

**MOZAMBIQUE**  
**Demographic and Health**  
**Survey**  
**2003**

**PRELIMINARY REPORT**

**National Statistics Institute**  
**Ministry of Health**  
**Maputo, Mozambique**

**Measure *DHS+*/ORC Macro**  
**(Technical Assistance)**

**February 2004**

**Levels of Fertility and Preferences**

Global Fertility Rate in the last 3 years (average number of children per woman) .....	5.5
Percentage of women aged 15-19 years with at least 1 child .....	34.0
Percentage of women aged 20-24 years with at least 1 child .....	82.2
Median interval between births (in months).....	34.4
Percentage of women who do not want more children (including sterilised women) .....	24.3
Percentage of women who do not want to have children early .....	31.2
Percentage of women who do not want to have children late .....	33.5

**Mortality in the last 5 years prior to the IDS (deaths per 1,000 births)**

Infant mortality rate .....	124
Under-five mortality rate .....	178

**Knowledge and Use of Contraceptives among All women and those**

**Currently Married**

Percentage of married women who know some method of contraception .....	82.3
Percentage of married women who know at least two modern methods .....	82.3
Percentage of all women who currently use some method of contraception .....	16.5
Percentage of married women who currently use some method .....	14.2
Percentage of all women who currently use a modern method .....	11.7

**Ante-natal Care for women with Children Born**

**In the five Years prior to the Date of the IDS**

Percentage of women who had an ante-natal consultation with a health professional .....	84.6
Percentage of women who received anti-tetanus vaccine .....	77.8
Percentage of children born with assistance from health personnel .....	47.7
Percentage of children born in a health unit .....	47.6

**Vaccinations (health card and statement by mothers)**

Percentage of children aged 12-23 months who at some stage received DPT <sub>3</sub> .....	71.6
Percentage of children aged 12-23 months who at some stage received all the vaccines <sup>1</sup> .....	63.3
Percentage of children aged 12-23 months who received DPT <sub>3</sub> during the 1st year of life .....	57.2
Percentage of children aged 12-23 months who received all the vaccines during the 1st year of life.....	43.5

**Treatment of children aged under five showing symptoms of acute respiratory infection and diarrhoea in the two weeks preceding the IDS**

Percentage of children with symptoms of acute respiratory infections treated .....	51.4
Percentage of children with diarrhoea who were treated in a health unit .....	48.8
Percentage of children with diarrhoea who received Oral Rehydration Salts (ORS).....	48.5
Children with diarrhoea who received ORS and home-made fluids recommended or liquids .....	70.5
Percentage of mothers who know about ORS.....	87.0
Children with diarrhoea who received more liquids than normal .....	46.7
Children with diarrhoea who received more solids than normal.....	17.4

**Breastfeeding of children and Nutritional status**

Percentage of children under four months old exclusively breast fed .....	49.8
Percentage of children under four months old who are only breast fed and consume water .....	35.9
Percentage of children under 3 years old who ate fruit and vegetables rich in vitamin A .....	49.9
Percentage of children aged 6-59 months who received vitamin supplements .....	49.8
Percentage of mothers with children born in the last 5 years prior to the date of the IDS who received vitamin A after the birth .....	20.8
Percentage of children under five with retarded growth (low height for age).....	41.0
Percentage of children under five with very retarded growth .....	18.3
Percentage of children under five with low weight.....	23.7
Percentage of children under five with very low weight.....	4.0

**Knowledge of and Attitude towards AIDS**

**Women Men**

Median age at first sexual relation, for interviewees aged 20-49 years .....	16.1	17.7
Percentage of interviewees who have already heard of AIDS .....	95.7	97.7
Percentage of interviewees who believe there are ways of avoiding HIV/AIDS.....	63.8	77.1
Percentage of interviewees who know at least two ways of avoiding AIDS .....	44.0	59.7
Percentage of interviewees who know two or three important pragmatic methods of avoiding AIDS <sup>3</sup> .....	53.7	69.4
Percentage of interviewees who know that condoms are a way of avoiding AIDS.....	57.0	72.5
Percentage of interviewees who know that limiting one's number of partners is a way of avoiding AIDS .....	58.8	72.3
Percentage of married interviewees who have sexual partners other than their spouses or habitual partners <sup>4</sup> .....	3.8	22.5
Percentage of unmarried interviewees who have sexual partners <sup>3</sup> .....	54.2	68.5
Interviewees who used a condom in their most recent sexual relation with an occasional partner .....	6.3	12.0

<sup>1</sup>Includes BCG, three doses of DPT and measles

<sup>2</sup> Men aged 20-64 years

<sup>3</sup> Pragmatically important methods are sexual abstinence, use of condoms and limitation of sexual partners.

<sup>4</sup> In the 12 months prior to the date of the IDS.

# INTRODUCTION

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## 1

This report presents the preliminary results of the second Demographic and Health Survey (IDS 2003) in Mozambique, undertaken by the National Statistics Institute (INE) and the Ministry of Health (MISAU) with the technical support of Macro Internacional Inc. The IDS is part of the world programme of Demographic and Health Surveys (DHS), currently in their fourth phase of implementation. This is the second such survey in Mozambique.

These surveys are based on a nationally and regionally representative sample of women aged between 15 and 49, and are designed to handle information on fertility, mother and child health and the socio-economic characteristics of the population interviewed. In the area of fertility, the data gathered makes it possible to assess fertility levels and trends, knowledge and use of contraceptive methods, breastfeeding and other proximal determinants of this demographic variable, such as the proportion of women who are married or in a stable union, and the duration of post-birth amenorrhea. It also looks into reproductive intentions, and unmet needs concerning family planning.

In the area of mother and child health, data are gathered on maternal mortality, STD/AIDS, pregnancy, ante-natal and post-natal care. As regards children's health, the data gathered make it possible to determine rates and trends of infant and child mortality, and also to analyse their socio-economic determinants, since the main causes of the dominant childhood diseases (diarrhoea and respiratory infection), immunization and nutritional status are all investigated.

The survey also records socio-economic characteristics of the population interviewed, such as: education; access to means of communication; occupation; religion; housing conditions with regard to access to water, sanitation, electricity, durable consumer goods, number of rooms, and dominant material used for flooring.

Apart from the survey on the female population, a sub-sample of 30% of the households selected was also considered in order to record the perceptions of the male population about knowledge, attitudes and practices concerned with family planning, reproductive intentions, and sexual knowledge and behaviour faced with HIV/AIDS.

By holding the IDS in Mozambique, reliable and representative data were obtained that are highly comparable with other countries in the region. The IDS data bank is very accessible, making it possible to generate indicators to analyse trends and changes in the Mozambican demographic dynamic.

## QUESTIONNAIRES

To gather the data, the methodology of household interviews was applied, and three types of questionnaire were used:

- Questionnaire for households
- Questionnaire for women;
- Questionnaire for men.

The questionnaires took as their basis the model used by the Demographic and Health Surveys in the third phase. Apart from this, they were put into context and specific questions were added to satisfy the needs of our country. It should be mentioned that these instruments were duly pre-tested in Maputo City and in the surrounding rural areas in June 2003.

## DESIGN OF THE SAMPLE

The sample was designed so as to be representative at national and provincial level and by areas of residence (urban-rural), covering only people living in households. Excluded from the sample were people living in collective residential institutions, such as hotels, hospital or military barracks etc., and the homeless.

It took into account the need to obtain indicators of fertility levels, infant and child mortality, the prevalence of contraceptive use etc. In the fields mentioned above, it was estimated that that the size of the sample should make it possible to obtain 11,200 complete interviews of women aged 15-49 years, and in a third of the selected households, men aged 15-64 years were also interviewed.

IDS03 was a sub-sample of the Household Survey (IAF) undertaken by the INE in 2002/03. The IAF was formed by 858 UPA's (Primary Sample Units) and the same number of AEs (Enumeration Areas), drawn up based on the results of the 1997 population census.

For its part, IDS 2003 consisted of 52 UPA's and the same number of AEs per province, with the exception of Nampula and Zambézia provinces, with 68 UPA's and AE's, due to the weight of their populations in the national total. In the AEs included, an update of households through listing was undertaken. From this list the 24 households to be surveyed were selected.

## OPERATIONAL ASPECTS OF THE SURVEY

### ***Training of the Survey Staff***

In order to ensure uniformity in training and in field work procedures, all the field staff were trained at the same time by INE and ORC Macro technicians. The teams received theoretical and practical training for three and a half weeks, through explanatory classes, group dynamics, dramatization, exercises and field practice. The course lasted from 28 July to 23 August 2003. 80 women and 40 men took part. Given the ethnic and linguistic diversity of Mozambique, all the participants were natives of the provinces where they were to work and spoke correctly the languages dominant in these areas.

### ***Gathering data***

Data gathering activity began in September 2003, and ended in December of this year. In each province, the field work was undertaken by a team consisting of 8 people: a controller, a supervisor, five questioners (four women and one man), as well as the driver.

### ***Data processing***

The entry of data began in September 2003, three weeks after the start of data collection, and ended in January 2004, one week after the end of the field work. Work on processing the survey involved manual and automatic procedures: reception and verification of the questionnaires, criticism (revision and codification), digital input, editing and analysis of inconsistencies. This work involved one person in charge of processing, a programmer, five supervisors, five data critics, and thirty people inputting data.

For entering data, the interactive software CSPRO (Census and Survey Processing System), for micro-computers, was used. This is a programme specially designed to facilitate digital input of data, criticism, and obtaining frequencies and tabulations. CSPRO is the combination of IMPS and ISSA interfaces in the Windows environment. This programme makes it possible to verify interactively the intervals of the variables, to detect inconsistencies and control the internal flow of data during inputting the questionnaires.

### ***Supervision and Quality Control***

The field work relied on close supervision and quality control by central and provincial technicians both from the INE and from MISAU and by the Macro Resident Consultant.

In addition, during data collections, strict control was established in each team over the collection process, through the detection of errors on the part of the field critic, which made possible immediate correction on the ground. At the level of central coordination, the data critics undertook additional revision of the questionnaires and the respective teams were informed of the problems found.

Interactive processing by batches of information through the CSPRO programme also made it possible at central level to obtain regularly partial results, to analyse the data obtained at any given moment, through the production of tables for follow-up and quality control. The results of these tabulations were reported as feedback to the survey takers, guaranteeing the quality of the data.

Table 1.2 shows the weighted number of women and men surveyed. In calculating indicators it is necessary to apply the weighting, because the sample was not allocated to the provinces in accordance with the current population distribution. It is also important to note that some variables presented include a comparatively small number of respondents. For this reason, in cases where the number of non-weighted sub-groups was between 25-30, their data were not included in this report.

**Table 1.1 Rates of reply to the survey from households and from the women and the men**

Number of households, number of women and men, number of interviews and rates of reply by provinces and area of residence, Mozambique, 2003

Area of residence and Province	Households			Rate of reply	Women			Men		
	Number of households selected	Households occupied	Households interviewed		Number of women eligible	Women interviewed	Rate of reply	Number of men eligible	Men interviewed	Rate of reply
<b>Area of residence</b>										
Rural	8,983	8,435	7,719	91.5	7,525	7,038	93.5	1,851	1,585	85.6
Urban	5,492	5,232	4,596	87.8	6,132	5,380	87.7	1,748	1,315	75.2
<b>Provinces</b>										
Niassa	1,248	1,154	994	86.1	888	819	92.2	252	192	76.2
Cabo Delgado	1,241	1,182	1,083	91.6	963	899	93.4	288	254	88.2
Nampula	1,632	1,524	1,355	88.9	1,292	1,217	94.2	444	378	85.1
Zambézia	1,632	1,565	1,370	87.5	1,210	1,135	93.8	353	281	79.6
Tete	1,248	1,191	1,137	95.5	1,154	1,115	96.6	291	251	86.3
Manica	1,248	1,173	1,016	86.6	1,238	1,094	88.4	362	270	74.6
Sofala	1,240	1,140	1,083	95.0	1,303	1,220	93.6	363	322	88.7
Inhambane	1,248	1,182	1,114	94.2	1,199	1,125	93.8	216	176	81.5
Gaza	1,242	1,181	1,112	94.2	1,324	1,273	96.1	238	215	90.3
Maputo Province	1,248	1,179	1,015	86.1	1,340	1,125	84.0	281	182	64.8
Maputo City	1,248	1,196	1,036	86.6	1,746	1,396	80.0	511	379	74.2
<b>Total</b>	<b>14,475</b>	<b>13,667</b>	<b>12,315</b>	<b>90.1</b>	<b>13,657</b>	<b>12,418</b>	<b>90.9</b>	<b>3,599</b>	<b>2,900</b>	<b>80.6</b>

**Table 1.2 Selected characteristics of persons interviewed, by area of residence and provinces**

Percentage distribution of the women and men interviewed, by area of residence and provinces, Mozambique, 2003

Characteristics	Women			Men		
	Percentage weighted	Number weighted	Un-weighted	Percentage weighted	Number weighted	Un-weighted
<b>Area of residence</b>						
Rural	63.4	7,870	7,038	58.8	1,705	1,585
Urban	36.6	4,548	5,380	41.2	1,195	1,315
<b>Provinces</b>						
Niassa	3.8	476	819	4.0	116	192
Cabo Delgado	8.6	1,071	899	9.4	274	254
Nampula	19.4	2,403	1,217	23.9	693	378
Zambézia	15.3	1,906	1,135	16.0	463	281
Tete	8.3	1,025	1,115	7.6	222	251
Manica	6.5	809	1,094	6.6	192	270
Sofala	7.0	865	1,220	7.8	226	322
Inhambane	8.8	1,088	1,125	5.7	164	176
Gaza	5.4	666	1,273	3.1	90	215
Maputo Province	8.5	1,050	1,125	6.8	197	182
Maputo City	8.5	1,059	1,396	9.0	261	379
<b>Total</b>	<b>100.0</b>	<b>12,418</b>	<b>12,418</b>	<b>100.0</b>	<b>2,900</b>	<b>2,900</b>

# CHARACTERISTICS OF THE POPULATION INTERVIEWED

## 2

The description and specific characterisation of the population interviewed is important in that it gives a context to the data presented in the following chapters of this report. Table 2.1 shows the percentage distribution of women and men interviewed, according to their age, educational level and marital status. Table 2.2 presents the percentage distribution of women and men interviewed by area of residence and provinces.

**Table 2.1 Background characteristics of the persons interviewed**

Percentage distribution of the women and men interviewed, by sex, age, marital status and educational level, Mozambique, 2003

Characteristics	Women			Men		
	Percentage weighted	Number weighted	Un-weighted	Percentage weighted	Number weighted	Un-weighted
<b>Educational level</b>						
None	41.1	5,100	4,491	17.3	501	413
Primary	51.1	6,347	6,713	66.9	1,940.	1,964
Secondary	7.6	940	1,172	15.1	437	494
Higher	0.2	30	42	0.7	21	29
<b>Age</b>						
15-19	19.8	2,454	2,644	23.2	673	681
20-24	19.8	2,456	2,494	13.9	404	437
25-29	17.9	2,224	2,165	13.0	378	378
30-34	14.4	1,792	1,661	11.3	329	317
35-39	11.4	1,411	1,383	9.1	265	267
40-44	9.1	1,126	1,157	7.6	221	220
45-49	7.7	954	914	7.6	221	204
50-54	na	na	na	6.1	176	167
55-59	na	na	na	4.3	124	117
60-64	na	na	na	3.8	111	112
<b>Marital status</b>						
Single	15.8	1,961	2,261	31.4	911	974
Married	15.5	1,926	1,768	32.8	950	723
Marital union	54.8	6,810	6,609	30.8	894	1,057
Divorced/separated	13.0	1,609	1,678	4.8	139	138
Widowed	0.9	112	102	0.2	6	8
<b>Total</b>	<b>100.0</b>	<b>12,418</b>	<b>12,418</b>	<b>100.0</b>	<b>2,900.</b>	<b>2,900</b>

na = not applicable

Note: Educational level refers to the highest level attended, whether completed or not.

**Table 2.2 Characteristics of the persons interviewed**

Percentage distribution of the women and men interviewed, by sex, and by area of residence and province, Mozambique, 2003

Characteristics	Women			Men		
	Percentage weighted	Number weighted	Un-weighted	Percentage weighted	Number weighted	Un-weighted
<b>Niassa</b>						
Rural	75.0	357	354	74.0	86	92
Urban	25.0	119	465	26.0	30	100
<b>Cabo Delgado</b>						
Rural	77.1	826	723	69.4	190	188
Urban	22.9	245	176	30.6	84	66
<b>Nampula</b>						
Rural	63.7	1,531	907	57.8	400	280
Urban	36.3	872	310	42.2	293	98
<b>Zambezia</b>						
Rural	88.5	1,686.	948	86.8	402	228
Urban	11.5	220	187	13.2	61	53
<b>Tete</b>						
Rural	84.4	865	831	86.4	191	197
Urban	15.6	160	284	13.6	30	54
<b>Manica</b>						
Rural	62.8	508	550	55.9	108	123
Urban	37.2	300	544	44.1	85	147
<b>Sofala</b>						
Rural	52.9	458	768	44.9	102	174
Urban	47.1	407	452	55.1	125	148
<b>Inhambane</b>						
Rural	76.4	832	831	74.4	122	130
Urban	23.6	257	294	25.6	42	46
<b>Gaza</b>						
Rural	70.6	470	724	66.9	60	112
Urban	29.4	196	549	33.1	30	103
<b>Maputo Province</b>						
Rural	32.1	337	402	22.0	43	61
Urban	67.9	713	723	78.0	154	121
<b>Maputo City</b>	100.0	1,059	1,396	100.0	261	379
<b>Total</b>						
Rural	63.4	7,870	7,038	58.8	1,705	1,585
Urban	36.6	4,548	5,380	41.2	1,195	1,315

# FERTILITY AND REPRODUCTIVE

## INTENTIONS

# 3

Fertility is one of the demographic variables used to assess the population growth trend, and so the IDS collected detailed information on the reproductive behaviour of Mozambican women. For each woman interviewed, data was collected on the history of births, that is, the number of children born live, date of birth and sex of each of the children, whether they had survived up to the time of the interview, and the age of those who had died at the moment of death. This information makes it possible to obtain direct estimates of current levels and trends in fertility and mortality.

### Current Fertility

The estimate of current fertility refers to the three years prior to the survey, approximately equivalent to the calendar years 2001-2003, so that the results obtained are centred on the year 2002<sup>1</sup>. Estimates of the level of current fertility are relevant for the definition of population policies and programmes.

The estimates of fertility presented in this section are based on the reproductive histories told by women aged 15-49 years interviewed by the IDS. Based on the histories of births, retrospective fertility (average number of live births) and current fertility (specific fertility rates) were estimated.

Table 3.1 presents the specific fertility rates by area of residence. A synthetic indicator of fertility which makes comparisons easier is the *Global Fertility Rate* (TGF). This indicator may be interpreted as the average number of children that women would bear during their entire reproductive life, if fertility conditions were to remain constant. The TGF for the whole country is 5.5 children per women.

