



# Multiple Indicator Cluster Survey

## GUINEA-BISSAU



December 2000

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## **Executive Summary**

The 2000 Guinea-Bissau Multiple Indicator Cluster Survey (MICS) is a nationally representative survey of households, women, and children. The main objectives of the survey are to provide up-to-date information for assessing the situation of children and women in Guinea-Bissau at the end of the decade and to furnish data needed for monitoring progress toward goals established at the World Summit for Children and as a basis for future action.

### **Infant and Under Five Mortality**

- The data suggest that the infant mortality rate was 124 per 1000 and the under five mortality rate was 203 per 1000 around 1999. There is no recent data from institutional sources to validate this figure.

### **Maternal Mortality**

- It is estimated at 349 per 100,000 live births. This represents a significant drop from other estimations (900 in SOWC 2000 and 700 in a research conducted by Bandim Project 1990-1996)

### **Education**

- 41.1 percent of children of primary school age in Guinea-Bissau are attending primary school. School attendance in Gabu is significantly lower than in the rest of the Guinea-Bissau at 19.1 percent. At the national level, there is no big difference between male and female primary school attendance 44.4 and 37.7 respectively .
- Less than half of children (43.2 percent) who enter the first grade of primary school eventually reach grade five. A recent revision of official data for 1999-2000 shows 42% of access to 5th grade.
- 36.6 percent of the population over age 15 years is literate.

### **Water and Sanitation**

- 60 percent of the population has access to safe drinking water – 79.3 percent in urban areas and 49 percent in rural areas. The situation in OIO is considerably worse than in other regions; only 39.4 percent of the population in this region gets its drinking water from a safe source.
- 62.8 percent of the population of Guinea-Bissau is living in households with sanitary means of excreta disposal.

### **Child Malnutrition**

- 25 percent of children under age five in Guinea-Bissau are underweight or too thin for their age. 30.4 percent of children are stunted or too short for their age and 10.3 percent are wasted or too thin for their height.
- Children whose mothers have secondary or higher education are least likely to be underweight and stunted compared to children of mothers with less education.

### **Breastfeeding**

- Approximately 41.5 percent of children under four months of age are exclusively breastfed, a level considerably good. At age 6-9 months, 35.6 percent of children are receiving breast milk and solid or semi-solid foods. By age 20-23 months, 67 percent are continuing to breastfeed.

### **Salt Iodization**

- Only 1.7 percent of households in Guinea-Bissau have adequately (15+ PPM) iodized salt. The percentage of households with adequately iodized salt ranges from 0 percent in Biombo region to 3.6 percent in Tombali region.

### **Vitamin A Supplementation**

- Within six months prior to the MICS, 28.4 percent of children aged 6-59 months received a high dose Vitamin A supplement. Approximately 9.3 percent did not receive a supplement in the last 6 months but did receive one prior to that time.
- The mother's level of education is related to the likelihood of Vitamin A supplementation. The percentage receiving a supplement in the last six months increases from 24 percent among children whose mothers have no education to 53.6 percent among children of mothers with secondary or higher education.
- Only about 28.3 percent of mothers with a birth in the year before the MICS received a Vitamin A supplement within eight weeks of the birth.

### **Low Birth weight**

- Approximately 27.5 percent of infants are estimated to weigh less than 2500 grams at birth. This percentage is somewhat higher than the average for the Latin America and Caribbean region.

### **Immunization Coverage**

- 69.6 seven percent of children aged 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 60.6 percent. The percentage declines for subsequent doses of DPT to 43.3 percent for the second dose, and 27.1 percent for the third dose.
- Similarly, 66.6 percent of children received Polio 1 by age 12 months and this declines to 30.3 percent by the third dose.
- The coverage for measles vaccine is 47.7 percent of children before their first birthday.
- 11.4 of children had all eight recommended vaccinations in the first 12 months of life.
- Male and female children are vaccinated at roughly the same rate.
- Vaccination coverage is higher among children whose mothers have secondary or higher education. The education differences are greater for the third doses of DPT and Polio, suggesting that drop out rates are higher among children with less educated mothers.

