerners and among those who are circumcised than those un-circumcised. Even so, less than half of circumcised women want the practice to be continued. Women were also asked about their perception of men's attitudes toward female circumcision. Half of women believe that men want the practice discontinued. Nonetheless, one-fifth believe that men want female circumcision to continue.

Table 13.5.1 Attitudes toward female circumcision: women

Percent distribution of all women who have heard of female circumcision by opinion on whether female circumcision should be continued and by opinion on whether men think female circumcision should be continued, according to background characteristics, Nigeria 2003

Background characteristic	Attitude toward female circumcision					Believes men think that female circumcision should be:					Number of women
	Should be continued	Should be discontinued	Depends/don't know	Missing	Total	Continued	Discontinued	Depends/don't know	Missing	Total	
Age											
15-19	23.4	60.0	15.2	1.4	100.0	20.8	42.7	35.5	1.0	100.0	739
20-24	21.3	66.2	10.6	1.9	100.0	19.9	49.1	29.0	2.0	100.0	789
25-29	17.0	70.1	12.2	0.7	100.0	14.9	51.5	32.8	0.7	100.0	794
30-34	15.8	73.7	9.9	0.5	100.0	15.8	53.1	30.6	0.5	100.0	518
35-39	24.9	66.7	8.4	0.0	100.0	21.1	51.2	27.7	0.0	100.0	496
40-44	20.0	64.9	14.8	0.4	100.0	18.6	51.5	29.6	0.3	100.0	369
45-49	24.9	62.9	11.2	1.0	100.0	19.5	49.4	30.1	1.0	100.0	347
Residence											
Urban	22.5	64.7	11.9	0.9	100.0	18.7	49.4	31.0	0.9	100.0	1,805
Rural	19.4	67.9	11.8	1.0	100.0	18.5	49.4	31.2	0.9	100.0	2,248
Region											
North Central	13.2	64.2	19.1	3.6	100.0	12.1	42.0	42.3	3.6	100.0	403
North East	7.3	78.6	13.5	0.6	100.0	5.9	55.5	37.9	0.7	100.0	548
North West	13.5	70.5	13.1	2.9	100.0	11.5	55.7	30.7	2.1	100.0	527
South East	23.9	67.4	8.6	0.0	100.0	20.4	56.8	22.8	0.0	100.0	646
South South	18.9	73.7	7.2	0.2	100.0	20.0	52.6	26.9	0.5	100.0	1,107
South West	38.3	46.3	15.1	0.3	100.0	31.3	34.9	33.6	0.3	100.0	821
Education											
No education	19.1	64.7	14.7	1.6	100.0	15.5	47.8	35.2	1.5	100.0	1,023
Primary	23.1	64.5	11.6	0.9	100.0	18.9	47.8	32.2	1.0	100.0	949
Secondary	23.2	65.4	10.9	0.6	100.0	22.6	48.9	28.1	0.5	100.0	1,666
Higher	10.4	79.7	9.1	0.8	100.0	9.2	59.3	30.6	0.9	100.0	415
Circumcision status											
Not circumcised	9.3	76.3	12.9	1.4	100.0	8.3	57.1	33.3	1.3	100.0	2,607
Circumcised	41.5	48.6	9.8	0.1	100.0	37.0	35.7	27.1	0.2	100.0	1,445
Total	20.8	66.4	11.8	0.9	100.0	18.6	49.4	31.1	0.9	100.0	4,052

Men who had heard of female circumcision were asked the same attitude questions. Table 13.5.2 shows that among men who had heard of the practice, almost two-thirds are against continuation of female circumcision, while about one-fifth favour continuation. Similar to women, men residing in urban areas and those in the south are the most likely to support the continuation of the practice. Once again, differentials by residence are largely due to ethnicity. Almost half of men believe women want the practice discontinued, while only 14 percent believe that women want female circumcision to continue.

Table 13.5.2 Attitudes toward female circumcision: men

Percent distribution of all men who have heard of female circumcision by opinion on whether female circumcision should be continued and by opinion on whether women think female circumcision should be continued, according to background characteristics, Nigeria 2003