### Fertility differentials

Table 3.2 Fertility, live births and pregnancy, by selected characteristics

Global fertility rate for the three years prior to the survey, average number of live births for women ages 40-49 years, an proportion of women currently pregnant, by selected characteristics. Mozambique, 2003

Característica	Global fertility rate TGF	Average live births 40-49	Proportion of women currently pregnant
<b>Residence</b>			
Rural	6.1	6.3	11.2
Urban	4.4	5.7	7.7
<b>Province</b>			
Niassa	7.2	6.6	13.6
Cabo Delgado	5.9	6.3	8.5
Nampula	6.2	6.7	9.6
Zambézia	5.3	5.5	11.1
Tete	6.9	7.5	13.5
Manica	6.6	6.7	13.9
Sofala	6.0	6.4	13.9
Inhambane	4.9	5.6	7.6
Gaza	5.4	5.7	9.9
Maputo Province	4.1	5.5	6.1
Maputo City	3.2	4.8	4.9
<b>Educational level</b>			
None	6.3	6.3	10.9
Primary	5.3	6.0	9.9
Secondary	2.9	4.1	5.6
Total	5.5	6.1	9.9

Note: Global fertility rate for women aged 15-49 years

Notes: the rates refer to the period of 1-35 months prior to the interview. The rates for the 45-49 year group may present a slight deviation due to the effect of truncated values.  
TGF: Global Fertility Rate per woman.  
TFG: General Fertility Rate (births divided by number of women aged 15-49) expressed per 1,000 women.  
TNB: Gross birth rate

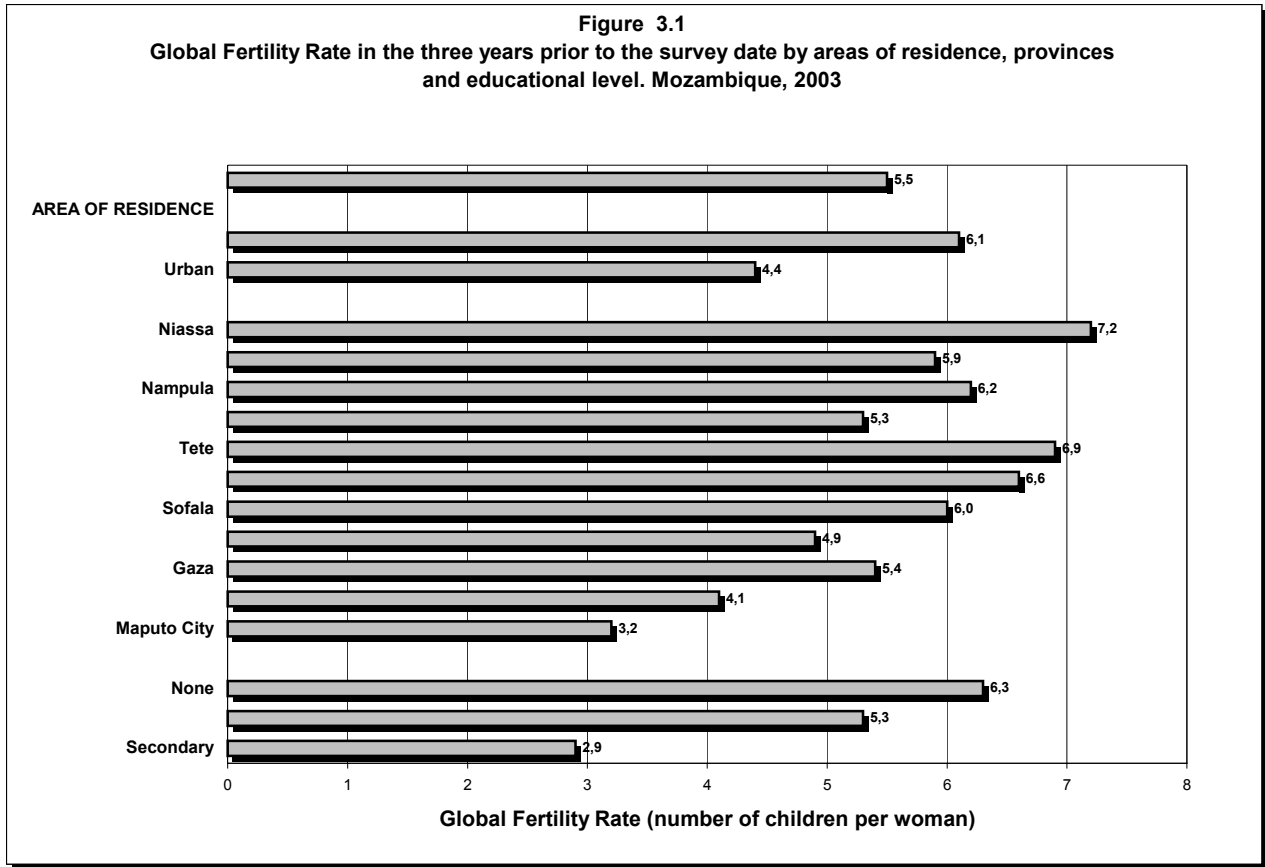
<sup>1</sup> The field work took place from September 2003 to January 2004

Table 3.2 compares the Global Fertility Rate and the average number of children born live to women aged 40-49 years and shows the differentials by province. It is thus possible to identify where there is evidence of the most important reductions in fertility levels.

In women reaching the end of their reproductive period (45-49 years), the average number of children may be equivalent to the average final number. In a population where fertility levels remain constant, this measure should be close to the TGF. However, in a population where fertility levels are falling, the TGF is lower than the average number of children borne by women aged 45-49 years.

The same table also shows important differences in fertility levels by province, by educational level and by area of residence.

Table 3.2 also shows current pregnancies, that is, the percentage of women who were pregnant at the date of the interview. Of the total number of women interviewed, 10% were pregnant, but this number varies by area of residence, province and educational level.



### Accumulated Fertility

This section examines the average number of children per woman, an indicator frequently used in analyzing the reproductive behaviour of the population. In older women this indicator expresses the accumulated fertility over the past 20 or 25 years, that is, it shows approximately the average complete descendance of this cohort.

The percentage distribution of all the women interviewed and those currently married or in a marital union by the number of children born live is shown in Table 3.3. This information, together with the number of surviving children, is used for indirect estimates of mortality levels and trends. Since the direct estimates of infant and child mortality can be calculated from the data of the history of births collected by the survey, these are presented in Chapter 7 of the present report.

**Table 3.3 Children born live, and surviving children**

Percentage distribution of all women and of women living in unions by number of children born live and average number of children born live and surviving. Mozambique, 2003

Age groups	Children born live											Total	Number	Average live births	Average surviving
	0	1	2	3	4	5	6	7	8	9	10+				
<b>ALL WOMEN</b>															
15-19	66.0	26.4	6.4	0.8	0.3	0.0	0.0	0.1	0.0	0.0	0.0	100.0	2,454	0.43	0.36
20-24	17.7	29.7	30.3	15.1	5.6	1.0	0.3	0.2	0.0	0.0	0.0	100.0	2,456	1.67	1.39
25-29	7.2	12.6	18.9	24.7	18.6	11.0	4.4	2.2	0.1	0.2	0.0	100.0	2,224	2.99	2.42
30-34	5.6	9.1	9.8	13.8	16.7	20.0	12.1	7.8	2.6	1.5	0.9	100.0	1,792	4.08	3.26
35-39	4.2	5.8	8.6	8.9	11.2	18.3	14.3	11.4	7.6	6.2	3.5	100.0	1,411	5.05	3.98
40-44	3.3	4.6	6.9	8.7	10.8	13.4	10.5	11.9	12.7	7.5	9.9	100.0	1,126	5.75	4.40
45-49	3.1	4.8	4.9	6.1	7.1	12.3	10.0	11.1	12.0	9.7	19.0	100.0	954	6.52	4.78
Total	19.6	16.1	14.0	11.8	9.7	9.3	5.9	4.8	3.3	2.4	2.9	100.0	12,418	3.14	2.47
<b>MARRIED WOMEN OR WOMEN IN STABLE UNIONS</b>															
15-19	35.9	47.4	13.9	1.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	100.0	936	0.84	0.69
20-24	10.8	26.7	34.8	18.3	7.3	1.4	0.4	0.3	0.0	0.0	0.0	100.0	1,747	1.92	1.59
25-29	5.5	10.3	18.0	25.0	20.3	12.8	5.2	2.4	0.2	0.3	0.0	100.0	1,812	3.19	2.58
30-34	5.2	7.3	8.5	13.2	17.1	20.5	13.6	8.8	3.0	1.7	1.1	100.0	1,495	4.28	3.41
35-39	3.4	5.5	8.8	7.2	11.4	18.5	14.3	11.6	8.5	6.7	4.1	100.0	1,158	5.21	4.11
40-44	3.3	4.2	6.3	7.5	10.7	12.4	10.1	13.1	13.4	7.6	11.4	100.0	872	5.95	4.54
45-49	2.3	3.8	4.4	5.3	5.3	12.2	10.0	9.9	13.6	11.7	21.4	100.0	715	6.91	5.03
Total	9.0	15.3	15.8	13.5	11.7	11.1	7.2	5.7	4.1	3.0	3.6	100.0	8,736	3.72	2.92

### Age of women at the first birth

The age at which women start their reproductive lives has important demographic implications, as well as consequences for mother and child. The experience of many countries shows that the late onset of women's reproductive lives, which reflects an increase in the age at first marriage, has made a major contribution to the decline in fertility.

The proportion of women under 20 years old who are mothers is also a measure of the scale of adolescent fertility, which represents one of the main social and health problems of most countries. Table 3.4 shows the percentage of women interviewed for IDS 2003 who had their first child at the exact age of 20, by area of residence, province and current age. It also shows the median age at first birth by area of residence and current age.

**Table 3.4 Age at first birth**

Percentage of women who had their first birth with the exact age of 20 years, by their current age, area of residence and province, and median at first birth by area of residence, Mozambique 2003

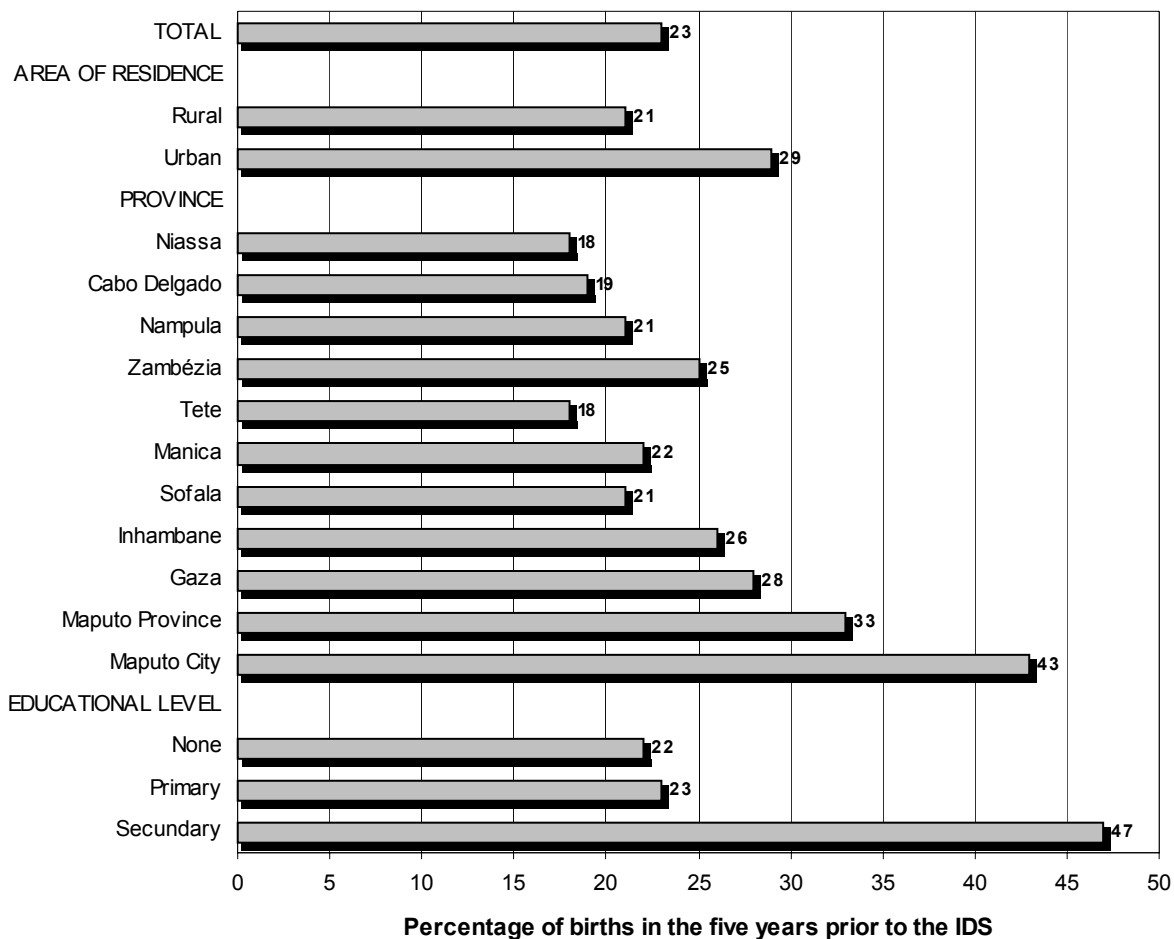
Area of residence And province	Current age					
	20-24	25-29	30-34	35-39	40-44	45-49
<b>Area of residence</b>						
Rural	73.7	66.8	57.3	54.3	54.9	49.1
Urban	58.4	59.3	58.1	66	63.8	55.8
<b>Province</b>						
Niassa	89.1	70.2	56.0	59.5	54.0	30.8
Cabo Delgado	72.8	68.7	72.5	65.9	56.8	63.9
Nampula	72.5	71.3	55.0	62.1	58.8	63.7
Zambézia	79.3	68.1	56.8	43.3	54.6	31.2
Tete	69.9	61.7	55.5	60.7	60.4	60.9
Manica	69.5	61.7	56.8	58.8	57.4	41.8
Sofala	56.6	68.9	62.6	60.1	56.5	36.6
Inhambane	68.4	64.2	53.1	54.0	58.9	51.6
Gaza	60.4	53.1	47.7	51.5	60.7	46.2
Maputo Province	56.8	56.1	56.9	63.2	57.5	59.4
Maputo City	46.4	45.9	57.8	72.1	62.1	54.9
<b>Total</b>	<b>67.8</b>	<b>64.4</b>	<b>57.6</b>	<b>58.3</b>	<b>58.0</b>	<b>51.2</b>
<b>Number of women</b>	<b>2,456</b>	<b>2,224</b>	<b>1,792</b>	<b>1,411</b>	<b>1,126</b>	<b>954</b>
<b>Median age at first birth</b>						
Rural	18.2	18.6	19.1	19.6	19.3	20.2
Urban	19.3	19.1	19.2	18.6	18.7	19.4
<b>Total</b>	<b>18.6</b>	<b>18.8</b>	<b>19.2</b>	<b>19.2</b>	<b>19.0</b>	<b>19.2</b>

## Spacing between Births

The interval between births, also defined as spacing pregnancies or the inter-birth period, has been used as an important indicator of the conditions for child survival. It is known that short intervals between births are associated with higher risks of infant and child mortality.

Table 3.5 shows the percentage distribution of births for the five years prior to the date of the survey, by the number of months between one birth and the next, by the demographic characteristics of the mothers. The median interval, that is, the figure in which 50% of the births occurred, is 34.4 months at national level, 36.3 in urban areas and 33.9 in rural areas.

**Graph 3.2**  
**Spacing between births with duration of 48 months or more by Area of Residence, Provinces and Mother's Educational Level. Mozambique, 2003**



**Table 3.5 Spacing between births**

Percentage distribution of births in the five years prior to the survey, by interval since the previous birth, and by selected characteristics. Mozambique, 2003

Characteristic	Number of months since the previous birth					Total	Median interval (months)	Number of births
	7-17	18-23	24-35	36-47	48+			
<b>Area of residence</b>								
Rural	5.5	12.2	39.7	21.6	21.0	100.0	33.9	6,092
Urban	4.0	8.9	36.1	22.4	28.7	100.0	36.3	2,211
<b>Province</b>								
Niassa	6.6	13.4	40.8	21.5	17.6	100.0	32.8	427
Cabo Delgado	6.1	11.4	41.4	21.7	19.3	100.0	33.8	776
Nampula	5.7	13.1	41.8	18.9	20.5	100.0	32.7	1,845
Zambézia	5.4	15.5	34.0	20.5	24.6	100.0	34.2	1,293
Tete	8.2	11.1	43.0	20.1	17.7	100.0	33.1	886
Manica	2.9	8.6	41.8	24.3	22.4	100.0	34.9	654
Sofala	4.0	11.1	41.3	22.6	21.0	100.0	33.9	625
Inhambane	3.8	7.2	37.3	26.0	25.7	100.0	36.5	613
Gaza	2.6	8.2	37.5	24.1	27.5	100.0	36.5	392
Maputo Province	3.0	5.0	28.6	30.0	33.3	100.0	40.0	464
Maputo City	2.1	8.3	28.0	18.8	42.8	100.0	43.5	328
<b>Educational level</b>								
None	5.2	13.1	39.1	20.4	22.2	100.0	33.7	4,042
Primary	5.2	9.9	39.3	23.0	22.7	100.0	34.6	4,037
Secondary	1.6	4.5	22.1	25.9	45.8	100.0	45.0	219
Total	5.1	11.3	38.8	21.8	23.1	100.0	34.4	8,304

Note: First births have been excluded. The interval between multiple births is the number of months since the previous pregnancy that resulted in a live birth.

## Reproductive Preferences

The IDS included several questions to investigate the preferences of the Mozambican population as regards reproduction: the desire to have more children, the length of time they would like to wait before having another child, and the number of children regarded as ideal. Such data make it possible to quantify reproductive intentions and, combined with the information on contraceptive use, allow an estimate of the demand for contraception, whether to space, or to limit births.

The question on the ideal family size was asked to all women and men, while the others were asked to non-sterilised respondents, currently living in couples.

For obvious reasons, questions on reproductive intentions were not asked to sterilised men and women. Table 3.6 shows the distribution of reproductive preferences in accordance with the number of live children, for men and women. Graph 3.3 shows the reproductive intentions of women in unions, by their age and by background characteristics.

**Table 3.6 Reproductive preferences**

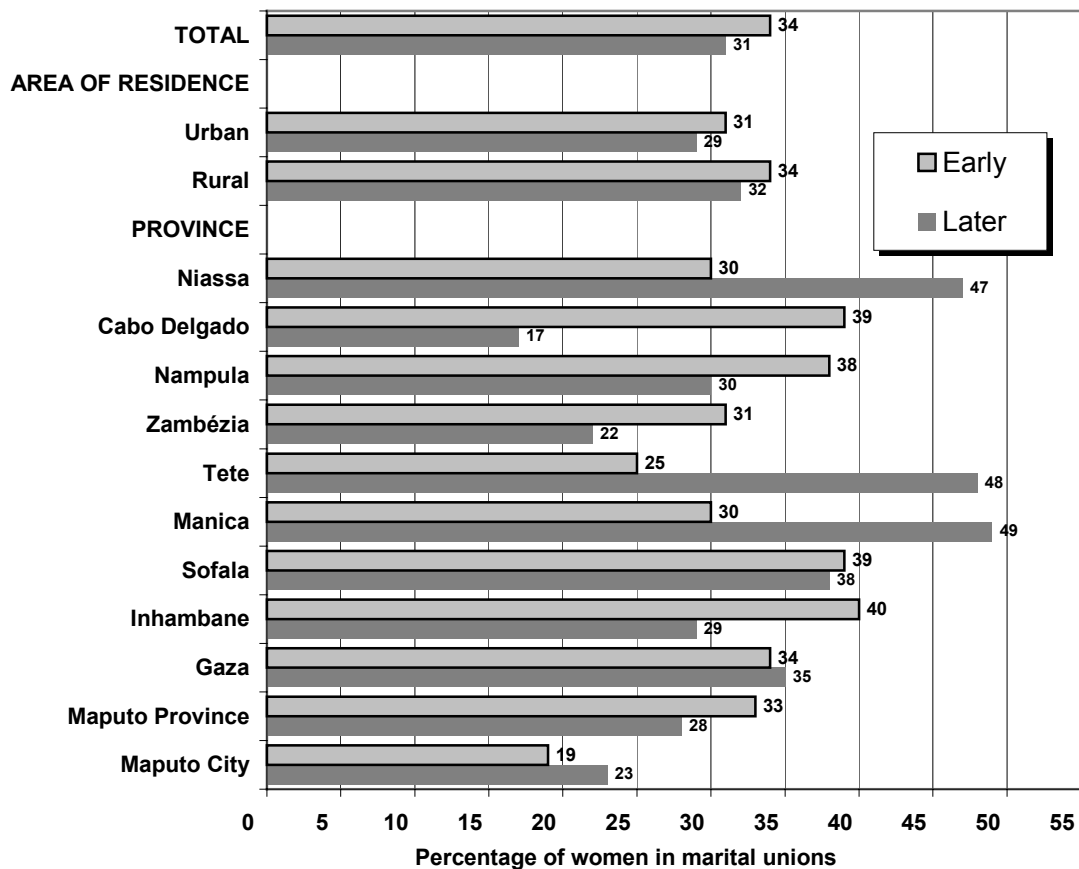
Percentage distribution of women currently in unions by desire for more children, and by age and background characteristics. Mozambique, 2003

Characteristic	Desire for more children				Does not want more/ sterilised		Declared she is infertile	Total	Number of women
	Have Another In 2 years	Have another after 2 years	Have another, don't know when	In- decisive	Does not want more children	Ster- lized <sup>1</sup>			
<b>Area of residence</b>									
Rural	34.4	32.0	4.5	1.2	20.7	0.5	6.6	100.0	6,199
Urban	31.2	29.3	3.3	1.0	29.9	1.7	3.3	100.0	2,537
<b>Province</b>									
Niassa	30.4	47.0	2.7	0.3	13.1	0.4	5.8	100.0	387
Cabo Delgado	38.5	17.3	15.9	1.8	17.3	0.1	9.0	100.0	851
Nampula	37.9	29.7	1.8	0.6	23.3	0.2	6.2	100.0	1,898
Zambézia	30.5	21.6	5.6	2.1	27.3	0.9	12.0	100.0	1,430
Tete	25.1	48.4	0.4	2.7	18.5	1.0	3.9	100.0	771
Manica	30.2	48.8	2.7	0.4	16.6	0.1	1.1	100.0	617
Sofala	38.8	37.7	4.6	1.3	15.3	0.0	2.3	100.0	617
Inhambane	40.3	28.5	0.4	0.2	24.4	1.3	5.0	100.0	724
Gaza	33.7	34.9	1.6	0.2	26.6	1.1	1.8	100.0	426
Maputo Province	33.2	28.0	4.3	0.0	30.7	2.7	1.0	100.0	552
Maputo City	19.1	23.1	5.3	1.5	45.8	4.0	0.8	100.0	462
<b>Educational level</b>									
None	34.3	29.8	4.7	1.2	21.0	0.5	8.4	100.0	4,212
Primary	33.6	31.9	3.8	1.1	25.0	1.1	3.3	100.0	4,147
Secondary	23.6	38.5	3.1	0.1	32.2	1.6	0.9	100.0	362
Higher	*	*	*	*	*	*	*	*	16
<b>Number of living children</b>									
0	85.4	4.1	2.2	0.4	0.7	0.1	7.2	100.0	837
1	45.2	40.3	5.4	0.8	4.9	0.1	3.3	100.0	1,632
2	35.1	44.3	4.7	0.8	10.9	0.4	3.5	100.0	1,571
3	29.1	40.3	4.3	0.9	19.3	1.1	4.9	100.0	1,412
4	22.2	34.0	4.7	1.5	30.6	0.9	5.9	100.0	1,157
5	16.4	23.2	4.5	1.6	45.7	1.2	7.3	100.0	893
6+	8.8	13.8	2.3	1.9	60.7	2.4	9.9	100.0	1,234
<b>Total</b>	<b>33.5</b>	<b>31.2</b>	<b>4.2</b>	<b>1.1</b>	<b>23.4</b>	<b>0.9</b>	<b>5.7</b>	<b>100.0</b>	<b>8,736</b>

Note: Percentage distribution based on less than 30 non-weighted cases is not shown (\*)

<sup>1</sup> Includes sterilised men and women

**Graph 3.3 Percentage of women in marital unions by the desire to have other children and by areas of residence, and provinces. Mozambique 2003**



# CONTRACEPTION

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## 4

This section begins by analysing the level of knowledge among the population of contraceptive methods, and then considers the current use of contraceptive methods. Such an approach makes it possible to verify the pre-conditions for the use of contraception, such as knowledge of the methods, and how to obtain contraceptives. Furthermore, analysis of the results of the use of contraceptive methods in comparison with contraceptive need indicates the segments of the population most lacking in services.