### **Diarrhea**

- Approximately 85 percent of children with diarrhea received one or more of the recommended home treatments (i.e., were treated with ORS or RHF).
- Only 13.1 percent of children with diarrhea received increased fluids and continued eating as recommended.

### **Acute Respiratory Infection**

- 10.1 percent of under five children had an acute respiratory infection in the two weeks prior to the survey. Approximately 64.2 percent of these children were taken to an appropriate health provider.

### **IMCI Initiative**

- Among under five children who were reported to have had diarrhea or some other illness in the two weeks preceding the MICS, 16.7 percent received increased fluids and continuous feeding as recommended under the IMCI programme.
- 65 percent of mothers know at least two of the warning signs to take a child immediately to a health facility.

### **Malaria**

- Malaria is widespread in Guinée Bissau. 67 percent of under five children slept under a bednet the night prior to the survey interview. However, only about 11.1 percent of the bednets used are impregnated with insecticide.
- Approximately 66.7 percent of children with fever in the two weeks prior to the MICS interview were given Paracetamol to treat the fever and 58.3 percent were given Chloroquine while 2.5 percent were given Fansidar. A relatively large percentage of children (18.8 percent) were given some other medicine.

### **HIV/AIDS**

- 12 percent of women aged 15-49 know all three of the main ways to prevent HIV transmission – having only one uninfected sex partner, using a condom every time, and abstaining from sex.
- 34 percent of women correctly identified three misconceptions about HIV transmission – that HIV can be transmitted through supernatural means, that it can be transmitted through mosquito bites, and that a healthy looking person cannot be infected.
- 16.9 percent of women of reproductive age in Guinea-Bissau know a place to get tested for AIDS and about 4.3 percent have been tested.
- The percentage of women who have sufficient knowledge of HIV transmission and the percentage who know where to get tested for HIV increases dramatically with the level of education.

### **Contraception**

- Current use of contraception was reported by 7.6 percent of married couples or in consensual unions. The most popular method is abstinence which is used by 2.5 percent of married women followed by IUD, which accounts for 2.3 percent of married women.

### **Prenatal Care**

- 63.5 percent of women with recent births in Guinea-Bissau are protected against neonatal tetanus. The vast majority of these women received two or more doses of tetanus toxoid within the last three years.
- Virtually all women in Guinea-Bissau receive some type of prenatal care and 62.1 percent receive antenatal care from skilled personnel (doctor, nurse, midwife).

### **Assistance at Delivery**

- A doctor, nurse, or midwife delivered about 34.7 percent of births occurring in the year prior to the MICS survey. This percentage is the highest in the SAB at 62 percent and the lowest in the OIO region at 18.5 percent.

**Birth Registration**

- 42.1 percent of children under five years in Guinea-Bissau have been registered at birth. There are no significant variations in birth registration across sex, age, or education categories.

**Orphanhood and Living Arrangements of Children**

- Overall, 70.9 percent of children aged 0-14 are living with both parents. Children who are not living with a biological parent comprise 12.4 percent and children who have one or both parents dead amount to 7.2 percent of all children aged 0-14.
- The situation of children in the regions is almost the same. More than half of the children live with both parents. Less than 20 percent are not living with a biological parent and less than 10 percent have one or both parents dead.

**Child Labor**

- About 5.1 percent of children aged 5-14 years engage in paid work. About twice as many – 9.7 percent – participate in unpaid work for someone other than a household member.
- Slightly more 71 percent of children engage in domestic tasks, such as cooking, fetching water, and caring for other children, for less than four hours a days while 3.7 percent spend more than four hours a day on such tasks.