Background characteristic	Attitude toward female circumcision					Believes women think that female circumcision should be:					Number of men
	Should be continued	Should be discontinued	Depends/don't know	Missing	Total	Continued	Discontinued	Depends/don't know	Missing	Total	
Age											
15-19	20.2	54.0	25.0	0.8	100.0	17.1	40.2	42.0	0.8	100.0	127
20-24	19.0	62.1	18.4	0.5	100.0	15.8	50.1	33.0	1.0	100.0	223
25-29	22.6	59.9	17.6	0.0	100.0	16.1	46.5	37.4	0.0	100.0	211
30-34	17.0	67.4	15.6	0.0	100.0	8.9	58.9	32.1	0.0	100.0	229
35-39	22.1	61.3	16.6	0.0	100.0	15.4	54.9	29.7	0.0	100.0	163
40-44	10.2	75.8	14.0	0.0	100.0	8.0	55.9	36.1	0.0	100.0	166
45-49	24.8	62.6	12.6	0.0	100.0	15.2	49.2	35.6	0.0	100.0	117
50-54	19.8	57.7	22.5	0.0	100.0	16.7	53.5	29.9	0.0	100.0	103
55-59	21.4	66.3	12.3	0.0	100.0	15.3	45.8	38.9	0.0	100.0	89
Residence											
Urban	23.1	59.8	17.0	0.2	100.0	13.0	49.9	37.0	0.2	100.0	586
Rural	16.7	65.9	17.3	0.1	100.0	14.5	52.2	33.0	0.3	100.0	840
Region											
North Central	17.4	75.6	6.9	0.0	100.0	12.6	68.1	19.3	0.0	100.0	154
North East	8.7	73.7	17.3	0.3	100.0	9.4	50.8	39.1	0.7	100.0	307
North West	14.5	64.3	21.2	0.0	100.0	11.7	53.6	34.7	0.0	100.0	276
South East	28.4	45.5	26.2	0.0	100.0	12.2	42.4	45.4	0.0	100.0	156
South South	24.1	64.1	11.4	0.4	100.0	20.4	51.6	27.6	0.4	100.0	279
South West	27.8	52.7	19.5	0.0	100.0	16.4	44.0	39.6	0.0	100.0	254
Education											
No education	15.2	63.7	21.0	0.0	100.0	15.2	46.5	38.3	0.0	100.0	280
Primary	24.6	57.6	17.8	0.0	100.0	17.4	44.8	37.8	0.0	100.0	362
Secondary	20.1	61.2	18.4	0.4	100.0	12.8	51.4	35.2	0.6	100.0	549
Higher	14.4	77.0	8.6	0.0	100.0	9.7	66.3	24.0	0.0	100.0	235
Total	19.3	63.4	17.1	0.1	100.0	13.9	51.2	34.6	0.2	100.0	1,426

13.6 REASONS FOR SUPPORTING FEMALE CIRCUMCISION

In the 2003 NDHS, women and men who said they thought female circumcision should continue were asked about the benefits the girls themselves get if they undergo this procedure. Chastity before marriage is the reason most commonly cited by both women and men in Nigeria. More than one-third of the women (36 percent) and 45 percent of men cited the need to prevent premarital sex as their reason for supporting female circumcision (Table 13.6). Maintaining virginity before marriage has been given as a benefit of female circumcision in other African countries as well, but except for Niger, it has always been the third or fourth most frequently given reason (Yoder et al., 2004).

An additional 35 percent of women and 30 percent of men said that a circumcised female would have better marriage prospects. Whereas almost one-quarter of men cite greater sexual pleasure for men as a perceived benefit, this is the least commonly cited reason among women (5 percent). One-quarter of women and one-fifth of men support female circumcision due to a belief that it aids safe delivery. This misconception will require adequate public education to correct.

Table 13.6 Perceived benefits of undergoing female circumcision

Among women and men who say they think female circumcision should be continued, percentage who cite specific reasons, according to urban-rural residence, Nigeria 2003

Reason	Women			Men		
	Residence			Residence		
	Urban	Rural	Total	Urban	Rural	Total
Reason for supporting female circumcision						
Cleanliness/hygiene	5.1	8.4	6.8	5.5	14.4	10.0
Social acceptance	34.0	21.9	27.7	9.1	22.7	16.0
Better marriage prospects	26.8	42.0	34.6	28.3	31.9	30.1
Preserve virginity/prevent premarital sex	49.0	23.4	35.8	48.3	41.8	45.0
More sexual pleasure for the man	7.1	3.5	5.3	24.7	21.7	23.2
Religious approval	10.4	12.2	11.3	11.2	6.2	8.7
Helps delivery	24.6	25.8	25.2	20.2	20.9	20.5
Other	9.6	21.3	15.7	15.7	5.9	10.7
Number	407	436	843	135	141	276

13.7 REASONS FOR NOT SUPPORTING FEMALE CIRCUMCISION

Women and men who said they thought female circumcision should be discontinued were asked about the benefits the girls themselves get if they do not become circumcised. Table 13.7 shows that sexual gratification was cited as a benefit by the majority of the women and men who do not support the continuation of female circumcision. One-third of the women cited more sexual pleasure for the woman and an additional one-fourth cited more sexual pleasure for the man. Among men, however, 48 percent cited more sexual pleasure for the man, and an additional 34 percent cited increased sexual pleasure for the woman. Religion is the reason least frequently cited by both women and men for not supporting female circumcision, suggesting that female circumcision is not perceived as a religious practice. It has been observed that female circumcision is a cultural rather than a religious practice (Toubia, 1995; Caldwell et al., 2000).

Table 13.7 Reasons for not supporting female circumcision

Among women and men who say they think female circumcision should be discontinued, percentage who cite specific reasons, according to urban-rural residence, Nigeria 2003

Reason	Women			Men		
	Residence			Residence		
	Urban	Rural	Total	Urban	Rural	Total
Reason for not supporting female circumcision						
Fewer medical problems	33.0	34.2	33.7	25.8	35.6	31.8
Avoiding pain	18.8	21.7	20.5	27.2	22.3	24.2
More sexual pleasure for her	38.9	32.5	35.3	41.9	28.8	33.9
More sexual pleasure for the man	25.1	24.0	24.5	53.0	45.0	48.1
Follows religion	2.3	3.1	2.8	3.6	5.1	4.5
Number	1,168	1,525	2,693	350	554	904