### **Knowledge and Use of Contraceptive Methods**

The data on knowledge of contraceptive methods was gathered by asking the population interviewed to mention the means or methods through which a couple can delay or avoid pregnancy. Should the interviewee fail to mention any method spontaneously, the interviewer would describe the methods and ask if they knew about them. Eight modern methods were described – the contraceptive pill, IUD, condoms, injection, implants, barrier methods (diaphragm, contraceptive cream or jelly) and female and male sterilisation. Two traditional methods were described – periodical abstinence and coitus interruptus. Other methods were also noted, such as herbal infusions, divination etc. These last named are referred to as “folklore methods”.

All the women and men interviewed who said they knew about some method of family planning were then asked if they had ever used it. In the case of methods used by women, men were asked the following question: “Have you ever had a wife/partner who used (name of method)?” The opportunity was envisaged of checking the reply, by later asking the women who declared they had never used any of the methods: “Have you ever used something, or done something, to avoid becoming pregnant?”. Women and men were also asked if they are currently used any method. Table 4.1 shows the knowledge of the various contraceptive methods, for all the women surveyed.

### **Current use of Contraception**

The current level of contraceptive use can be an important indicator to assess the impact of family planning programmes. Furthermore, it can be used to estimate the reduction in fertility attributable to contraception. Table 4.2 presents data on the proportion of women currently living in unions who are using contraceptive methods, by age and by other selected socio-demographic characteristics, namely: area of residence, province, level of schooling, age and number of living children. The data contained in Table 4.2 also make it possible to examine variations in the use of methods among the current users of contraception in the various sub-groups.

**Table 4.1 Knowledge of contraceptive methods**

Percentage of all women and of women currently in unions who know methods. Mozambique, 2003

Contraceptive methods	All women	Women in unions	Not in unions with Sexual experience		Not in unions without sexual experience <sup>2</sup>	Women currently married	Men currently married
			Sexually active <sup>1</sup>	Sexually non active			
<b>Any method</b>	<b>91.5</b>	<b>91.3</b>	<b>96.4</b>	<b>94.5</b>	<b>77.9</b>	<b>88.6</b>	<b>97.6</b>
<b>Knows at least 2 modern methods</b>	<b>82.6</b>	<b>82.3</b>	<b>90.7</b>	<b>88.0</b>	<b>59.2</b>	<b>77.5</b>	<b>94.3</b>
<b>Modern methods</b>	<b>90.8</b>	<b>90.4</b>	<b>96.4</b>	<b>94.2</b>	<b>77.9</b>	<b>87.5</b>	<b>97.4</b>
Female sterilisation	40.0	40.3	48.2	43.2	15.0	33.3	57.4
Male sterilisation	8.0	7.9	11.4	9.0	2.5	5.6	13.5
Pill	79.9	79.7	89.5	84.6	56.0	74.1	93.3
IUD	51.2	49.0	70.6	57.9	31.0	38.1	75.7
Injections	78.4	78.3	86.7	84.2	50.4	72.8	91.7
Condom	78.4	76.1	90.5	83.4	74.6	70.7	89.4
Diaphragm	5.5	4.4	12.6	7.4	4.4	2.3	9.4
Spermicides, Jellies	3.6	2.8	9.0	4.1	3.1	1.1	6.9
Amenorrhea by lactations	45.2	50.4	37.8	39.3	7.9	49.6	52.4
<b>Traditional</b>	<b>38.5</b>	<b>37.7</b>	<b>51.3</b>	<b>43.0</b>	<b>16.4</b>	<b>31.5</b>	<b>52.9</b>
Periodic abstinence	33.7	32.8	44.9	38.1	15.1	27.4	46.1
Coitus interruptus	20.7	19.0	35.2	25.1	7.4	13.5	32.7
<b>Average no, of methods</b>	<b>4.4</b>	<b>5.4</b>	<b>4.8</b>	<b>2.7</b>	<b>3.9</b>	<b>5.7</b>	
Number of women	12,418	8,736	1,065	1,916	706	6,199	2,537

Had coitus interruptus in the month prior to IDS.

<sup>2</sup> Did not have coitus interruptus in the month prior to the IDS.

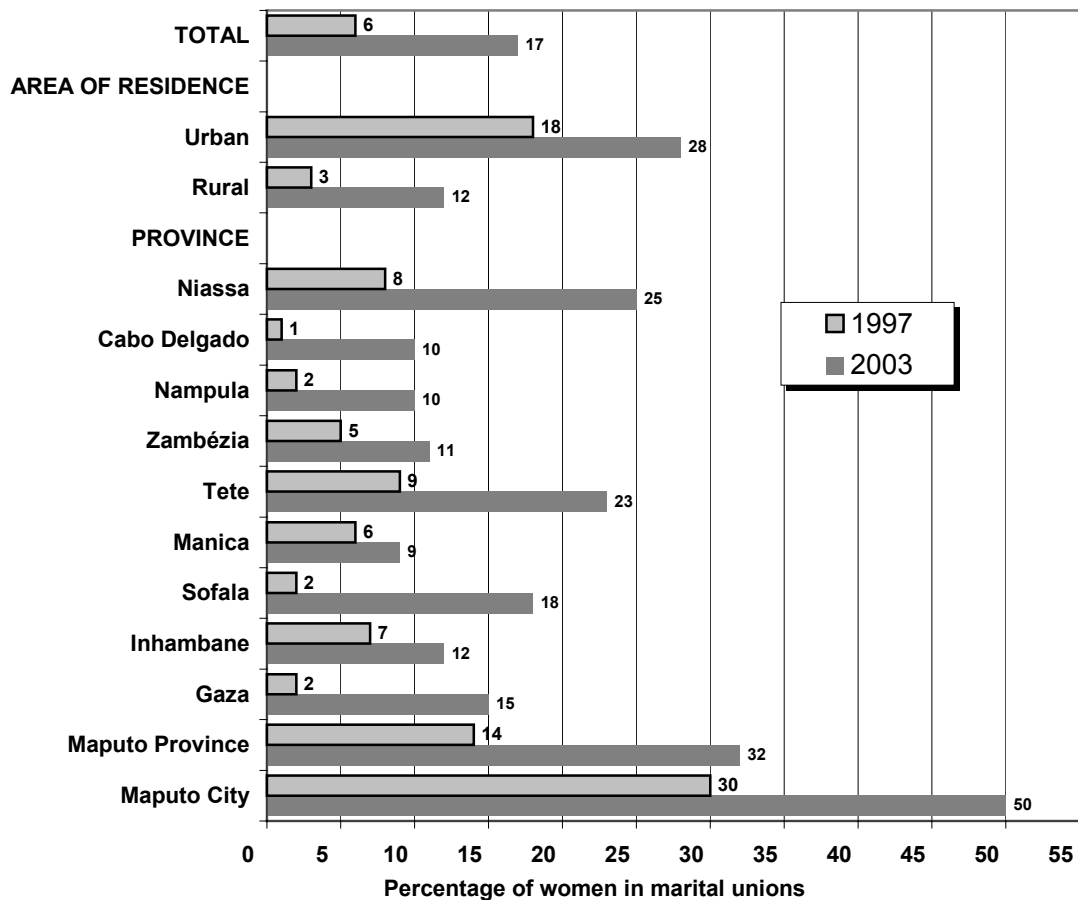
**Table 4.2 Current use of contraceptive methods**

Percentage of women currently in unions by contraceptive method currently used, and by background characteristics. Mozambique, 2003

Characteristic	Modern methods							Traditional methods				No method used	Number of women
	Any method	Any modern method	Ste-rilis. (fem-ale)	Pill	IUD	Injec-tions	Con-dom	Any tradi-tional method	Peri-odic abstin-ence	Coitus inter-ruptus	Other		
<b>ALL WOMEN</b>													
Total	18.2	14.2	0.7	5.4	0.1	4.2	3.7	4.0	2.7	0.2	1.1	81.8	12,418
Rural	11.1	7.1	0.4	2.8	0.0	3.0	0.8	4.0	2.5	0.1	1.3	88.9	7,870
Urban	30.5	26.5	1.2	10.0	0.3	6.1	8.8	4.1	3.1	0.2	0.7	69.5	4,548
<b>WOMEN CURRENTLY IN UNIONS</b>													
<b>Area of residence</b>													
Rural	11.7	7.0	0.5	2.7	0.0	3.4	0.4	4.7	2.9	0.2	1.6	88.3	6,199
Urban	28.1	23.2	1.7	10.3	0.4	8.1	2.6	4.9	3.7	0.2	1.0	71.9	2,537
<b>Province</b>													
Niassa	24.7	5.8	0.4	3.3	0.0	2.0	0.2	18.9	15.4	0.5	3.0	75.3	387
Cabo Delgado	9.9	4.5	0.1	2.7	0.1	0.9	0.7	5.4	4.8	0.0	0.6	90.1	851
Nampula	10.3	7.2	0.2	2.8	0.0	3.2	1.0	3.1	1.4	0.3	1.5	89.7	1,898
Zambézia	11.0	9.2	0.9	3.5	0.0	4.8	0.0	1.8	0.0	0.0	1.8	89.0	1,430
Tete	22.6	14.3	1.0	5.0	0.2	7.6	0.5	8.4	4.6	0.6	3.2	77.4	771
Manica	8.8	7.9	0.1	3.5	0.0	3.3	1.0	0.9	0.2	0.1	0.7	91.2	617
Sofala	18.4	7.5	0.0	3.0	0.0	3.9	0.6	10.9	9.9	0.0	1.1	81.6	617
Inhambane	12.4	11.3	1.3	4.2	0.0	4.6	1.2	1.2	0.0	0.2	1.0	87.6	724
Gaza	15.2	14.4	1.1	6.5	0.0	5.4	1.4	0.7	0.2	0.2	0.4	84.8	426
Maputo Province	32.3	30.2	2.7	14.0	0.2	11.3	2.0	2.1	1.0	0.5	0.6	67.7	552
Maputo City	49.7	39.2	4.0	16.8	1.7	10.7	6.0	10.6	9.0	0.2	1.4	50.3	462
<b>Educational Level</b>													
None	9.3	4.7	0.5	1.7	0.0	2.4	0.1	4.5	3.1	0.1	1.4	90.7	4,212
Primary	20.4	15.6	1.1	6.4	0.1	6.7	1.4	4.7	3.0	0.2	1.5	79.6	4,147
Secondary	53.8	47.4	1.6	25.0	2.2	9.7	8.8	6.4	4.1	1.5	0.8	46.2	362
Higher	*	*	*	*	*	*	*	*	*	*	*	*	16
<b>Age</b>													
15-19	11.0	6.8	0.0	4.3	0.0	0.5	1.9	4.3	3.0	0.0	1.3	89.0	936
20-24	15.4	11.7	0.0	6.6	0.0	2.9	2.2	3.7	3.0	0.0	0.6	84.6	1,747
25-29	16.2	11.1	0.5	5.5	0.0	4.5	0.6	5.2	3.7	0.1	1.4	83.8	1,812
30-34	17.5	11.5	0.4	4.4	0.1	6.1	0.4	6.0	3.8	0.4	1.8	82.5	1,495
35-39	20.1	15.6	1.5	5.8	0.2	7.1	1.1	4.4	3.0	0.5	1.0	79.9	1,158
40-44	22.2	16.3	3.3	3.8	0.2	8.1	0.8	5.9	2.7	0.3	2.9	77.8	872
45-49	11.7	8.4	1.9	1.0	0.6	4.9	0.0	3.2	1.4	0.0	1.8	88.3	715
<b>Number of living children</b>													
0	2.2	1.7	0.1	0.3	0.0	0.2	1.2	0.4	0.4	0.0	0.1	97.8	1,060
1-2	15.1	10.6	0.2	6.4	0.1	2.1	1.8	4.5	3.3	0.0	1.2	84.9	3,169
3-4	19.5	14.0	1.0	5.6	0.3	6.4	0.7	5.5	3.8	0.1	1.6	80.5	2,510
5+	22.3	15.8	2.0	4.1	0.0	9.3	0.4	6.5	3.4	0.7	2.4	77.7	1,997
Total	16.5	11.7	0.9	4.9	0.1	4.8	1.1	4.7	3.1	0.2	1.4	83.5	8,736

Note: In cases where more than one method was used, only the most efficient was considered in the tabulations. Percentage distribution based on less than 30 weighted cases is not shown (\*).

**Graph 4.1**  
**Use of Contraceptives among Women in Marital Unions, by Areas**  
**of Residence and Provinces, 1997 and 2003**



# 5

This section presents data for three areas of fundamental importance for the health of women and children: ante-natal care and care at birth, vaccination and childhood illnesses, such as diarrhoea and acute respiratory infections. The IDS gathered data for all live births since January 1998, a period of approximately five years prior to the survey.

Ante-natal care is defined in accordance with the number of ante-natal visits, the stage of pregnancy at the first visit, and the number of doses of anti-tetanus vaccine that the women received. Care at birth is, in turn, defined by the type of professional who assisted the birth and the place where it occurred. Combined with the results of neo-natal and infant mortality, these data can be used to identify sub-groups of women whose children are at risk due to failure to use health services. This information is significant for planning expanded coverage by the health services.

The data gathered on treatment practices and contact with the health services, for children with diarrhoea and acute respiratory infections (IRA) help assess the impact of the national programmes to fight against these diseases.

### **Ante-natal Care and Care at Birth**

One of the main objectives of ante-natal medical care is to monitor women during pregnancy, reducing the risks of maternal and infant mortality and morbidity. It also helps reduce the incidence of premature births and peri-natal mortality.

According to the norms of the Ministry of Health, a woman is regarded as assisted in the ante-natal programme when she appears at five consultancies during the pregnancy. Apart from the number of ante-natal consultations, the time at which the mother begins them is also important. The norms recommend that the first consultation should take place in the third month of pregnancy.

Table 5.1 presents the coverage of anti-tetanus vaccine during pregnancy, ante-natal care and care during birth, for the three years prior to the survey. Anti-tetanus vaccination during pregnancy seeks to avoid neo-natal tetanus, which is an important cause of death in developing countries. For full protection, the woman should receive two doses of the vaccine; however, if she was vaccinated during the previous pregnancy, just one dose will be enough.

The indicators of ante-natal health care for recent births show the percentage of women who had ante-natal consultations with health professionals, the percentage of women who received at least one dose of anti-tetanus vaccines, and the percentage of women who received iron pills or syrup. The indicators of care at birth include the percentage of live births during the

last five years prior to the survey that were attended by medical staff, and the percentage of births that took place in health units.

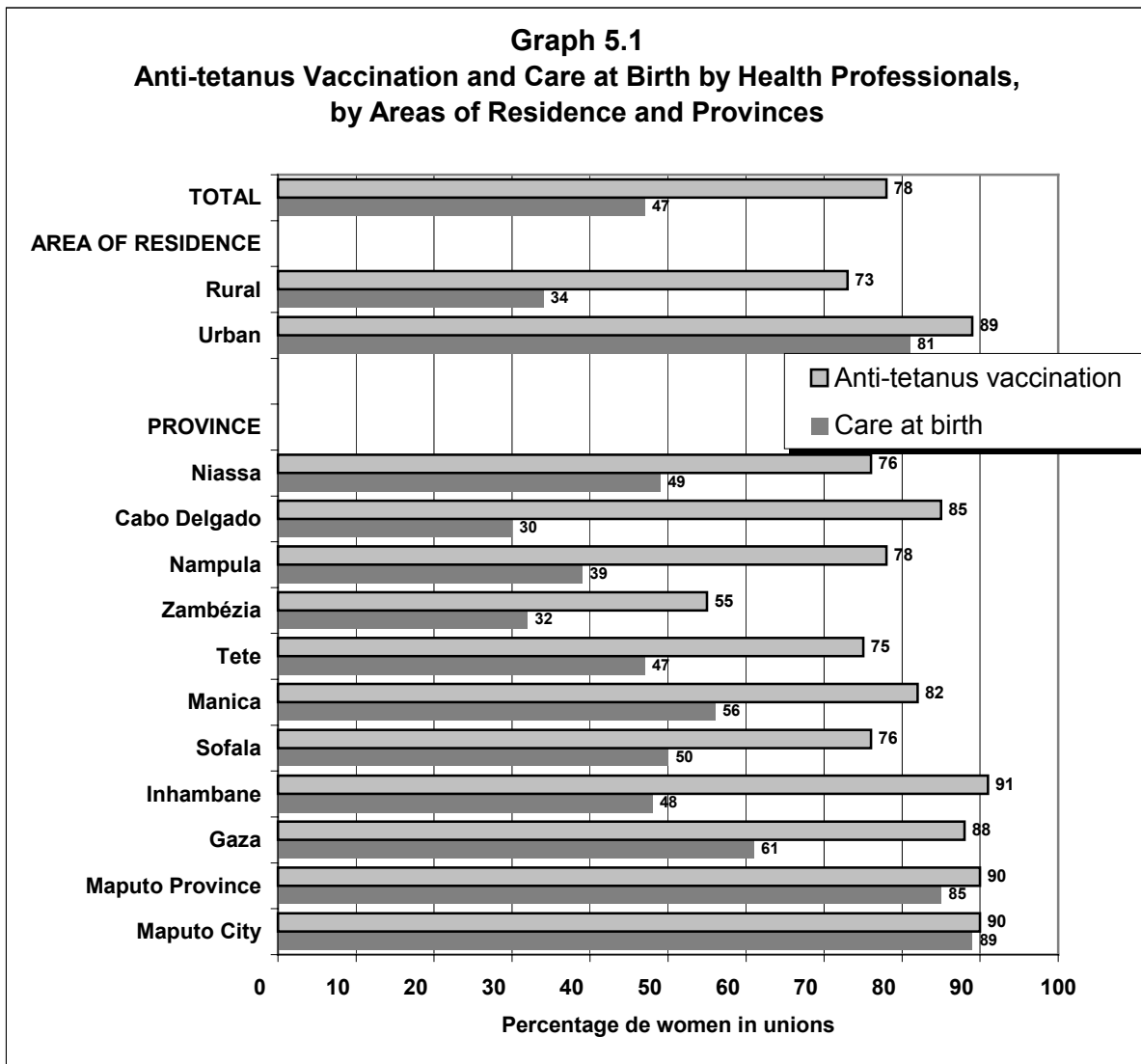
**Table 5.1 Ante-natal care and care at birth**

For children born in the five years prior to the survey, Percentage whose mothers received ante-natal care from an obstetric doctor or nurse, at least one anti-tetanus injection, and who received iron salts for the newborn; and among all live births in the five years prior to the survey, Percentage who received care during the birth from an obstetric doctor or nurse, and Percentage who gave birth in a health unit, by background characteristics. Mozambique, 2003

Characteristic	Ante-natal care for the new born				Number of women	Care at birth for all births			Number of births
	Health Professional	One or more doses anti-tetanus	Two or more doses	Iron salts		Health professional	Traditional midwife	Births in health units	
<b>Area of residence</b>									
Rural	78.9	72.8	53.8	50.9	4,940	34.2	14.2	34.0	7,533
Urban	97.1	89.0	64.6	80.9	2,239	80.7	3.1	81.0	3,087
<b>Province</b>									
Niassa	81.3	74.1	56.1	57.9	326	47.0	3.9	46.0	527
Cabo Delgado	88.6	85.5	59.3	67.1	638	31.4	16.0	29.6	968
Nampula	86.1	78.2	59.0	49.9	1,458	38.2	6.0	36.8	2,250
Zambézia	57.9	54.7	46.9	31.3	1,118	32.1	36.2	32.7	1,622
Tete	85.8	74.7	54.2	60.0	694	46.8	9.5	47.4	1,096
Manica	90.1	81.5	52.7	67.3	535	55.9	7.1	56.0	820
Sofala	82.4	76.4	54.5	68.9	524	51.0	1.4	51.6	794
Inhambane	92.6	90.7	67.8	60.0	576	49.0	7.2	49.8	822
Gaza	97.2	88.1	70.7	69.7	381	60.6	5.5	63.1	539
Maputo Province	99.9	90.6	57.8	93.7	519	85.2	0.3	85.4	667
Maputo City	99.5	89.7	62.3	96.1	409	89.2	0.5	90.1	516
<b>Educational level</b>									
None	75.0	68.2	49.3	46.8	3,177	31.4	14.4	31.0	4,906
Primary	91.5	84.9	63.3	69.1	3,666	59.2	8.5	59.4	5,315
Secondary	98.7	92.4	66.2	90.2	325	94.7	0.6	95.4	387
Higher	*	*	*	*	*	*	0.0	*	13
<b>Mother's age at the birth</b>									
<20	87.3	82.9	65.1	62.2	1,468	53.2	10.9	53.6	2,381
20-34	84.0	77.7	56.0	59.7	4,618	46.5	11.2	46.3	6,860
35+	83.5	71.9	51.6	59.6	1,093	44.1	10.0	43.9	1,379
<b>Order of birth</b>									
1	89.9	84.8	66.1	66.1	1,456	57.9	9.1	58.1	2,303
2-3	84.6	79.7	58.4	59.9	2,400	48.3	12.4	48.2	3,650
4-5	81.9	74.8	53.3	57.8	1,716	43.9	11.5	43.5	2,483
6+	82.5	72.0	51.4	57.9	1,606	40.3	9.8	40.2	2,184
Total	84.6	77.8	57.2	60.2	7,179	47.7	11.0	47.6	10,620

Note: Percentage distribution based on less than 30 weighted cases is not shown(\*).