## Summary of Indicators

World Summit for Children Indicators		
Under-five mortality rate	Probability of dying before reaching age five	203 per 1000
Infant mortality rate	Probability of dying before reaching age one	124 per 1000
Maternal Mortality Ratio	Annual number of deaths of women from pregnancy related causes, when pregnant or within 42 days of termination of pregnancy, per 100,000 live births	349 per 100.000
Underweight prevalence	Proportion of under-fives who are too thin for their age	25 percent
Stunting prevalence	Proportion of under-fives who are too short for their age	30.4 percent
Wasting prevalence	Proportion of under fives who are too thin for their height	10.3 percent
Use of safe drinking water	Proportion of population who use a safe drinking water source	59.9 percent
Use of sanitary means of excreta disposal	Proportion of population who use a sanitary means of excreta disposal	62.8 percent
Children reaching grade four	Proportion of children entering first grade of primary school who eventually reach grade four	51.3 percent
Children reaching grade five	Proportion of children entering first grade of primary school who eventually reach grade five	43.2 percent
Net primary school attendance rate	Proportion of children of primary school age attending primary school	41.1 percent
Brut primary school attendance rate	Proportion of children of primary school age attending primary school	72.0 percent
Literacy rate	Proportion of population aged 15+ years who are able to read a letter or newspaper	36.6 percent
Antenatal care	Proportion of women aged 15-49 attended at least once during pregnancy by skilled personnel	62.6 percent
Contraceptive prevalence	Proportion of married women aged 15-49 who are using a contraceptive method	7.6 percent
Childbirth care	Proportion of births attended by skilled health personnel	62.1 percent
Birth weight below 2.5 kg.	Proportion of live births that weigh below 2500 grams	19.5 percent
Iodized salt consumption	Proportion of households consuming adequately iodized salt	1.7 percent
Children receiving Vitamin A supplementation	Proportion of children aged 6-59 months who have received a Vitamin A supplement in the last 6 months	28.4 percent
Mothers receiving Vitamin A supplementation	Proportion of mothers who received a Vitamin A supplement before infant was 8 weeks old	28.3 percent
Exclusive breastfeeding rate	Proportion of infants aged less than 4 months who are exclusively breastfed	41.5 percent
Timely complementary feeding rate	Proportion of infants aged 6-9 months who are receiving breast milk and complementary food	35.6 percent
Continued breastfeeding rate	Proportion of children aged 12-15 months and 20-23 months who are breastfeeding	90.5 percent (12-15) 67.0 percent (20-23)
DPT immunization coverage	Proportion of children immunized against diphtheria, pertussis and tetanus by age one	37.7 percent
Measles immunization coverage	Proportion of children immunized against measles by age one	70.2 percent
Polio immunization coverage	Proportion of children immunized against polio by age one	42.3 percent
Tuberculosis immunization coverage	Proportion of children immunized against tuberculosis by age one	74.0 percent
Children protected against neonatal tetanus	Proportion of one year old children protected against neonatal tetanus through immunization of their mother	63.5
ORT use	Proportion of under-five children who had diarrhea in the last 2 weeks who were treated with oral rehydration salts or an appropriate household solution	85.0 percent
Home management of diarrhea	Proportion of under-five children who had diarrhea in the last 2 weeks and received increased fluids and continued feeding during the episode	13.1 percent

<b>World Summit for Children Indicators (continued)</b>		
Care seeking for acute respiratory infections	Proportion of under-five children who had ARI in the last 2 weeks and were taken to an appropriate health provider	64.2 percent
Preschool development	Proportion of children aged 36-59 months who are attending some form of organized early childhood program	6.5 percent
<b>Indicators for Monitoring Children's Rights</b>		
Birth registration	Proportion of under-five children whose births are reported registered	42.1 percent
Children's living arrangements	Proportion of children aged 0-14 years in households not living with a biological parent	12.4 percent
Orphans in household	Proportion of children aged 0-14 years who are orphans living in households	1.4 percent (both parents) 7.2 percent (one parent)
Child labor	Proportion of children aged 5-14 years who are currently working	65.4 percent
<b>Indicators for Monitoring IMCI and Malaria</b>		
Home management of illness	Proportion of under-five children reported ill during the last 2 weeks who received increased fluids and continued feeding	16.7 percent
Care seeking knowledge	Proportion of caretakers of under-five children who know at least 2 signs for seeking care immediately	65.0 percent
Bednets	Proportion of under-five children who sleep under an insecticide impregnated bednet	11.1 percent (high risk areas only)
Malaria treatment	Proportion of under five children who were ill with fever in the last 2 weeks who received anti-malarial drugs	58.4 percent
<b>Indicators for Monitoring HIV/AIDS</b>		
Knowledge of preventing HIV/AIDS	Proportion of women who correctly state the 3 main ways of avoiding HIV infection	12.0 percent
Knowledge of misconceptions of HIV/AIDS	Proportion of women who correctly state the 3 misconceptions about HIV /AIDS	12.3 percent
Knowledge of mother to child transmission	Proportion of women who correctly identify means of transmission of HIV from mother to child	24.0 percent
Attitude to people with HIV/AIDS	Proportion of women expressing a discriminatory attitude towards people with HIV/AIDS	21.5 percent
Women who know where to be tested for HIV	Proportion of women who know where to get tested for HIV	16.9 percent
Women who have been tested for HIV	Proportion of women who have been tested for HIV	4.3 percent

## **I. Background**

### ***Introduction***

At the World Summit for Children held in New York in 1990, the government of Guinea-Bissau committed itself to a Declaration and Plan of Action for Children. Subsequently, a National Program of Action for Children was developed and implemented. The National Plan of Action has been prepared in November 1992 by the CIPI (Interministerial Committee of Child Protection) under the leading role of the State Secretary of Planning.

The Plan of Action also called for the establishment of mechanisms for monitoring progress toward the goals and objectives set for the year 2000. Toward this end, UNICEF, in collaboration with WHO, UNESCO and others, has developed a core set of 75 indicators of specific aspects of the situation of children. The 2000 Guinea-Bissau MICS survey have been conducted in order to provide end-decade information on many of these indicators.

The Guinea-Bissau MICS was conducted by a team composed of technicians of the Planning Division ( Secretary State of Planning) , UNICEF and INEC (National Institute of Statistics and Census). Funding was provided mainly by the UNICEF Guinea-Bissau office and complemented by the contributions of the World Bank, UNDP, WFP and UNFPA. Other organizations including WHO, FAO and UNOGBIS had provided logistic support.

This preliminary report presents selected results on some of the principal topics covered in the survey and on a subset of indicators. A comprehensive full report is scheduled for publication in the first half of 2001.

### ***Survey Objectives***

The 2000 Guinea-Bissau Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Guinea-Bissau at the end of the decade and for looking forward to the next decade;
- To furnish data needed for monitoring progress toward goals established at the World Summit for Children and as a basis for future action;
- To contribute to the improvement of data and monitoring systems in Guinea-Bissau and to strengthen technical expertise in the design, implementation, and analysis of such systems.

## **II. Sample and Survey Methodology**

### ***Sample Design***

The sample for the Guinea-Bissau Multiple Indicator Cluster Survey (MICS) was designed to provide estimates of health, education and child protection indicators, food production and consumption and accessibility to services at the national level, for urban and rural areas, and for eight regions (Gabu, Quinara, Tombali, Biombo, Cacheu, Oio, Bafata, Bolama) and the Autonomous Sector of Bissau.

The sample was selected in two stages. At the first stage, and based on the results of 1991 National Census Survey, the 1.232 districts were selected ( for MICS-2000 were selected 310 districts.)

The cartography used for MICS was the same as of Population Census in 1991. In each district (cluster) households were selected randomly thus obtaining a sample size of 4.571 households. In each selected district the ‘‘tabancas’’ (villages) were identified. The identification of ‘‘tabancas’’ was also verified vis a vis the ‘‘tabancas’’ of the electoral census of October 1999.

### ***Questionnaires***

In addition to a household questionnaire, questionnaires were administered in each household for women aged 12 - 49 and children under five. The questionnaires were adapted from the MICS standard model, taking into account local concerns such as the inclusion of additional modules on socio-professional status of households requested by World Bank and food security requested by WFP. From the MICS model English version, the questionnaires were translated into Portuguese, but the interviews were conducted in Creole and other national languages. The questionnaires were pre-tested during April 2000. In general the questionnaires remained standard with a few changes adapted to the local context. A thorough revision was conducted by one Unicef external consultant to ensure comparability of the information. Changes made included the lowering of the women in bearing age to twelve but to ensure international comparability the tables in annex show the results for women 15-49 age group and the two cycles of primary education. The questionnaires were validated with the participation of the government counterparts dealing with information, NGOs and the participation of UN Agencies during April.