<sup>1</sup> Doctor, nurse, midwife, or auxiliary midwife; and trained birth attendant



## Vaccination

The IDS gathered data on vaccination coverage for all children born live since January 1998 and who were still alive at the time of the survey. According to World Health Organisation (WHO) guidelines, in the expanded vaccination programme, for a child to be regarded as fully vaccinated, he/she should have received the following vaccinations: BCG, measles and three doses each of the triple and the polio vaccines. BCG protects against tuberculosis and the triple vaccine protects against diphtheria, tetanus and whooping cough. The triple and the polio vaccines require three doses at intervals of several weeks.

The data on immunisation coverage was gathered in two ways: directly, from the vaccination cards, or through what the mothers said. The majority of child health care services in Mozambique provide vaccination cards. When the mother presented the card to the interviewer, this was the source considered, and the vaccination dates were copied directly from the card. In the absence of the card, the mother was asked to try and remember whether the child had received BCG, polio and the triple vaccine, including the number of doses, and the

measles vaccine. In these cases the mother was not asked to say on what dates the child was vaccinated.

WHO recommends that children should receive the complete vaccination by the age of 12 months. Table 5.2.1 shows the percentage of children aged 12 to 23 months, who were vaccinated by the time they were 12 months old, and Table 5.2.2 shows the percentage of children who were vaccinated at the time of the survey, according to the vaccination card, or what the mothers said, by background characteristics. This data gives us an idea as to the reach of the vaccination programme among the various population groups. These results are shown in Graph 5.2.

Table 5.2.1 Vaccination in first year of life

Percentage of children aged 12 to 23 months, with vaccination card; and percentage of children who received specific vaccines during the first year of life, by area of residence and sex of the child, Mozambique 2003

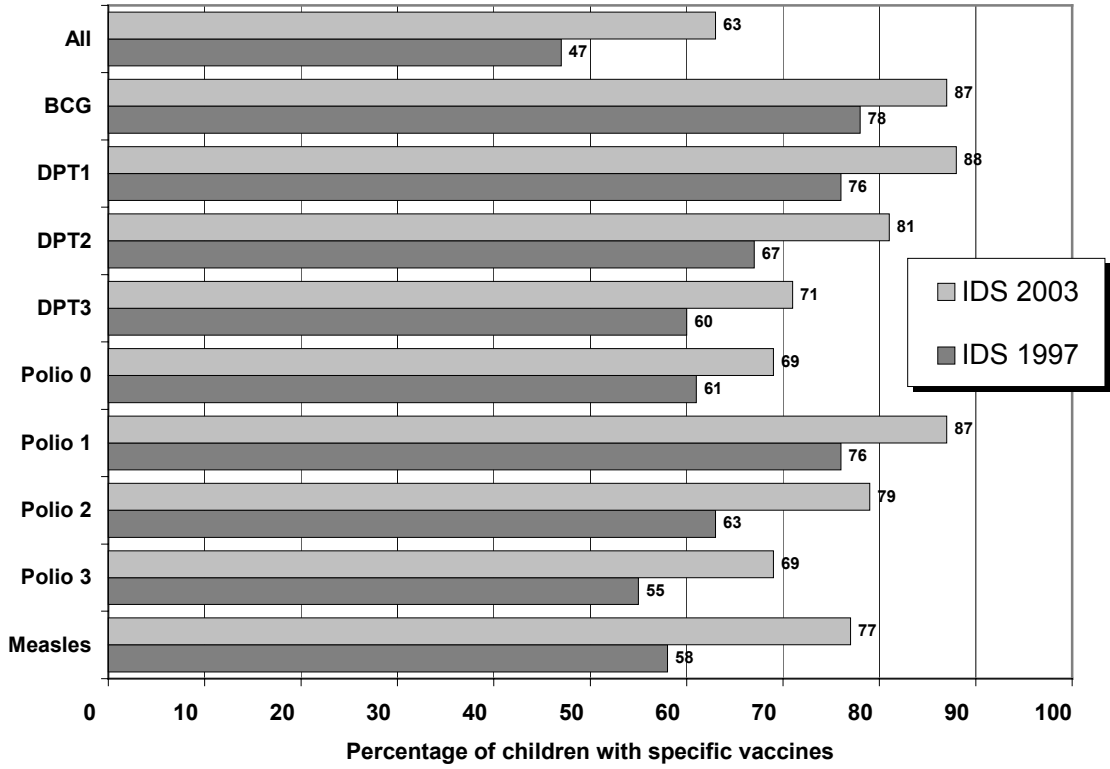
Sex of child and residence	Percentage of children who received:											Percentage with vaccination card	Number of children
	Triple				Polio <sup>1</sup>				Measles	All <sup>2</sup>	None		
	0	1	2	3	0	1	2	3					
<b>Male</b>	<b>86.0</b>	<b>85.8</b>	<b>77.8</b>	<b>66.8</b>	<b>69.9</b>	<b>84.4</b>	<b>75.4</b>	<b>64.0</b>	<b>61.4</b>	<b>51.8</b>	<b>10.7</b>	<b>78.8</b>	<b>999</b>
Rural	81.5	81.9	72.2	59.1	61.5	80.7	69.4	56.8	52.7	42.4	13.6	75.8	693
Urban	96.3	94.7	90.4	84.1	89.1	92.8	88.8	80.4	80.4	72.9	4.0	85.6	306
<b>Female</b>	<b>86.0</b>	<b>84.4</b>	<b>77.4</b>	<b>66.4</b>	<b>68.0</b>	<b>84.9</b>	<b>75.8</b>	<b>65.2</b>	<b>64.8</b>	<b>54.8</b>	<b>10.9</b>	<b>77.1</b>	<b>934</b>
Rural	82.4	80.2	71.2	59.0	58.8	81.2	69.5	57.2	56.0	45.7	13.8	73.1	665
Urban	94.9	94.8	92.5	84.7	90.8	93.9	91.1	84.7	86.1	77.0	3.9	86.9	269
<b>Total</b>	<b>86.0</b>	<b>85.2</b>	<b>77.6</b>	<b>66.6</b>	<b>69.0</b>	<b>84.6</b>	<b>75.5</b>	<b>64.6</b>	<b>63.0</b>	<b>53.2</b>	<b>10.8</b>	<b>78.0</b>	<b>1,933</b>
Rural	81.9	81.1	71.7	59.0	60.1	81.0	69.5	57.0	54.3	44.0	13.7	74.5	1,358
Urban	95.6	94.7	91.4	84.4	89.9	93.3	89.9	82.4	83.1	74.9	4.0	86.2	575

Note: Information obtained from vaccination card or from the mother in cases where there was no card. It was considered that the age pattern of vaccination, for children where the information was given by the mother, was the same as for those who had the card.

<sup>1</sup>Polio 0 is polio vaccination at birth

<sup>2</sup>Children with complete vaccination (BCG, measles and three doses of triple and polio)

**Graph 5.2**  
**Vaccination Coverage of children aged between 12-23 Months,**  
**1997 and 2003**



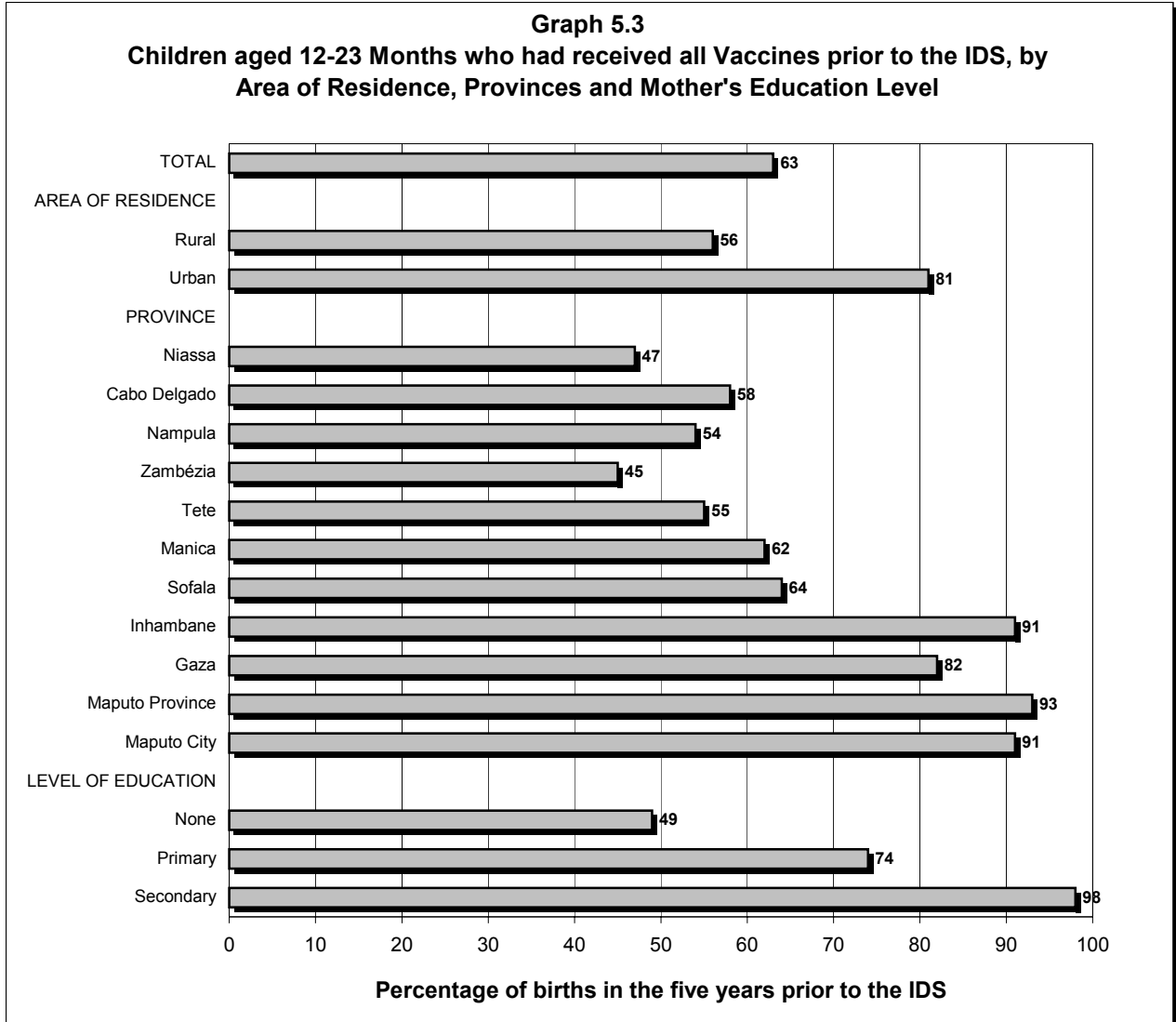
**Table 5.2.2 Vaccination by background characteristics**

Percentage of children between 12 and 23 months old who received specific vaccines, with information provided by the vaccination card or by the mother, by background characteristic. Mozambique, 2003

Characteristic	Percentage of children who received:											Percentage with vacc- of card	Number children
	Triple				Polio <sup>1</sup>			Measles	All <sup>2</sup>	ination None			
	0	1	2	3	0	1	2				3		
<b>Area of residence</b>													
Rural	83.6	83.8	76.2	65.3	60.6	83.8	73.8	63.1	70.8	56.0	11.5	74.5	1,358
Urban	96.5	96.6	92.9	86.6	90.7	95.1	91.4	84.8	90.8	80.5	2.2	86.2	575
<b>Province</b>													
Niassa	81.4	82.2	68.0	54.6	65.2	82.3	65.6	52.2	51.9	46.6	16.9	69.5	78
Cabo Delgado	85.3	89.2	78.7	68.9	55.4	88.8	74.9	66.4	80.2	57.9	6.8	85.5	169
Nampula	83.5	81.9	75.0	61.8	68.5	83.5	76.4	62.4	69.1	53.9	10.3	81.4	411
Zambézia	71.9	73.4	65.0	53.0	49.8	75.5	65.4	50.0	63.3	44.7	20.4	51.6	277
Tete	88.3	84.4	76.2	63.6	48.6	81.5	67.8	59.9	72.0	55.0	9.9	72.4	202
Manica	93.1	94.5	85.3	73.6	81.6	89.2	79.0	68.5	81.5	61.6	4.8	79.2	157
Sofala	86.2	88.1	85.5	77.1	74.4	84.4	78.9	73.8	74.7	63.9	10.6	78.1	138
Inhambane	99.1	99.1	96.8	93.6	83.0	99.1	97.1	93.3	92.9	90.6	0.9	93.3	147
Gaza	97.1	98.2	96.3	90.4	88.7	97.7	94.2	88.0	91.7	82.3	1.4	90.5	122
Maputo Province	100.0	100.0	99.6	98.0	98.4	100.0	98.9	97.0	95.2	92.5	0.0	90.7	127
Maputo City	99.7	99.7	97.3	97.0	91.7	99.7	97.1	94.2	96.9	91.3	0.3	85.7	106
<b>Educational level</b>													
None	80.0	80.8	71.9	59.0	56.8	79.6	68.8	56.9	65.6	48.6	14.2	70.4	875
Primary	93.0	92.6	88.0	80.7	78.6	92.9	86.6	78.6	84.9	73.6	4.5	83.2	977
Secondary	00.0	100.0	100.0	98.6	98.4	99.1	98.5	97.6	99.1	97.6	0.0	96.2	77
<b>Sex of child</b>													
Male	87.9	87.9	81.5	72.6	70.6	86.7	79.0	69.8	77.4	63.8	8.3	78.8	999
Female	86.9	87.2	80.8	70.5	68.5	87.6	79.2	69.4	76.0	62.7	9.1	77.1	934
<b>Order of birth</b>													
1	93.5	89.8	85.2	81.2	78.5	89.2	81.9	77.7	85.6	73.3	4.2	79.1	375
2-3	86.6	87.8	81.8	74.5	68.6	86.8	80.7	72.3	78.1	66.6	10.2	76.3	649
4-5	85.5	87.9	78.3	65.1	65.6	87.1	75.5	63.7	72.5	56.3	8.1	77.8	486
6+	85.4	84.8	79.9	66.2	67.7	85.9	78.1	64.9	71.6	57.1	11.1	79.8	422
Total	87.4	87.6	81.2	71.6	69.6	87.1	79.1	69.6	76.7	63.3	8.7	78.0	1,933

<sup>1</sup>Pólio 0 is polio vaccination at birth

<sup>2</sup>Children with complete vaccination (BCG, measles and three doses of triple and polio)



### Treatment of Acute Respiratory Infections, Fever and Diarrhoea

In the survey, the major causes of mortality and morbidity among children under three years old were studied: diarrhoea, acute respiratory infections (IRA) and fever, since malaria is endemic in the country.

Acute respiratory infections (IRA) are among the main causes of mortality and morbidity, particularly in the first year of life. The majority of these deaths can be prevented if the infection is diagnosed early, and treated with the correct antibiotic. The prevalence of IRA was estimated, by asking all mothers about the occurrence of IRA symptoms: coughing, rapid or difficult breathing and fever in children under three years old, in the two weeks prior to the survey. If affirmative, the mother was asked if she had sought out the nearest health unit to treat the infection.

In Mozambique, diarrhoea and the subsequent dehydration are still an important cause of mortality among infants and children under three. Furthermore, repeated episodes of diarrhoea are one of the most important etiological factors in serious calorie/protein malnutrition. The Programme for Control of Diarrhoeal Diseases has undertaken an active programme to reduce the mortality and morbidity caused by this disease. The strategy is based on increased ingestion of liquids and continued feeding during episodes of diarrhoea.

The use of Oral Rehydration Therapy (ORT), either through packets of Oral Rehydration Salts (ORS) or the preparation of appropriate home-made mixtures, has been widely publicized. The ORS packets are distributed in all the country's health units, pharmacies, and by community health agents, such as the APEs and the Traditional Midwives trained by the SNS.

All mothers with children under three years old were asked if there had been an episode of diarrhoea in the two weeks prior to the survey. If the answer was affirmative, the mother was asked if the diarrhoea contained blood and what kind of treatment the mother sought. Due to the seasonal nature of diarrhoea, as mentioned earlier, the prevalence obtained might be different from the annual prevalence.

Table 5.3 presents the prevalence of acute respiratory infections (IRA), fever and diarrhoea among children under two years old in the two weeks prior to the survey.

Furthermore, Tables 5.4.1 and 5.4.2 show children under five who suffered from coughing accompanied with rapid breathing (symptoms of acute respiratory infections -IRA) or fever in the two weeks prior to the survey. It also shows the percentage of those who received treatment from the health services, and the percentage of children who had diarrhoea.

Finally, it also presents the percentage of those who received treatment from the health services and of those who received the ORS oral solution. The results are shown in Table 5.4.1 by age of the child, and in Table 5.4.2 by background characteristics. This graph also shows mothers' knowledge of ORS packets.

Table 5.5 presents data of the feeding practices of the mothers at the times when the child had diarrhoea (The amount of liquids and food offered when compared with the normal situation).

**Table 5.3 Prevalence of acute respiratory infections (ARI), fever and diarrhoea**

Percentage of children under five who were ill with coughing accompanied with breathing difficulties, Percentage with fever and Percentage with diarrhoea, in the two weeks prior to the survey, by area of residence and province. Mozambique, 2003

Area of residence and province	Symptoms of			Number of children
	ARI	Fever	Diarrhoea	
<b>Area of residence</b>				
Rural	8.8	26.8	13.4	6,636
Urban	12.1	26.4	15.9	2,765
<b>Province</b>				
Niassa	7.5	16.3	11.6	455
Cabo Delgado	10.8	36.8	18.3	806
Nampula	9.3	38.4	21.8	1,966
Zambézia	6.3	18.1	9.5	1,473
Tete	4.7	14.2	7.0	948
Manica	7.9	20.0	14.0	740
Sofala	7.2	23.0	12.4	688
Inhambane	19.6	36.5	13.3	741
Gaza	11.1	28.6	9.6	483
Maputo Province	7.3	20.2	8.7	613
Maputo City	26.1	29.2	21.2	487
<b>Total</b>	<b>9.8</b>	<b>26.7</b>	<b>14.1</b>	<b>9,400</b>

**Table 5.4.1 Treatment of acute respiratory infections, fever and diarrhoea**

Among children under five who had coughing accompanied with breathing difficulty, or had fever in the two weeks prior to the survey, Percentage who went to a health unit for treatment; and, among children under five with diarrhoea, Percentage who went to a health unit for treatment, Percentage who received ORS packets or Oral Rehydration Therapy (ORT), by age and sex of the children. Mozambique, 2003

Characteristics	Treatment of ARI		Treatment of diarrhoea			
	Percentage who went to health unit for treatment <sup>1</sup>	Number of children with ARI	Percentage who went to health unit for treatment <sup>1</sup>	Percentage who received ORS	Percentage who received ORT <sup>2</sup>	Number of children
<b>Age in months</b>						
<6	54.7	252	37.7	40.9	66.3	121
6-11	57.4	442	58.6	54.6	69.9	269
12-23	53.2	778	49.8	53.2	70.3	445
24-35	46.5	558	44.7	44.8	71.5	227
36-47	48.9	501	44.7	40.4	73.2	179
48-59	48.8	345	47.6	42.1	70.4	86
<b>Sex</b>						
Male	49.3	1,415	48.7	47.3	67.4	675
Female	53.5	1,461	48.9	49.8	73.6	652
<b>Total</b>	<b>51.4</b>	<b>2,877</b>	<b>48.8</b>	<b>48.5</b>	<b>70.5</b>	<b>1,328</b>

<sup>1</sup>Excludes pharmacies, shops and traditional personnel

<sup>2</sup>Includes ORS, homemade liquids or increase in fluids.