### ***Fieldwork and Processing:***

Field staff was trained for six days in early April 2000. The data was collected by five teams: 42 interviewers (21 females, 21 males), 5 supervisors, 6 data control assistants using 8 vehicles.

The MICS Coordinator provided overall supervision. Field work began in 10 of April 2000 and concluded in 25 of May 2000.

Once the questionnaires were received, a process of verification of number of households interviewed as well as ‘‘tabancas’’ visited was undertaken to ensure quality control.

Field work was a very well organized operation with the use of UN vehicles. Fieldworkers reached almost all households selected in the sample despite constraints. In some areas such as Tombali and Quinara not all women/children could be interviewed because of the cultural practice of ‘‘Fanado’’ (initiation rites) taking place

at that time; The survey also coincided with the cashew crop season which is mainly done by women. This reflected somehow in the coverage of children /women in some areas. Some problems were also encountered in the islands specially keeping women attentive to the process of interview. Problems encountered by interviewers in the islands are also related to difficulties in transportation.

Data was entered on 10 microcomputers using the EpiInfo software. It was decided to use six information control assistants and 4 administrators for checking questionnaires in order to prevent poor qualities of information before the data processing phase started.

Procedures and standard programs developed under MICS and adapted to the Guinea-Bissau questionnaire were used throughout. Data processing began in July 2000 and finished in September 2000.

### ***Sample Coverage***

Of the 4,571 households selected for the sample, 4,532 were found to be occupied. Of these, 4,372 were successfully interviewed for a household response rate of 99.6 percent.. In the interviewed households, 9,772 eligible women (age 12-49) were identified. Of these, 7,976 were successfully interviewed, yielding a response rate of 81.1 percent. In addition, 6,314 children under age five were listed in the household questionnaire. Questionnaires were completed for 5,856 children for a response rate of 92.7 percent.

### ***Characteristics of the Respondents***

Table 1A presents the percent distribution of household in the sample by background characteristics. About 35.11 percent of the households (1,535) are urban and 64.89 percent (2,837) are rural. The SAB comprises the largest of the 9 regions with 23.6 percent of households while the region of Oio is the next largest with 16.6 percent. The remaining regions contain between 3.1 and 15.4 percent of households. Most of the households have between 5 and 10 members. Each household contained at least one child under five and at least 1 woman from 12 to 49 years of age.

Women in the age groups 15-19 comprise the greatest percentage of the sample at 19.6 percent (Table 2A). This percentage declines steadily across age groups until age 45-49 where it is 5.0 percent. This pattern is typical of countries in the region. Approximately 87.8 percent of women in the sample are married and 71.6 percent have had at least one birth. The majority of women 69.2 percent have had no education while 8.6 percent have some secondary education .

Table 3A shows the characteristics of children under five. 49.1 percent of the children are male and 50.9 percent are female. Approximately 82.3 percent of mothers of children under age five have no education, a percentage that is almost two times greater than the overall percentage of women with no education in the sample. It is be noted that, for children whose mothers did not live in the household, the education of the child's caretaker is used. There are slightly more children under six months than under 6-11 months, a pattern, which is unexpected.