**Table 5.4.2 Treatment of acute respiratory infections, fever and diarrhoea by selected characteristics**

Among children under five who had a cough accompanied with difficulty in breathing, or were feverish in the two weeks prior to the survey. Percentage who went to a health unit for treatment; Percentage of mothers with children born in the five years prior to the survey who know about ORS; and among the children under five with diarrhoea, the percentage who went to a health unit for treatment, Percentage who received ORS packets or Oral Rehydration Therapy (ORT), by age and sex of the child. Mozambique, 2003

Characteristics	Treatment of ARI		Knowledge of ORS		Treatment of diarrhoea			
	Percentage who went to health unit for treatment <sup>1</sup>	Percentage of mothers with children with ARI	who know ORS	Number of mothers <sup>1</sup>	Percentage who went to health unit for ORS	who received ORT <sup>2</sup>	Number of children	
<b>Area of residence</b>								
Rural	46.6	2,001	83.4	4,940	46.6	41.7	62.0	887
Urban	62.3	876	95.0	2,239	53.1	62.2	87.4	440
<b>Province</b>								
Niassa	41.8	97	78.1	326	30.6	42.9	56.3	53
Cabo Delgado	54.8	327	92.3	638	57.1	50.4	60.2	147
Nampula	50.7	820	81.3	1,458	57.7	55.6	77.2	429
Zambézia	37.0	293	70.6	1,118	26.5	22.8	59.4	140
Tete	51.5	143	95.9	694	38.6	41.9	59.0	66
Manica	65.7	186	82.3	535	60.2	30.5	66.7	104
Sofala	54.6	178	95.1	524	44.4	37.3	66.0	86
Inhambane	48.8	325	91.1	576	41.0	45.9	60.0	99
Gaza	59.7	161	99.4	381	53.1	68.1	82.7	47
Maputo Province	51.4	140	99.7	519	52.3	72.9	95.3	53
Maputo City	55.7	206	98.5	409	41.7	66.4	86.0	103
<b>Educational level</b>								
None	44.4	1,233	79.7	3,177	46.3	40.7	64.7	612
Primary	55.4	1,530	92.3	3,666	49.0	53.2	73.5	658
Secondary	73.8	111	98.0	325	72.2	76.5	97.0	58
<b>Total</b>	<b>51.4</b>	<b>2,877</b>	<b>87.0</b>	<b>7,179</b>	<b>48.8</b>	<b>48.5</b>	<b>70.5</b>	<b>1,328</b>

<sup>1</sup>Excludes, pharmacies, shops and traditional practitioners

<sup>2</sup>Includes ORS, home-made liquids or increase in fluids

<sup>3</sup>Children under two

**Table 5.5 Knowledge of appropriate feeding during diarrhoea**

Percentage of mothers with children born in the three years prior to the survey who know correct feeding practices during diarrhoea, by background characteristics. Mozambique, 2003

Characteristics	Same as always	More	A little less	Much less	Nothing	Don't know/ no information	Total	Number of children
<b>LIQUIDS</b>								
<b>Area of residence</b>								
Rural	11.8	38.8	24.0	19.7	4.4	1.3	100.0	887
Urban	11.7	62.7	13.1	8.7	3.3	0.5	100.0	440
<b>Province</b>								
Niassa	21.8	42.5	24.8	7.2	3.4	0.4	100.0	53
Cabo Delgado	6.0	27.2	36.1	26.9	1.9	1.8	100.0	147
Nampula	11.1	50.2	17.8	18.5	2.4	0.0	100.0	429
Zambézia	16.0	37.1	17.0	19.6	4.0	6.3	100.0	140
Tete	8.9	47.1	28.7	6.7	8.6	0.0	100.0	66
Manica	17.1	52.5	17.3	8.9	4.1	0.0	100.0	104
Sofala	10.5	42.4	11.5	31.6	4.0	0.0	100.0	86
Inhambane	7.0	36.7	27.4	16.2	12.7	0.0	100.0	99
Gaza	14.8	57.4	20.3	5.2	2.3	0.0	100.0	46
Maputo Province	10.0	70.9	18.0	0.0	1.1	0.0	100.0	53
Maputo City	13.3	65.2	10.9	3.1	5.5	2.0	100.0	103
<b>Educational level</b>								
None	12.2	38.4	22.6	20.7	4.9	1.2	100.0	612
Primary	11.1	52.5	19.8	12.0	3.5	1.0	100.0	658
Secondary	13.6	68.4	3.7	12.4	1.9	0.0	100.0	58
Total	11.8	46.7	20.4	16.0	4.1	1.0	100.0	1,328
<b>SOLIDS</b>								
<b>Area of residence</b>								
Rural	19.8	14.2	29.9	23.1	11.4	1.5	100.0	887
Urban	18.7	24.2	21.2	22.0	9.7	4.3	100.0	440
<b>Province</b>								
Niassa	31.1	12.9	25.5	15.3	13.7	1.5	100.0	53
Cabo Delgado	10.1	4.5	34.1	29.1	19.5	2.8	100.0	147
Nampula	16.6	21.2	24.2	26.3	7.9	3.8	100.0	429
Zambézia	25.0	22.6	26.9	15.0	4.7	5.7	100.0	140
Tete	15.8	14.4	26.6	23.9	19.3	0.0	100.0	66
Manica	24.0	30.5	28.4	12.3	4.8	0.0	100.0	104
Sofala	20.3	11.0	15.5	48.7	4.5	0.0	100.0	86
Inhambane	20.2	11.9	35.8	15.3	16.7	0.0	100.0	99
Gaza	24.5	13.9	35.0	14.6	12.0	0.0	100.0	46
Maputo Province	28.7	20.0	24.1	10.0	17.2	0.0	100.0	53
Maputo City	20.7	16.2	27.5	19.1	14.1	2.5	100.0	103
<b>Educational level</b>								
None	19.6	15.8	28.2	24.9	10.1	1.4	100.0	612
Primary	19.5	16.7	27.6	21.4	12.2	2.6	100.0	658
Secondary	17.8	44.4	8.5	15.5	3.3	10.5	100.0	58
Total	19.5	17.5	27.0	22.8	10.9	2.4	100.0	1,328

## BREAST-FEEDING AND INFANT NUTRITION

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# 6

This chapter is concerned with aspects related to the nutritional status of children born in the last five years prior to the survey. The survey gathered data concerning breastfeeding practices, the introduction of supplementary foods, the weight of new-born children, measurements of children and their mothers. The importance of this analysis is obvious, if we consider the role that nutrition plays in state of health of children under the age of five, and particularly in the first two years of life.

### **Breastfeeding and supplementary foods**

There is an association between children's nutritional status and mortality and morbidity, Breastfeeding has a positive influence on children's nutritional status and hence on infant mortality and morbidity. In general, inadequate nutrition (in quantity and/or quality) is causally associated with the aetiology of diseases, particularly infectious diseases, and in turn this conditions nutritional status since they interfere negatively in the physiological processes of body growth and adequate feeding of children.

The onset and duration of breastfeeding are factors that may influence somatic development. It is known that breast milk possesses physiological properties important for children, including the presence of maternal antibodies that are important for the prevention of infections.

Furthermore, breast milk is always at the ideal temperature, it is hygienic and it is always available. Breastfeeding provides an emotional link between mother and child which is important for the psycho-motor development of children. By means of hormones, breastfeeding also has effects on post-birth fertility, which can help in spacing births. On the other hand, bottle feeding carries an added risk of transmitting diseases, particularly in rural and suburban areas where standards of hygiene are not appropriate.

Table 6.1 shows the percentage distribution of children under three years old living with their mothers, by stage of breastfeeding, according to age. The table can be used to derive the percentage of children predominantly breastfed (the sum of those exclusively breastfed plus those fed with breast milk plus water or water mixed with other liquids/juices). The table also shows also shows the percentage of children who were bottle fed on the day before the interview.

The state of breastfeeding is considered over a 24 hour period (yesterday and the previous night). Thus children were considered as breastfed if they only consumed breast milk or had also drunk simple water and had no other kind of supplement. The categories of non-breastfed, exclusively breastfed, fed on breast milk and water, water mixed with other ingredients, animal milk, and complementary food (solids and semi-solids) are hierarchically and mutually exclusive. Thus their percentages add up to 100 per cent. The children who received breast milk, and water with other ingredients, but who did not receive supplementary foods were classified in the category of liquids based on water, even if they had received simple

water. Any child who received supplementary foods was classified also as breastfed.

**Table 6.1 Breastfeeding conditions, by age**

Percentage distribution of children under three years of age living with their mothers, by breastfeeding condition, and Percentage of children who were bottle-fed, by the age of the children in months. Mozambique, 2003

Age in months	Not breast fed	Exclusively breast fed	Breast milk and				Total	Number of children <sup>1</sup>	Percentage using bottles <sup>2</sup>	Number of living children
			Pure water only	Liquids Juices	Other milks	Complementary food				
<b>Total</b>										
<2	0.2	49.8	35.9	4.1	1.9	8.0	100.0	323	6.7	327
2-3	0.7	28.6	47.7	3.5	7.0	12.5	100.0	385	7.3	392
4-5	1.2	13.7	32.1	4.7	3.1	45.2	100.0	358	10.9	364
6-7	0.7	5.2	16.8	2.0	1.0	74.2	100.0	372	8.0	377
8-9	2.4	1.6	9.0	1.0	0.4	85.7	100.0	335	12.8	341
10-11	2.1	1.4	1.9	0.0	0.7	93.9	100.0	297	7.6	300
12-15	6.0	1.0	1.3	0.2	0.0	91.6	100.0	682	7.9	700
16-19	14.9	0.4	1.9	0.0	0.0	82.8	100.0	645	6.4	665
20-23	35.5	0.2	0.1	0.0	0.1	64.1	100.0	549	6.0	568
24-27	68.4	1.0	0.3	0.0	0.0	30.3	100.0	502	6.9	589
28-31	79.8	0.2	0.4	0.0	0.0	19.5	100.0	479	4.4	633
32-35	87.2	0.2	0.5	0.0	0.0	12.1	100.0	297	4.3	455
<4	0.5	38.3	42.4	3.8	4.7	10.5	100.0	707	7.0	719
<6	0.7	30.0	38.9	4.1	4.2	22.1	100.0	1,065	8.3	1,082
6-9	1.5	3.5	13.1	1.5	0.7	79.7	100.0	707	10.3	718
<b>Rural</b>										
<4	0.0	41.4	42.0	2.5	1.1	13.1	100.0	501	2.3	505
<6	0.3	32.1	37.9	3.2	1.2	25.2	100.0	766	3.3	776
6-9	0.5	4.1	14.5	1.4	0.0	79.4	100.0	491	5.7	501
<b>Urban</b>										
<4	1.6	30.7	43.2	6.9	13.5	4.1	100.0	206	18.3	213
<6	1.8	24.6	41.5	6.2	11.7	14.3	100.0	299	21.2	307
6-9	3.8	2.0	9.9	1.8	2.3	80.2	100.0	216	20.8	217

<sup>1</sup> Only the youngest children

<sup>2</sup> Based on all children

**Table 6.2 Amounts of Micronutrients among children**

Percentage of children under three years old living with their mothers who ate fruit and vegetables rich in vitamin A in the seven days prior to the survey; Percentage of children aged 6 to 59 months who received vitamin A supplement in the six months prior to the survey, by background characteristics. Mozambique, 2003

Characteristics	Children under three years old		Children aged 6–59 months	
	Ate fruit and vegetables rich in vitamin A <sup>1</sup>	Number of children under three years old	Consumed vitamin A supplement	Number of children aged 6–59 months
<b>Area of residence</b>				
Rural	50.6	3,707	43.4	5,860
Urban	48.3	1,516	65.0	2,458
<b>Province</b>				
Niassa	57.8	247	36.5	398
Cabo Delgado	45.3	469	47.8	713
Nampula	41.4	1,084	46.7	1,741
Zambézia	46.7	814	49.8	1,283
Tete	51.4	515	46.8	865
Manica	55.0	425	56.0	637
Sofala	63.8	385	42.4	607
Inhambane	51.1	399	41.7	668
Gaza	60.5	282	54.7	431
Maputo Province	52.7	333	62.2	540
Maputo City	48.3	272	77.0	435
<b>Mother's education level</b>				
None	49.9	2,372	40.3	3,812
Primary	50.0	2,616	56.5	4,180
Secondary	50.7	226	76.0	316
Higher	*	*	*	10
<b>Age in months</b>				
<6	2.6	1,065	na	na
6–9	26.4	707	44.7	718
10–11	59.2	297	61.2	300
12–23	68.7	1,876	61.3	1,933
24–35	72.8	1,277	52.3	1,677
36–47	na	na	45.0	1,977
48–59	na	na	40.0	1,714
<b>Order of birth</b>				
1	49.0	1,008	52.4	1,745
2–3	48.9	1,797	50.1	2,910
4–5	51.3	1,288	49.5	1,941
6+	50.9	1,132	47.0	1,723
<b>Sex of child</b>				
Male	49.4	2,588	48.9	4,098
Female	50.5	2,636	50.7	4,220
<b>Breast-feeding</b>				
Breast fed	42.6	3,893	54.4	2,949
Not breast fed	71.6	1,286	47.7	5,116
No information	68.1	44	37.8	253
<b>Age of mother at the birth</b>				
<20	47.1	1,038	51.7	1,810
20–24	49.5	1,390	51.8	2,304
25–29	49.8	1,228	48.3	1,896
30–34	49.7	808	46.7	1,192
35–49	55.2	760	48.5	1,117
Total	49.9	5,224	49.8	8,318

Note: The information on vitamin A is based on the mother's memory

na = Not applicable

<sup>1</sup>Includes pumpkins, red or yellow pear/apples, carrots, potato or sweet potato, vegetables with green leaves, mangoes, paw-paws and other local fruits and vegetables rich in vitamin A

## **Micronutrients consumed by children and mothers**

Micronutrient deficiency contributes seriously to infant mortality and morbidity. Children may receive micronutrients from foods, fortified foods and through direct supplements. Table 6.2 shows the percentage of children under three years old living with their mothers who ate fruit and vegetables rich in Vitamin A in the seven days prior to the date of the survey, and the percentage of children aged 6-59 months who received vitamin A supplements during the six months preceding the survey, by selected characteristics.

Graph 6.1 shows the percentage of children who received Vitamin A supplements. The data shows that rather more than 50% of all children in the country received Vitamin A supplements, with a higher percentage in the urban areas (66%) than in rural areas. By provinces, Maputo City stands out, where 78% of children received Vitamin A supplements, while Niassa has the lowest percentage, 35%.

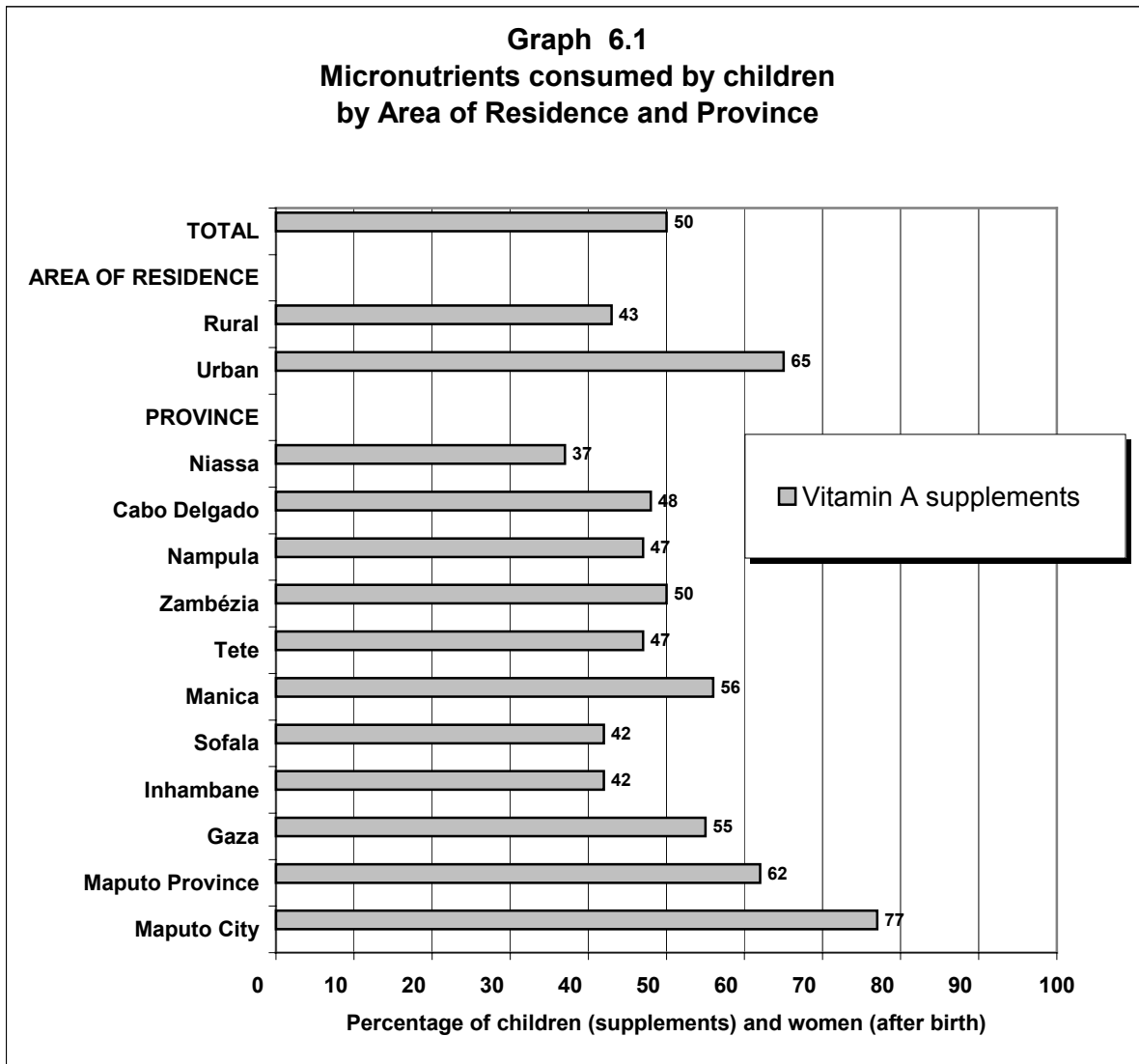
**Table 6.3 Amounts of micronutrients among the mothers**

Percentage of women who gave birth in the five years prior to the survey who had blurred vision at night during pregnancy, and Percentage of those who took iron pills and syrup on specific days, by background characteristics. Mozambique, 2003

Characteristics	Had vision difficulties at night during pregnancy		Percentage distribution of number of days on which the woman took iron/folic acid pills during pregnancy					Total	Number of women
	Reported	Weighted <sup>1</sup>	None	<60	60-89	90+	No inf.		
<b>Area of residence</b>									
Rural	4.9	1.4	48.7	25.0	13.4	10.5	2.4	100.0	4,940
Urban	6.2	1.4	18.6	35.8	17.9	22.6	5.1	100.0	2,239
<b>Province</b>									
Niassa	4.2	0.8	41.5	36.7	15.2	5.3	1.3	100.0	326
Cabo Delgado	4.5	1.4	32.9	23.1	23.5	18.2	2.4	100.0	638
Nampula	8.2	1.7	49.2	21.9	11.8	15.9	1.3	100.0	1,458
Zambézia	8.0	3.1	67.9	20.7	7.1	2.9	1.5	100.0	1,118
Tete	1.6	0.2	39.7	31.3	14.4	12.7	1.9	100.0	694
Manica	2.7	0.5	32.7	42.5	14.1	9.1	1.6	100.0	535
Sofala	4.6	1.1	30.6	30.8	21.2	15.7	1.6	100.0	524
Inhambane	5.6	1.7	39.9	30.4	17.0	10.5	2.2	100.0	576
Gaza	1.8	0.6	30.2	38.4	18.6	11.2	1.5	100.0	381
Maputo Province	4.1	1.1	6.3	29.2	13.7	33.5	17.3	100.0	519
Maputo City	5.1	0.6	3.5	34.3	20.5	31.9	9.8	100.0	409
<b>Educational level</b>									
None	6.4	1.7	52.7	22.1	13.4	9.8	2.0	100.0	3,177
Primary	4.6	1.2	30.5	33.5	15.8	16.1	4.1	100.0	3,666
Secondary	2.2	0.9	9.6	31.9	18.3	34.1	6.1	100.0	325
Higher	*	*	*	*	*	*	*	*	11
<b>Age at birth</b>									
<20	5.4	1.6	37.6	30.9	14.6	13.9	3.0	100.0	1,468
20-24	5.7	1.6	38.5	29.4	15.3	14.0	2.8	100.0	1,904
25-29	5.5	1.4	41.8	27.3	13.0	14.8	3.2	100.0	1,604
30-34	4.6	0.9	38.9	27.8	16.1	13.4	3.8	100.0	1,110
35-49	5.0	1.2	40.2	25.2	15.4	15.3	4.0	100.0	1,093
<b>Number of children born alive</b>									
1	5.9	1.7	33.4	31.2	14.9	16.6	3.8	100.0	1,456
2-3	5.0	1.6	39.7	27.5	14.8	14.9	3.1	100.0	2,400
4-5	5.0	0.8	41.6	28.5	12.9	13.6	3.3	100.0	1,716
6+	5.6	1.5	41.8	26.9	16.6	11.8	2.9	100.0	1,606
<b>Total</b>	<b>5.3</b>	<b>1.4</b>	<b>39.3</b>	<b>28.4</b>	<b>14.8</b>	<b>14.3</b>	<b>3.3</b>	<b>100.0</b>	<b>7,179</b>

Note: For women with two or more children born alive in the five years prior to the survey, the data refers to the most recent child.