### III. Results

#### A. Infant and Under-Five Mortality

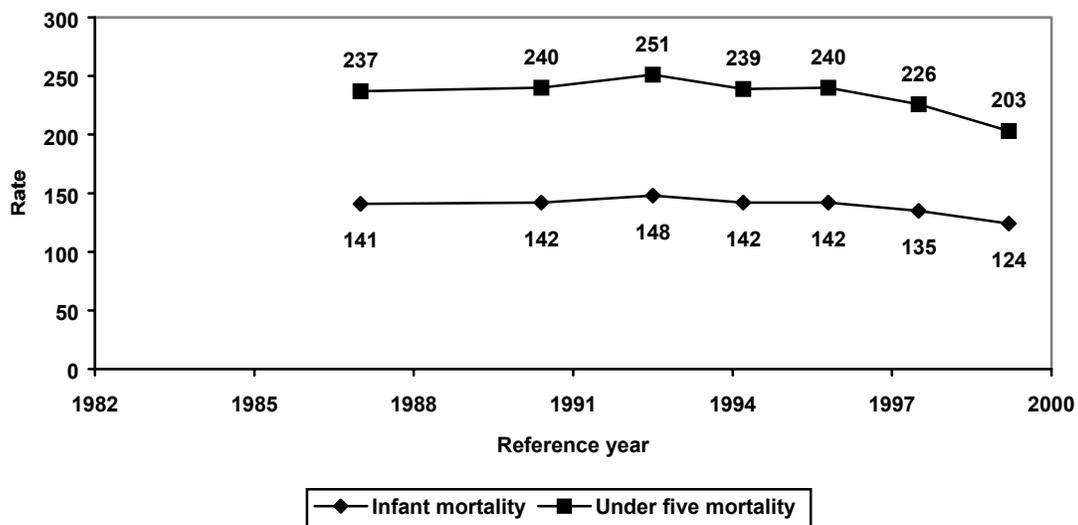
The *infant mortality rate* is the probability of dying before the first birthday. The *under five mortality rate* is the probability of dying before the fifth birthday. In MICS, infant and under five mortality rates are calculated based on an indirect estimation technique (the Brass method). The data used in the estimation are: the mean number of children ever born under five years of age, the groups of women from age 15 to 49, and the proportion of these children who died before their 5<sup>th</sup> birthday. The technique converts these data into probabilities of dying by taking account of both the mortality risks to which children are exposed and their length of exposure to the risk of dying.

The data used for mortality estimation are shown in Table 7. The mean number of children ever born rises from 0.33 among 15-19 year olds to 7.26 among 45-49 year olds as expected. However, the proportion of children dead has an irregular pattern. In particular, the proportion of children dead among women aged 25-29 is low and the proportion among younger women seems too high.

Mortality estimates were obtained using the United Nations QFIVE program. Plausible estimates for the most recent years thus cannot be obtained from these data. The estimates for 1999 appear to be the most recent figures that can be used with some confidence.

As per the table 8, the infant mortality rate is 124/1000, comparing by region we see that the region of Bafata has the highest rate 169/1000 followed by the Sector autonomous of Bissau 158/1000. The region of Cacheu (41/1000) has the lowest rate. Comparing by region the under five mortality rate show that Bafata and Sector Autonomy of Bissau Keep the highest rate (295/100 and 272/1000 respectively). Cacheu still the region which has the lowest rate (56/1000).

**Figure 1: Estimates of infant and under five mortality based on indirect estimation, Guinea-Bissau, 2000.**



## **B. Maternal Mortality**

Data show a significant reduction from previous estimates. A study conducted by the Project Bandim for the period 1990-1996 following-up deaths of women in fertile age in a cohort of 10.000 women living in 100 clusters, show a rate of 700 per 100.000. There is no reason to believe that the situation has improved dramatically over the past four years to explained this sharps decline.

The Guinea Bissau Survey selected women for interview from 12-49 year old instead of 15-49 as in other countries . Also for the sisters , we ask the number of sisters 12 years and over. Consequently it has the implication in the process of calculation of maternal mortality. It can be presumed that the maternal mortality rate is a little lower than it must be in case sisters 15 years and over are selected.

## **C. Education**

Universal access to basic education and the achievement of primary education by the world's children is one of the most important goals of the World Summit for Children.