<sup>1</sup>Women who declared night blindness, but had no vision difficulties during the day



## Children's Nutritional Status

It is known today that children's nutritional status is a determinant factor in their susceptibility to disease. Nutritional status is the function, among other aspects, of food habits, customs and practices, and it is also negatively influenced by diseases, particularly infectious diseases, which, in general, are excessively frequent in the least developed countries. Alterations in nutritional status may be acute or chronic, under certain circumstances needing medical treatment to restore the nutritional status and normal growth of the child.

Traditionally, nutritional status is assessed on the basis of measurements related to the age of the child. The measurement table used is equipped with an extension that makes it possible to measure adults, while a digital scale to a precision of 100 grams was used to obtain the weights of the children and their respective mothers.

Table 6.4 shows the percentage of children under five classified by state of malnutrition in accordance with the indices of height for age, weight for height, and weight for age, by age groups and also by background demographic characteristics. The same table presents the percentage of children who are more than two standard deviations lower than the median of the population reference group. The percentage of children who are severely malnourished, that is, who are more than 3 standard deviations below the median of the population reference group, is also shown in this table.

Graph 6.2 shows a summary of children with low weight and chronic malnutrition by area of residence and province.

Four in every ten children (41%) under five years old are short in relation to their age, or suffer from chronic malnutrition, and 4.0% suffer from acute malnutrition. As was expected, chronic malnutrition increases with age, and is relatively low among children whose mothers have secondary education (15%). Children from rural areas are more vulnerable to acute malnutrition than urban children (45.7 against 29.2%). The lowest level of chronic malnutrition is found in Maputo City and Maputo Province (20.6% and 24%, respectively). In Cabo Delgado, 56% of children under five are considered as of low height for their age. Almost a quarter of children are considered to have low weight, and 4% have very low weight. The lowest level of weight for age is observed among children aged 10 and 11 years, particularly in Cabo Delgado.

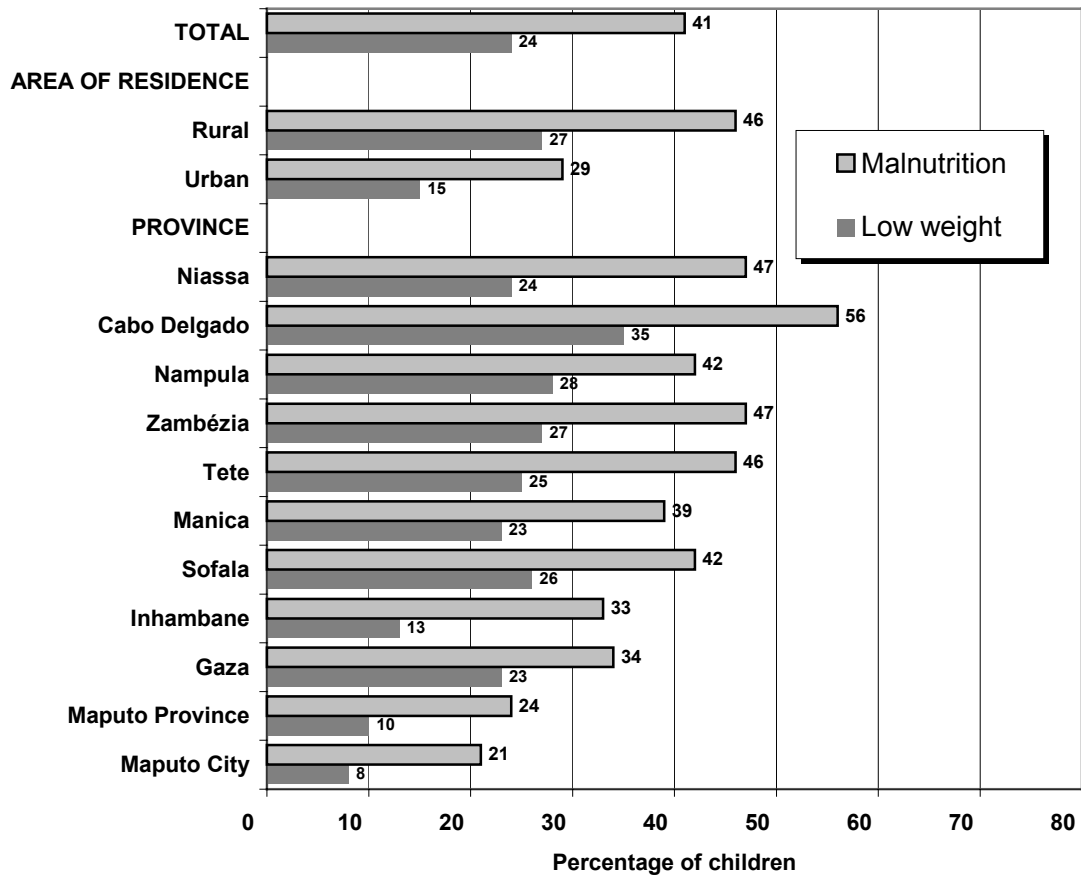
**Table 6.4 Nutritional status of children under five years old**

Among children under five, Percentage classified as malnourished in accordance with: height for age, weight for age, and weight for height, by background demographic and socio-economic characteristics. Mozambique, 2003

Characteristic	Height for age (Chronic malnutrition)		Weight for height (Acute malnutrition)		Weight for age (Insufficient weight)		Number of children
	Perce- tage -3 SD or more	Perce- tage -2 SD or more <sup>1</sup>	Perce- tage -3 SD or more	Perce- tage -2 SD or more <sup>1</sup>	Perce- tage -3 SD or more	Perce- tage -2 SD or more <sup>1</sup>	
<b>Area of residence</b>							
Rural	21.2	45.7	1.0	4.3	7.6	27.1	6,190
Urban	10.4	29.2	0.7	3.1	3.6	15.2	2,507
<b>Province</b>							
Niassa	24.0	47.0	0.6	1.3	4.6	25.1	384
Cabo Delgado	30.4	55.6	0.9	4.1	9.2	34.2	693
Nampula	18.7	42.1	1.7	6.0	8.0	28.2	1,823
Zambézia	24.6	47.3	0.8	5.2	8.9	26.9	1,353
Tete	18.1	45.6	0.3	1.6	5.8	25.1	948
Manica	16.8	39.0	0.6	2.8	5.8	22.9	678
Sofala	17.4	42.3	2.9	7.6	8.7	26.2	624
Inhambane	12.3	33.1	0.1	1.3	2.0	12.8	740
Gaza	11.7	33.6	1.0	6.7	6.0	22.6	504
Maputo Province	5.3	23.9	0.0	0.5	2.3	9.2	543
Maputo City	5.9	20.6	0.1	0.8	1.4	7.9	407
<b>Educational level</b>							
None	20.2	46.9	0.3	3.9	10.6	31.1	141
Primary	18.5	41.8	0.9	4.0	6.5	24.4	7,739
Secondary	5.2	15.0	2.0	4.4	3.7	12.1	311
<b>Age of child</b>							
<6	2.3	12.0	0.1	1.3	1.0	5.4	912
6-9	10.9	26.2	0.7	3.3	6.2	19.7	651
10-11	13.2	33.6	0.7	7.4	10.1	36.9	259
12-23	21.6	47.9	1.7	7.3	10.6	34.5	1,780
24-35	18.7	43.6	1.3	4.7	9.5	28.5	1,599
36-47	22.5	49.4	0.8	3.4	5.0	22.3	1,871
48-59	20.9	44.5	0.5	1.6	3.0	18.3	1,625
<b>Sex</b>							
Male	19.3	42.6	0.9	4.0	6.7	24.7	4,314
Female	16.9	39.4	1.0	4.0	6.2	22.6	4,384
<b>Age of mother</b>							
15-19	17.9	40.3	1.5	4.7	8.2	27.2	787
20-24	19.2	42.2	1.0	4.1	7.0	23.8	2,219
25-29	17.3	40.4	1.7	4.9	6.5	23.1	2,214
30-34	17.6	39.2	0.4	3.1	4.5	22.5	1,645
35-49	18.3	42.0	0.2	3.2	6.6	23.7	1,833
<b>Status of mother</b>							
Mother interviewed	18.1	41.0	0.9	4.0	6.4	24.0	7,850
Not interviewed							
Present	16.2	36.7	1.0	3.9	7.0	23.6	350
Absent	18.6	43.5	1.2	3.5	6.1	18.1	486
Total	18.1	41.0	0.9	4.0	6.4	23.7	8,697

Note: Information based on the children who spent the night in the household on the night prior to the survey. Each index is expressed in terms of standard deviation (SD) from the international reference median of the population recommended by the NCHS/CDC/WHO. Children are classified as malnourished when they are 2 or more standard deviations (2 SD) below the median of the reference population. Children with a valid date of birth (month and year) and valid weight and height measures were considered. Percentages based on less than 30 non-weighted cases are not shown (\*).

**Graph 6.2**  
**Children under five who are malnourished or of low weight, by provinces**



Levels and trends of infant (neonatal and post-neonatal) mortality and child mortality are intrinsically linked to the demographic, socio-economic, cultural and environment conditions of each country. They are regarded as among the best indicators of the level of development of a population. In this context, knowledge of infant and child mortality is indispensable in order to take decisions and implement public programmes and policies in the health area, as well as to draw up population projections.

This chapter presents data on the levels, trends and differentials in neonatal, post-neonatal, infant and child mortality.

To calculate the levels and trends of infant and child mortality, the IDS gathered data on the history of births of each of the women interviewed. To this end, each woman was asked the total number of her children. That is, the number of sons and daughters living with her, living elsewhere, and those who had died. In the case of the latter, their age at death was recorded, using three alternative replies: in days, for those who died in the first month of life, in months for those who died between 1 and 23 months of age, and in years for those who died after their second birthday.

These data make it possible to calculate, for particular periods, the following indicators:

- **Neonatal mortality (NN):** the probability of dying during the first month of life, (0 to 30 days);
- **Post-neonatal mortality (PNN):** the probability of dying after the first month of life, but before the child's first birthday (1-11 months);
- **Infant mortality ( ${}_1q_0$ ):** the probability of dying during the first year of life (0-11 months);
- **Post-infant mortality ( ${}_4q_1$ ):** the probability of dying between the first and fifth birthday (12-59 months);
- **Child mortality ( ${}_5q_0$ ):** the probability of dying before completing the fifth year of life (0-59 months).

Like other demographic variables, mortality is subject to errors in declaration. The reliability of mortality estimates depends on levels of omission of children who died immediately after birth, especially when the deaths occurred many years prior to the survey. Equally important is the differential quality in the declaration of dates of birth of surviving children and those who have died, as well as their respective ages.

## Mortality levels and trends

Table 7.1 presents the rates of neonatal, post-neonatal, infant, post-infant and child

Table 7.1 Infant and child mortality						
Rates of neonatal, post-neonatal, infant, post-infant and child mortality for five year periods prior to the survey. Mozambique, 2003						
Years prior to the survey	Calendar years	Neonatal mortality (NN)	Post-neonatal mortality <sup>1</sup> (PNN)	Infant mortality (1q0)	Post-infant mortality (4q1)	Child mortality (5q0)
0-4	1998-2003	37	64	101	58	153
5-9	1993-1998	60	89	149	68	207
10-14	1988-1993	59	92	151	88	226

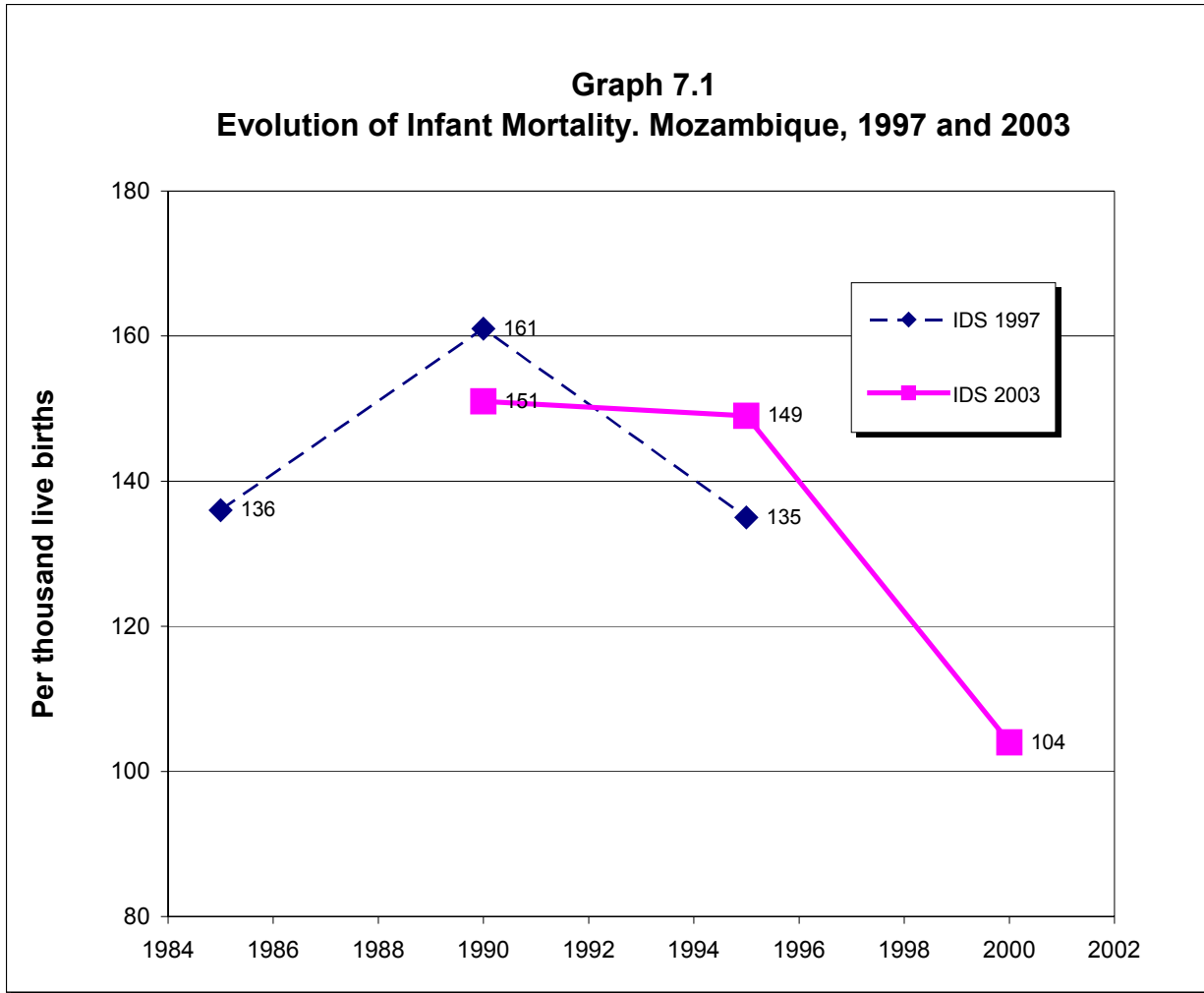
<sup>1</sup> Calculated with the difference between the infant and the neonatal mortality rates

mortality, for the three five year periods that preceded the survey, which allows one to see the trend in those indicators over the past 15 years.

During the most recent period (1998-2003) almost 2 in every 10 children (153 per thousand) died before reaching their fifth birthday. In every thousand live births, 101 died before competing the first year of life, and 58 died between their first and fifth birthdays.

As for those younger than a year, the probability of dying in the first month of life is 37 per thousand, while that of dying between the first and twelfth months is 64 per thousand. But, in general, over the past 13 years, there has been a significant reduction in mortality.

Graph 7.1 shows the infant mortality trend in the surveys held in 1997 and in 2003. Mortality, which was 147 per thousand in 1997, declined to 124 in 2003. These figures show a fall of about 15% in six years.



### Mortality differentials

In order to study mortality differentials, it is recommended to expand the reference period to 10 years prior to the date of the survey, because, for some characteristics, the size of the sample may be insufficient to provide reliable estimates for a five year period.

Table 7.2 shows the differentials in mortality, by background characteristics (area of residence, provinces, and education level of the mother). As was expected, mortality levels are higher in rural than in urban areas, and among children whose mothers have a low level of schooling. For example, infant mortality is 95 per 1,000 live births in the urban areas, against 135 in rural areas; it is 65 per thousand among women with secondary education, against 142 among women who have no education at all.

Mortality also differs between provinces according to their socio-economic development. Thus Maputo City – the most urbanised part of the country – has much lower mortality levels than the other provinces. If we take infant mortality as an example, we will note that the extremes are 51 per 1,000 in Maputo City, and 178 per 1,000 in Cabo Delgado province.

**Table 7.2 Infant and child mortality by background characteristics**

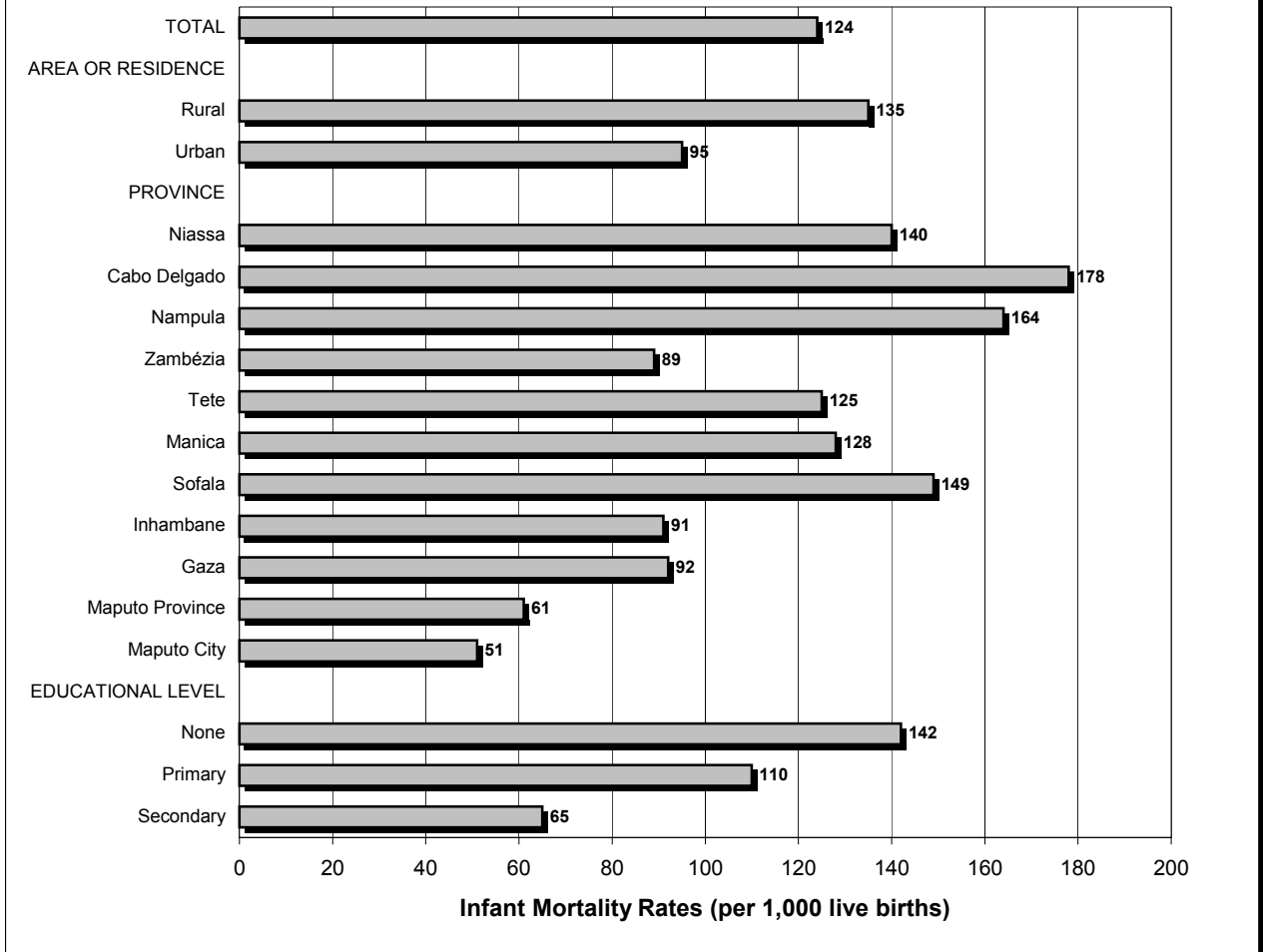
Rates of neonatal, post-neonatal, infant, post-infant and child mortality for the ten year period prior to the survey, by selected characteristics. Mozambique, 2003

Characteristics	Neonatal mortality (NN)	Post-neonatal mortality <sup>1</sup> (PNN)	Infant mortality (1q0)	Post-infant mortality (4q1)	Child mortality (5q0)
<b>Area of Residence</b>					
Rural	53	82	135	66	192
Urban	35	60	95	53	143
<b>Province</b>					
Niassa	57	82	140	77	206
Cabo Delgado	62	115	178	77	241
Nampula	74	90	164	66	220
Zambézia	31	59	89	37	123
Tete	42	83	125	92	206
Manica	47	81	128	64	184
Sofala	40	109	149	66	205
Inhambane	35	56	91	64	149
Gaza	38	54	92	71	156
Maputo Province	31	30	61	50	108
Maputo City	22	29	51	40	89
<b>Mother's educational level</b>					
None	53	89	142	68	200
Primary	44	66	110	60	163
Secondary	30	34	65	24	87
Higher	*	*	*	*	*
Total	48	76	124	62	178

Note: Rates based on less than 250 cases are not shown (\*)

<sup>1</sup> Calculated with the difference between the infant and the neonatal mortality rates

**Graph 7.2**  
**Infant Mortality Rate over the Ten Years prior to the Survey, by Area of Residence, Provinces and level of education of the Mothers**



Just as in 1997, in IDS 2003, data was gathered on Acquired Immune Deficiency Syndrome (AIDS), the disease caused by infection by the Human Immunodeficiency Virus (HIV). Over the past decade, AIDS has become one of the most important health problems in the world, and particularly in African and Third World countries, given its peculiar epidemiological characteristics: it is a disease that mostly affects the economically active population, it is invariably fatal, and its spread is geometric. Currently AIDS contributes significantly to the overall disease burden on the African continent.

Two sections of the IDS 2003 questionnaire were dedicated to HIV/AIDS/DTS matters. Section 5 has questions on sexual behaviour, access to and use of condoms. Section 8 deals specifically with HIV/AIDS and other Sexually Transmitted Diseases. However, the questionnaire also includes a series of questions on morbidity and alcohol consumption that will be used for cross-references with other risky behaviour.

### **Age at First Sexual Contact**

The age at which sexual activity begins is an important indicator for reproductive health initiatives, including on HIV/AIDS. Although age at first marriage is generally used as an approximate indicator for exposure to sexual activity, the two events do not coincide. In IDS 2003 the age that respondents, of both sexes, had at their first sexual contact was assessed, since it is known that sexual activity frequently begins before marriage. Tables 8.1 and 8.2 show the median age at first sexual contact, by five year age groups.

**Table 8.1 Median age at first sexual relation: women**

Median age at first sexual relation among women aged 20–49 years, by their current age, and by background characteristics. Mozambique, 2003

Characteristics	Current age						Women 20–49 years
	20–24	25–29	30–34	35–39	40–44	45–49	
<b>Area of residence</b>							
Rural	15.7	15.8	15.8	15.8	15.9	16.4	15.8
Urban	16.6	16.6	16.7	16.6	16.6	16.8	16.6
<b>Province</b>							
Niassa	15.4	15.3	15.2	16.0	17.3	19.4	15.9
Cabo Delgado	15.2	15.2	14.9	15.1	15.0	15.5	15.1
Nampula	15.9	15.6	15.9	16.0	15.4	15.2	15.7
Zambézia	15.4	15.6	15.7	15.9	16.3	17.6	15.7
Tete	16.4	16.4	16.5	15.9	16.5	16.8	16.4
Manica	16.1	16.1	17.0	16.1	16.4	18.1	16.3
Sofala	16.6	16.3	16.7	16.2	16.5	18.3	16.6
Inhambane	16.2	16.0	16.0	15.9	15.9	16.2	16.0
Gaza	16.4	16.8	16.7	17.0	16.6	18.0	16.8
Maputo Province	16.8	16.8	16.5	16.3	16.5	16.4	16.6
Maputo City	16.8	17.3	17.2	17.0	17.1	17.8	17.1
<b>Educational level</b>							
None	15.7	15.8	16.0	15.8	15.9	16.5	15.9
Primary	16.0	16.0	15.9	16.2	16.3	16.5	16.1
Secondary	17.5	18.3	17.8	17.7	18.4	19.2	17.9
Total	16.0	16.0	16.0	16.1	16.1	16.6	16.1

**Table 8.2.1 Median age at first sexual relation: men**

Median age at first sexual relation among men aged 20–64 years, by their current age, and by area of residence. Mozambique, 2003

Area of Residence	Current age									Men 20–64 years
	20–24	25–29	30–34	35–39	40–44	45–49	50–54	55–59	60–64	
Rural	16.7	16.4	17.1	17.7	17.7	18.2	19.0	19.2	19.8	17.6
Urban	16.9	17.2	17.7	18.0	18.6	18.4	18.3	20.2	19.0	17.9
Total	16.8	16.7	17.2	17.8	18.1	18.3	18.8	19.5	19.6	17.7

**Table 8.2.2 Media age at first sexual relation: men**

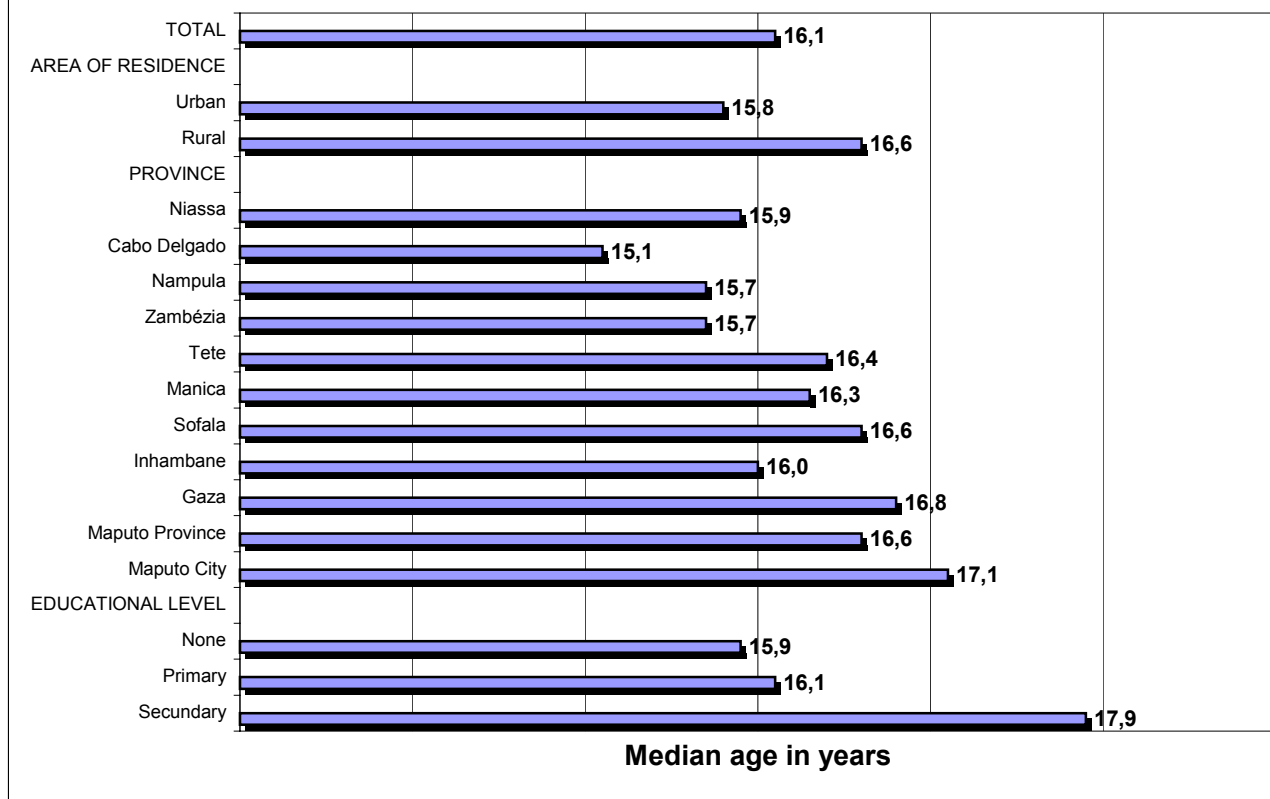
Median age at first sexual relation among men aged 20–64 years, by their current age, and by background characteristics. Mozambique, 2003

Characteristics	Current age				Men 20–64 years
	20–24	25–29	30–34	35–39	
<b>Area of residence</b>					
Rural	16.7	16.4	17.1	17.7	17.6
Urban	16.9	17.2	17.7	18.0	17.9
<b>Province</b>					
Niassa	15.0	*	16.8	*	17.0
Cabo Delgado	*	15.5	15.8	*	16.3
Nampula	16.4	16.3	16.3	18.0	17.9
Zambézia	16.4	17.0	17.5	17.5	17.4
Tete	17.6	16.4	18.3	*	18.3
Manica	18.4	18.3	*	*	19.0
Sofala	17.6	18.3	19.8	18.3	18.8
Inhambane	*	*	*	*	18.0
Gaza	16.4	*	*	*	18.1
Maputo Province	18.0	*	*	*	17.5
Maputo City	16.8	16.9	17.0	*	17.3
<b>Educational level</b>					
None	16.4	16.1	17.1	18.1	17.7
Primary	16.6	16.9	17.3	17.7	17.8
Secondary	17.3	16.9	17.3	17.6	17.8
<b>Marital status</b>					
Never married	17.2	17.5	17.7	18.2	17.4
Married	16.2	16.6	17.1	17.7	17.7
Marital union	16.8	16.6	17.8	18.0	17.9
Divorced/separated	*	*	*	*	17.4
Total	16.8	16.7	17.2	17.8	17.7

Note: Percentages based on less than 30 unweighted cases have been suppressed (\*)

The differences in median age at first sexual relation between women aged 25-49 years are summarized in Graph 8.1 by area of residence, province and educational level.

**Graph 8.1**  
**Median age at first sexual relation among women aged 25-49 years**  
**by area of residence, province and educational level**



### Knowledge of HIV/AIDS and how to prevent it

Basic knowledge about HIV/AIDS and acceptance that its transmission can be controlled and avoided is necessary. The experience of many countries shows that general knowledge tends to be very high, but there is a lower knowledge of the ways of avoiding HIV/AIDS.

Publicising information about AIDS is one of the educational strategies of the Ministry of Health's National Programme for the Fight against Sexually Transmitted Diseases/AIDS, and of the National Council for the Fight against AIDS (CNCS). To extend educational programmes about AIDS into the community, the Health Ministry relies on the involvement of other governmental institutions and of a network of NGOs and community organisations working in the area of HIV/AIDS.

IDS 2003 set out to gather information on knowledge about HIV/AIDS and related matters and ways to avoid transmission of HIV/AIDS. Table 8.3 and Graph 8.2 show the percentage of women and men who have heard of AIDS and those who believe there are ways of avoiding the transmission of HIV/AIDS, by background characteristics.

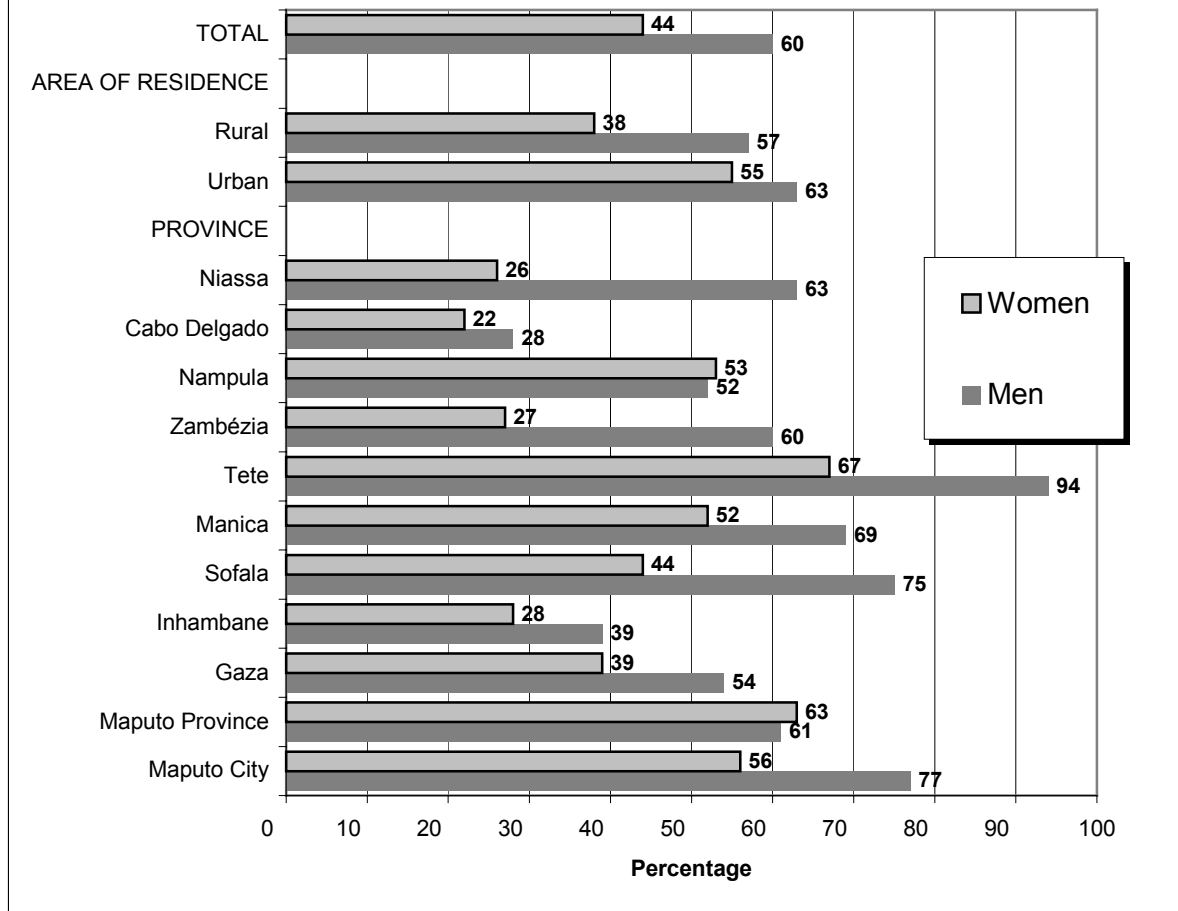
**Table 8.3 Knowledge of HIV/AIDS**

Percentage of women and men who have heard of HIV/AIDS; Percentage who believe that there are ways of avoiding HIV/AIDS, and Percentage who know at least two ways of avoiding HIV/AIDS by background characteristics. Mozambique, 2003

Characteristics	Women				Men			
	Heard of HIV/AIDS	Believe there are ways to avoid HIV/AIDS	Know at least two methods	Number of women	Heard of HIV/AIDS	Believe there are ways to avoid HIV/AIDS	Know at least two methods	Number of men
<b>Area of Residence</b>								
Rural	93.7	55.4	37.8	7,870	96.1	71.4	57.1	1,705
Urban	99.1	78.4	54.7	4,548	99.9	85.1	63.3	1,195
<b>Province</b>								
Niassa	93.8	50.5	26.0	476	99.5	96.1	63.3	116
Cabo Delgado	96.9	30.8	21.8	1,071	99.7	36.2	28.0	274
Nampula	95.3	65.3	53.3	2,403	99.8	66.7	51.8	693
Zambézia	83.7	35.2	26.9	1,906	87.1	61.0	59.5	463
Tete	99.6	81.5	67.4	1,025	100.0	98.7	93.8	222
Manica	99.0	70.3	51.6	809	100.0	89.2	69.1	192
Sofala	98.7	70.5	43.8	865	98.8	94.7	74.7	226
Inhambane	97.8	56.3	28.4	1,088	98.8	89.5	39.0	164
Gaza	100.0	86.5	38.9	666	99.6	94.5	53.7	90
Maputo Province	99.8	91.6	63.0	1,050	100.0	95.1	61.1	197
Maputo City	99.7	89.7	55.8	1,059	99.7	97.4	77.3	261
<b>Educational level</b>								
None	91.7	50.1	33.2	5,100	90.6	56.4	43.9	501
Primary	98.2	69.5	46.7	6,347	99.1	77.7	57.0	1,940
Secondary	100.0	98.2	81.8	940	99.3	96.9	87.9	437
Higher	*	*	*	*	*	*	*	21
<b>Age</b>								
15-19	96.0	66.8	43.2	2,454	97.9	77.1	53.4	673
20-24	94.7	63.7	43.4	2,456	99.3	82.9	67.7	404
25-29	95.9	64.0	44.8	2,224	97.1	75.3	62.1	378
30-34	95.7	61.3	44.2	1,792	95.1	74.4	62.0	329
35-39	95.6	63.8	46.5	1,411	99.1	81.8	69.2	265
40-44	96.7	64.0	44.7	1,126	99.0	78.1	64.2	221
45-49	95.5	60.3	40.3	954	97.4	81.2	56.5	221
50-54	na	na	na	na	97.5	66.5	48.0	176
55-59	na	na	na	na	97.6	64.6	47.9	124
60-64	na	na	na	na	94.5	78.8	59.7	111
<b>Marital status</b>								
Never married	96.2	73.8	48.5	1,961	97.8	79.9	59.1	911
Married or marital union	95.3	61.2	43.2	8,736	97.6	75.0	60.2	1,844
Divorced/separated/ Widowed	97.0	65.6	42.7	1,721	96.9	85.5	56.1	145
Total	95.7	63.8	44.0	12,418	97.7	77.1	59.7	2,900

na = Not applicable

**Graph 8.2**  
**Knowledge of at least two ways of avoiding HIV/AIDS by area of residence and province. Mozambique, 2003**



The messages of the HIV/AIDS prevention programmes are centred on the following questions: how to avoid HIV/AIDS, sexual abstinence of young people, condom use and reducing the number of sexual partners. The type of replies to these questions indicates the relative importance of the various ways of preventing HIV/AIDS.

Tables 8.4.1 and 8.4.2 present the percentage distribution of women and men by the knowledge of ways to avoid HIV/AIDS, respectively.

**Table 8.4.2 Knowledge of important ways to avoid HIV/AIDS, men**

Percentage of men who know ways to avoid HIV/AIDS, and Percentage of men who know two or three methods of avoiding HIV/AIDS, by background characteristics. Mozambique, 2003

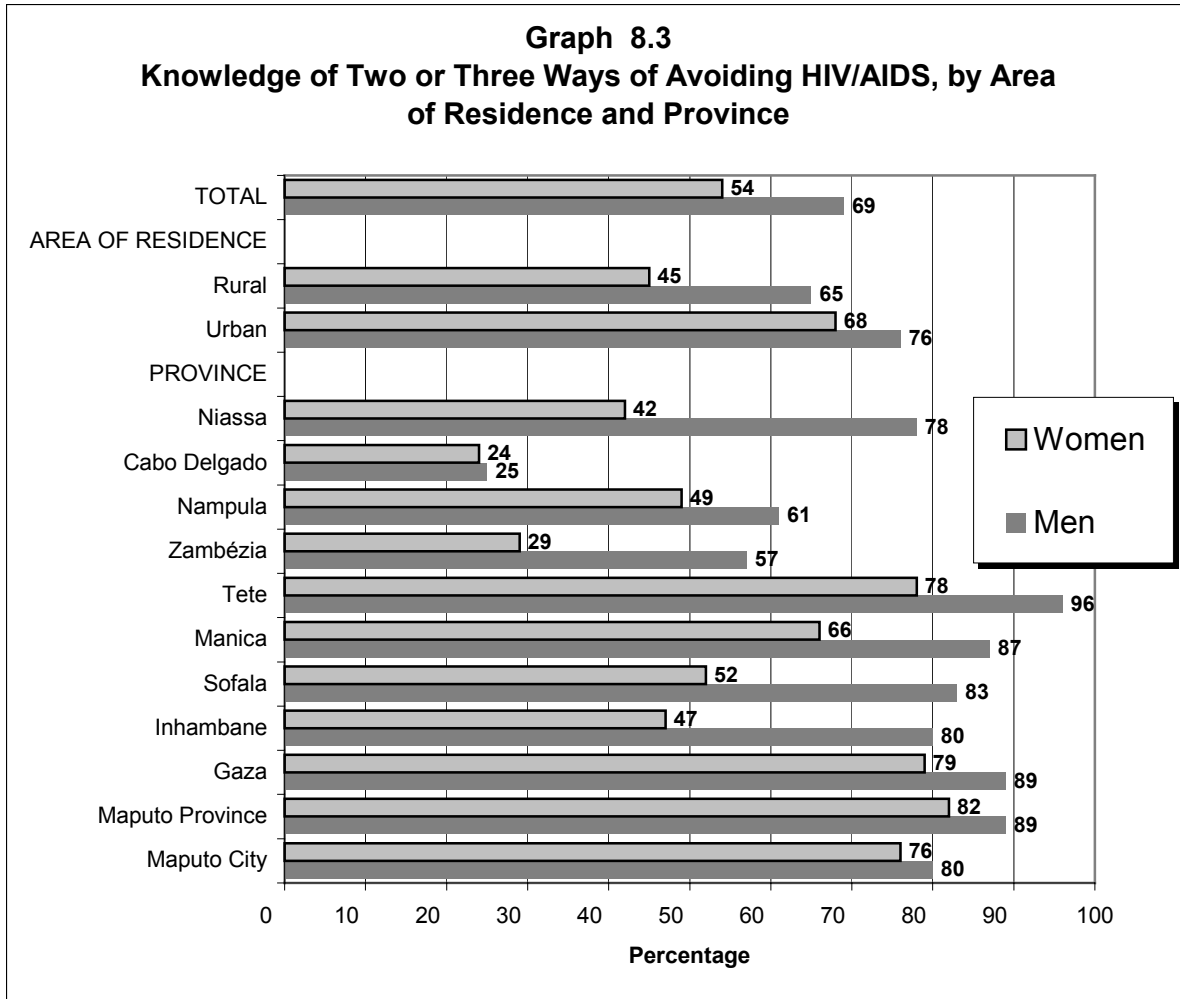
Characteristics	Knowledge of important methods to avoid HIV/AIDS				Specific method to avoid HIV/AIDS		
	None <sup>1</sup>	One method	Two or three methods	Total	Use condoms	Limit number of sexual partners <sup>2</sup>	Number of men
<b>Residence</b>							
Rural	28.6	6.5	64.9	100.0	65.8	69.0	1,705
Urban	15.1	8.9	75.9	100.0	82.2	76.9	1,195
<b>Province</b>							
Niassa	3.9	18.1	78.0	100.0	76.1	90.5	116
Cabo Delgado	65.1	9.5	25.4	100.0	26.9	28.0	274
Nampula	33.3	5.7	61.0	100.0	63.2	64.4	693
Zambézia	39.0	4.1	56.9	100.0	57.6	59.0	463
Tete	1.6	2.3	96.1	100.0	94.9	96.7	222
Manica	10.8	1.8	87.4	100.0	88.7	87.5	192
Sofala	5.3	11.9	82.8	100.0	84.8	92.2	226
Inhambane	10.5	9.2	80.3	100.0	85.9	83.9	164
Gaza	5.5	5.5	89.0	100.0	94.4	89.0	90
Maputo Province	4.9	5.7	89.4	100.0	93.6	90.4	197
Maputo City	2.3	17.3	80.1	100.0	96.4	79.1	261
<b>Educational level</b>							
None	43.6	7.4	49.0	100.0	50.0	53.4	501
Primary	22.5	8.0	69.4	100.0	73.1	72.5	1,940
Secondary	3.1	5.1	91.8	100.0	94.3	91.8	437
Higher	*	*	*	*	*	*	21
<b>Age</b>							
15-19	23.1	9.8	67.1	100.0	74.4	67.8	673
20-24	17.1	6.4	76.6	100.0	81.2	76.7	404
25-29	24.7	6.8	68.5	100.0	70.7	71.9	378
30-34	25.6	4.3	70.0	100.0	72.2	71.2	329
35-39	18.7	7.5	73.8	100.0	73.1	80.0	265
40-44	22.2	4.3	73.2	100.0	74.1	75.2	221
45-49	18.8	7.9	73.3	100.0	74.8	78.7	221
50-54	33.5	8.1	58.4	100.0	58.9	64.2	176
55-59	35.4	12.9	51.7	100.0	53.7	61.0	124
60-64	21.2	7.9	70.9	100.0	70.6	76.7	111
<b>Marital status</b>							
Never married	20.3	8.7	71.1	100.0	77.6	71.5	911
Married/marital union	25.1	6.7	68.1	100.0	69.3	72.2	1,844
Divorces/separated							
/Widowed	14.5	9.8	75.8	100.0	81.7	77.8	145
Total	23.1	7.5	69.4	100.0	72.5	72.3	2,900

Note: The most important programmatic methods are sexual abstinence, use of condoms and limiting the number of sexual partners. Sexual abstinence was measured through spontaneous responses, while condom use and limiting the number of partners were measured by spontaneous responses and replies obtained by insisting.

Percentages based on less than 30 non-weighted cases are not shown (\*).

<sup>1</sup>Those who have still not heard of HIV/AIDS or who know of no important programmatic method to avoid HIV/AIDS

<sup>2</sup>Refers to limiting the number of sexual partners to one.



### Number of sexual partners

In the context of preventing HIV/AIDS, sexual activity is typically classified as being risky. Thus this aspect has been taken into account in intervention programmes. The main thrust of these programmes has been advice to young people to delay the onset of sexual activity, reduce the number of sexual partners, and use condoms.

Tables 8.5 and 8.6 show the percentage of married and unmarried women and men by the number of occasional sexual partners in the last 12 months prior to the survey. As is the case in most countries, the level of extra-marital relations admitted by women is less than 5%.

Tables 8.5 and 8.6 also present information on the number of sexual partners of unmarried women and men. Data on the sexual activity of unmarried women and men is an important indicator for programmes that seek to delay the start of sexual activity and to reduce the incidence of HIV.

Table 8.5 Married and unmarried women by number of sexual partners

Percentage of married women with just one sexual partner, and percentage distribution of unmarried women by number of sexual partners in last 12 months, by background characteristics, Mozambique 2003

Background Characteristics	Married women		Unmarried women					
	Just one partner	Number of women	Number of sexual partners			Total	Number of women	Average number of sexual partners
			0	1	2+			
<b>Area of Residence</b>								
Rural	96.7	6,199	57.0	35.9	7.1	100.0	1,671	0.5
Urban	94.8	2,537	36.4	54.0	9.5	100.0	2,011	0.7
<b>Province</b>								
Niassa	98.1	387	53.3	38.9	7.5	100.0	89	0.5
Cabo Delgado	90.3	851	39.9	45.4	14.7	100.0	220	0.8
Nampula	94.1	1,898	52.6	40.5	6.9	100.0	505	0.6
Zambézia	98.4	1,430	61.0	32.2	6.9	100.0	476	0.5
Tete	99.7	771	72.1	24.3	3.4	100.0	254	0.3
Manica	99.3	617	69.2	28.2	2.6	100.0	192	0.4
Sofala	98.5	617	54.4	40.3	5.0	100.0	248	0.5
Inhambane	93.1	724	34.2	53.5	12.2	100.0	364	0.8
Gaza	97.8	426	42.1	54.0	3.9	100.0	240	0.6
Maputo Province	97.3	552	27.2	59.0	13.6	100.0	498	0.9
Maputo City	96.3	462	30.5	60.2	9.2	100.0	597	0.8
<b>Educational level</b>								
None	97.1	4,212	61.4	32.0	6.4	100.0	889	0.4
Primary	95.6	4,147	44.3	46.7	8.9	100.0	2,201	0.7
Secondary	92.6	362	27.7	62.6	9.7	100.0	578	0.8
Higher	91.5	16	25.1	74.9	0.0	100.0	14	0.7
<b>Age</b>								
15-19	93.4	936	51.4	42.3	6.2	100.0	1,517	0.5
20-24	95.9	1,747	31.3	58.3	10.4	100.0	709	0.8
25-29	95.8	1,812	35.4	50.0	14.6	100.0	412	0.8
30-34	96.5	1,495	38.6	53.8	7.3	100.0	297	0.7
35-39	96.6	1,158	47.5	38.9	13.3	100.0	254	0.7
40-44	97.8	872	53.3	39.6	6.7	100.0	254	0.5
45-49	98.2	715	69.8	26.7	3.5	100.0	239	0.3
<b>Marital status</b>								
Never married	na	na	44.3	48.6	7.1	100.0	1,961	0.6
With sexual experience	na	na	14.0	75.0	10.9	100.0	1,212	1.0
No sexual experience	na	na	100.0	0.0	0.0	100.0	683	0.0
Divorced/Separated /Widowed	na	na	47.4	42.6	9.9	100.0	1,721	0.6
Total	96.2	8,736	45.8	45.8	8.4	100.0	3,682	0.6

na = Not applicable

**Graph 8.4**  
**Unmarried women and men with no sexual partners by area of residence and province**

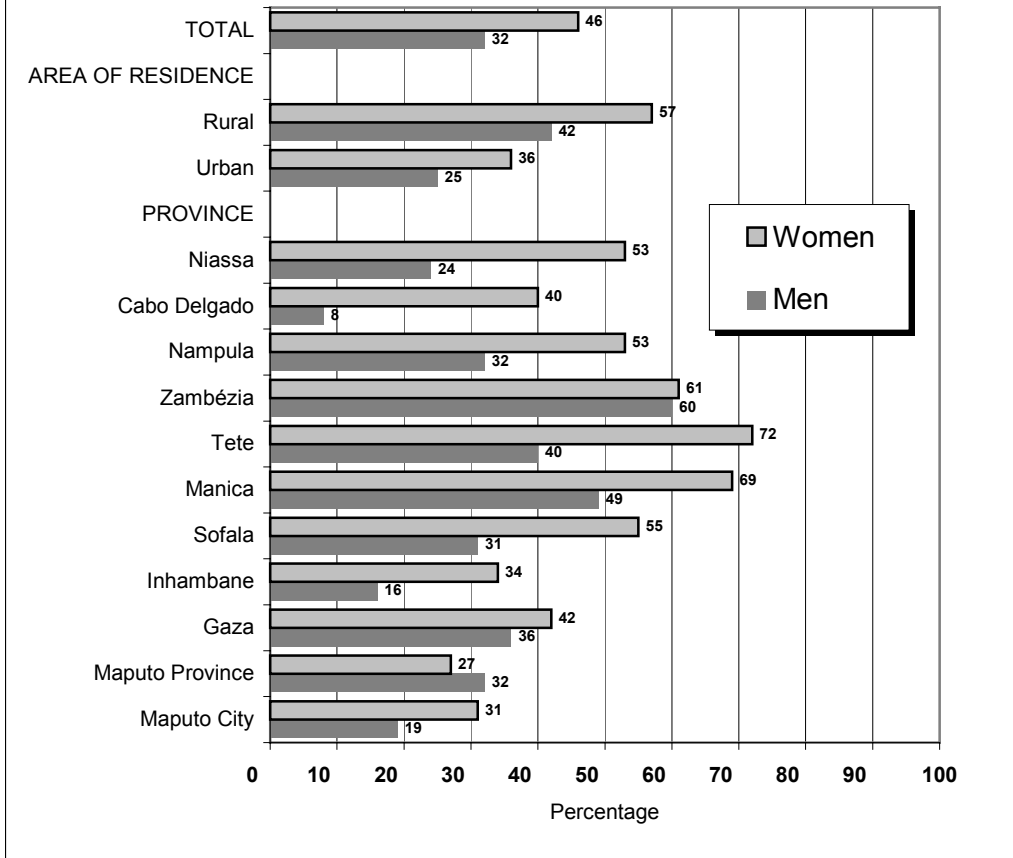


Table 8.6 Married and unmarried men by number of sexual partners

Percentage distribution of men who are currently married by number of sexual partners in the last 12 months prior to the survey, excluding wives and lovers, and average number of sexual partners, by selected characteristics. Percentage distribution of men who are currently not married by number of sexual partners in last 12 months prior to the survey, and average number of sexual partners, by background characteristics, Mozambique 2003

Background characteristics	Married men						Unmarried men					
	Number of sexual partners				Number of men	Average number of partners	Number of sexual partners				Number of men	Average number of partners
	Only the wife/lover	1	2+	Total			0	1	2+	Total		
<b>Area of Residence</b>												
Rural	82.1	13.1	4.8	100.0	1,287	0.3	41.7	34.1	23.7	100.0	418	1.0
Urban	67.0	22.0	10.8	100.0	557	0.5	24.5	42.5	32.8	100.0	638	1.4
<b>Province</b>												
Niassa	91.5	7.5	1.0	100.0	82	0.1	19.6	44.5	34.2	100.0	34	1.3
Cabo Delgado	60.4	23.5	16.2	100.0	202	0.9	8.4	44.3	47.4	100.0	72	1.9
Nampula	76.3	17.1	6.6	100.0	460	0.4	31.8	41.0	26.7	100.0	233	1.4
Zambézia	95.3	4.7	0.0	100.0	381	0.0	60.3	27.1	12.7	100.0	83	0.6
Tete	94.2	5.4	0.4	100.0	151	0.1	39.5	44.5	15.9	100.0	71	0.8
Manica	91.7	6.8	1.4	100.0	99	0.1	49.1	45.4	5.5	100.0	93	0.6
Sofala	78.6	11.6	9.2	100.0	129	0.3	31.3	36.2	31.4	100.0	98	1.1
Inhambane	60.8	32.2	7.0	100.0	106	0.6	16.2	38.2	45.6	100.0	59	1.8
Gaza	56.9	21.2	21.9	100.0	50	1.3	34.3	18.1	47.7	100.0	40	2.0
Maputo Province	46.4	40.6	13.0	100.0	81	0.8	31.9	38.7	29.3	100.0	116	1.2
Maputo City	52.6	32.5	14.2	100.0	103	0.7	18.8	41.2	39.6	100.0	158	1.5
<b>Educational level</b>												
None	88.4	9.7	1.9	100.0	412	0.1	52.4	29.9	17.7	100.0	89	0.8
Primary	77.3	15.5	7.1	100.0	1,238	0.4	33.7	40.0	25.9	100.0	702	1.2
Secondary	56.4	30.0	13.3	100.0	186	0.7	18.8	40.0	40.9	100.0	252	1.5
Higher	*	*	*	*	9	*	0.0	45.0	55.0	100.0	13	2.8
<b>Age</b>												
15-19	66.1	17.3	16.6	100.0	33	0.7	39.2	38.6	22.1	100.0	640	1.0
20-24	61.0	25.4	13.7	100.0	196	0.8	11.8	45.4	41.9	100.0	208	1.8
25-29	69.2	22.5	8.3	100.0	293	0.6	6.9	42.1	50.1	100.0	85	1.9
30-34	76.4	15.5	7.9	100.0	281	0.4	32.0	23.3	44.2	100.0	48	1.8
35-39	76.9	16.5	6.6	100.0	247	*	*	*	*	*	18	*
40-44	76.4	16.1	7.2	100.0	209	*	*	*	*	*	12	*
45-49	84.1	12.5	3.4	100.0	207	*	*	*	*	*	14	*
50-54	89.0	10.3	0.8	100.0	168	*	*	*	*	*	8	*
55-59	91.7	7.1	1.2	100.0	108	*	*	*	*	*	16	*
60-64	96.8	1.7	1.5	100.0	103	*	*	*	*	*	8	*
<b>Marital status</b>												
Never married	na	na	na	na	na	na	30.8	39.8	29.0	100.0	911	1.3
Married	87.1	9.9	3.0	100.0	950	0.2	na	na	na	na	na	na
Marital union	67.4	22.1	10.4	100.0	894	0.6	na	na	na	na	na	na
Div./Sep./Widowed	na	na	na	na	na	na	34.3	35.5	30.0	100.0	145	1.2
<b>Total</b>	<b>77.5</b>	<b>15.8</b>	<b>6.6</b>	<b>100.0</b>	<b>1,844</b>	<b>0.4</b>	<b>31.5</b>	<b>39.1</b>	<b>29.1</b>	<b>100.0</b>	<b>1,056</b>	<b>1.3</b>

Note: Cases fewer than 30 are not shown (\*).

## **Use of condoms**

The level of condom use among the population is an important indicator to assess and monitor HIV/AIDS programmes. Tables 8.7 and 8.8 present the percentage of women and men who used condoms in the last sexual relation in the 12 months prior to the survey, by type of partner; one of the types represents use in a low risk situation, and the other in a relatively high risk one.

According to the internationally recognised definition, a low risk sexual relation is one involving sex between people who are married or in a stable union. All other sexual relations are regarded as high risk.

Among women, the declaration of extra-marital sexual relations may be omitted because of the dominant norms in some societies. For some categories of analysis the number of cases may be very small, making it impossible to analyse condom use.

**Table 8.7 Use of condoms by type of partner: women**

Percentage of women who had sexual relations in the year prior to the survey who used a condom in their last sexual relation with husband or lover with habitual and occasional partners, by selected characteristics. Mozambique, 2003

Background characteristics	Husband or lover		Habitual partner		Occasional partner	
	Per-centa-ge	Number of women	Per-centa-ge	Number of women	Per-centa-ge	Number of women
<b>Area of Residence</b>						
Rural	10.6	5,415	8.0	919	1.5	6,158
Urban	3.7	2,382	33.4	1,406	14.4	3,666
<b>Province</b>						
Niassa	0.5	349	21.9	48	2.7	391
Cabo Delgado	1.1	651	9.2	214	2.2	791
Nampula	0.7	1,676	12.2	351	2.3	1,925
Zambézia	0.4	1,394	14.8	209	1.9	1,587
Tete	0.5	727	28.8	73	3.1	796
Manica	1.4	496	33.0	63	5.0	557
Sofala	1.3	555	22.0	122	4.8	666
Inhambane	2.3	603	15.6	290	6.7	852
Gaza	1.8	374	10.0	148	4.0	514
Maputo Province	2.5	529	34.4	377	15.4	889
Maputo City	10.2	443	42.1	430	25.6	857
<b>Educational level</b>						
None	0.1	3,699	4.0	465	0.5	4,053
Primary	2.0	3,728	19.3	1,403	6.5	4,968
Secondary	10.8	355	55.6	445	34.4	779
Higher	*	15	*	12	*	25
<b>Age</b>						
15-19	2.7	848	30.2	799	16.3	1,588
20-24	2.9	1,557	27.1	558	8.8	2,049
25-29	1.2	1,574	18.5	341	3.9	1,852
30-39	1.3	2,363	16.9	405	3.0	2,680
40-49	0.5	1,455	8.6	222	1.5	1,655
<b>Marital status</b>						
Never married	na	na	33.8	1,091	33.8	1,091
Married/marital union	1.6	7,603	15.3	330	1.6	7,664
Divorced/Separated/Widow	0.7	194	13.7	905	11.6	1,070
<b>Total</b>	<b>1.6</b>	<b>7,797</b>	<b>23.4</b>	<b>2,325</b>	<b>6.3</b>	<b>9,824</b>

na = Not applicable

**Table 8.8 Use of condoms by type of partner: men**

Percentage of men who had sexual relations in the year prior to the survey who used a condom in their last sexual relation with spouse or lover with habitual and occasional partners, by background characteristics. Mozambique, 2003

Background characteristics	Spouse or lover		Habitual partner		Occasional partner	
	Per-centa-ge	Number of men	Per-centa-ge	Number of men	Per-centa-ge	Number of men
<b>Area of residence</b>						
Rural	1.3	1,208	18.8	463	4.9	1,475
Urban	5.1	496	41.6	639	22.7	986
<b>Province</b>						
Niassa	2.3	75	36.0	30	10.1	98
Cabo Delgado	0.6	189	4.9	152	1.4	279
Nampula	0.1	413	17.1	269	5.3	586
Zambézia	1.9	378	29.5	50	3.6	416
Tete	1.1	139	41.9	50	10.5	183
Manica	2.1	84	54.8	48	20.8	129
Sofala	2.8	113	43.2	90	17.5	182
Inhambane	3.2	90	37.7	88	15.4	146
Gaza	2.4	51	27.5	47	11.1	76
Maputo Province	14.0	81	39.9	114	28.6	155
Maputo City	9.3	92	58.6	163	39.3	211
<b>Educational level</b>						
None	0.3	389	8.8	88	1.0	435
Primary	2.1	1,143	23.5	731	8.5	1,638
Secondary	9.3	165	59.4	268	37.8	368
Higher	*	6	*	16	*	20
<b>Age</b>						
15-19	4.6	31	29.7	397	28.3	418
20-24	3.1	178	38.1	251	23.5	365
25-29	2.7	261	33.4	165	12.1	350
30-39	2.9	483	27.2	162	5.1	540
40-49	2.7	391	39.2	88	4.3	414
50-59	0.6	268	17.3	34	1.3	279
<b>Marital status</b>						
Never married	na	na	34.7	619	34.7	621
Married/marital union	2.3	1,681	30.1	395	3.5	1,741
Divorced/Separated/Widowed	*	19	21.7	88	19.4	100
<b>Total</b>	<b>2.4</b>	<b>1,704</b>	<b>32.0</b>	<b>1,102</b>	<b>12.0</b>	<b>2,461</b>

na = Not applicable

Cases fewer than 30 are not shown (\*).

## MEASURE *DHS*+ Preliminary Reports

Turkey	December	1998	English
Ghana	May	1999	English
Guatemala	June	1999	Spanish
Guiné	October	1999	French
Kazakhstan	December	1999	English/Russian
Tanzania	February	2000	English
Zimbabwe	March	2000	English
Bangladesh	June	2000	English
Egypt	June	2000	English
Ethiopia	July	2000	English
Haiti	September	2000	French
Cambodia	November	2000	English
Turkmenistan	February	2001	English
Malawi	February	2001	English
Rwanda	February	2001	French
Armenia	March	2001	English
Gabon	March	2001	French
Uganda	May	2001	English
Nepal	August	2001	English
Mali	December	2001	French
Benin	February	2002	French
Eritrea	September	2002	English
Zambia	October	2002	English
Jordan	November	2002	English
Dominican Republic	February	2003	Spanish
Uzbekistan	May	2003	English
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Nigeria	October	2003	English
Kenya	December	2003	English
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