### **Early childhood education**

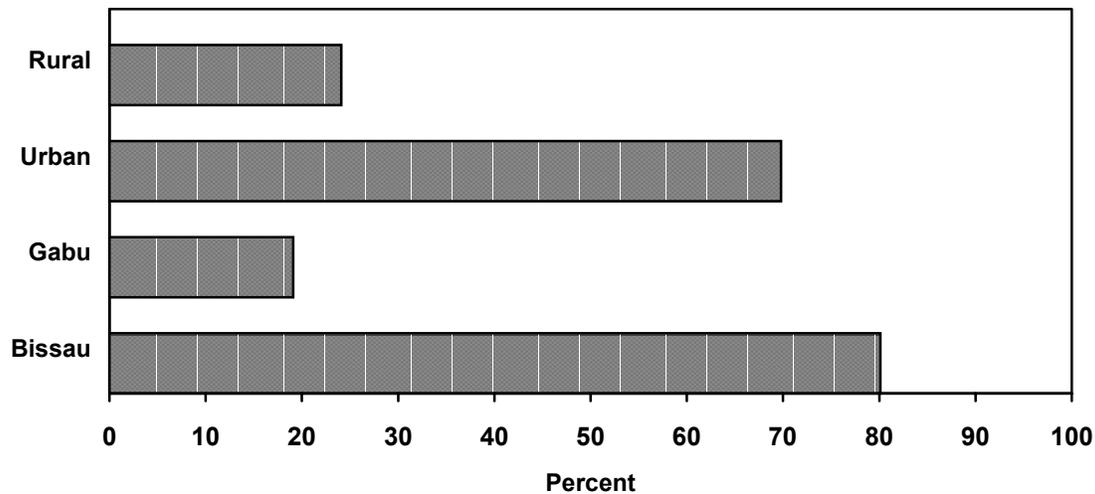
6.5 percent of children aged 36-59 months are attending an organized early childhood education programme, such as kindergarten or community childcare with organized learning activities (Table 9 Standard). Approximately equal percentages of girls and boys are attending these programmes. There are large variations according to region ranging from 0.6 percent of children in the Quinara to 18.3 percent in the Bissau city. In addition, children in urban areas (16.0 percent ) are more likely to attend early learning activities than children in rural areas. Relatively few children attend at age three (36-47 months) while the majority of children attend at age four (48-59 months).

Finally, the education of the mother is strongly related to the likelihood that a child will attend an early childhood education programme. The percentage of children attending increases from 15.9 percent to 30.9 percent as the mother's education increases from none to secondary or higher education.

### **Basic education**

Overall, 41.1 percent of children of primary school age in Guinea-Bissau are attending primary school (Table 11 Standard). In urban areas, 69.8 percent of children attend school while in rural areas 24.1 percent attend. School attendance in Gabu (19.1 percent) is significantly lower than in SAB at 80.1 percent. At the national level, there are some differences between male 44.4 and female 37.4 primary school attendance. A recent presentation of data on the school system (07/12/2000) prepared by a World Bank Consultant shows more updated information for 1999-2000 both in terms of access and retention. The percentages for the fifth grade are 42 and 43 respectively.

**Figure 2: Percentage of children of primary school age attending primary school, Guinea-Bissau, 2000**



43.2 percent of children who enter the first grade of primary school eventually reach grade five (Table 10A Standard). There is no large regional and urban-rural disparities in the achievement of grade five. Approximately 45.2 percent of urban children who enter grade one reach grade five compared to 36.4 percent of children in rural areas. In Tombali, only 10.6 percent of those who enter grade one reach grade five while in Oio 62.5 percent reach grade five. The main difference between Tombali and other regions is that only 50.0 percent of those entering grade one reach grade two. In subsequent grades, the percentage of children continuing schooling remains lower in Tombali than in other areas although the differences are not as great.

51.2 percent of children who enter the first grade of primary school eventually reach grade four (Table 10 standard). There is no difference between urban (51.2 percent) and rural (51.4 percent). In Tombali only 16.4 percent of children who enter in first grade reach grade four. The Bolamla region has the highest percentage with 73 percent.

### **Literacy**

36.6 percent of the population over age 15 years in Guinea-Bissau is literate (Table 12 Standard). The *literate* population includes those who are reported to read 'easily or with difficulty'. Overall, females (23.8 percent) are less likely than males (52.6 percent) to be literate. The percentage literate is lower in Bafata (11.8 percent) and Gabu (13.8 percent) than in the Bissau city (74.1 percent). The percentage literate is 21 percent among those aged 15-34 and 11.4 percent among the population aged 65 and older.

### **D. Water and Sanitation**

#### **Use of drinking water**

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health. In addition to its association with

disease, access to drinking water may be particularly important for women and children, particularly in rural areas, who bear the primary responsibility for carrying water, often for long distances.

66.5 percent of the population uses safe drinking water from protected and non protected well. Only 11 percent use the water from piped water or public tap. In Guinea-Bissau rainwater is not used as safe drinking water, but river water is used by 2.9 percent of the population as drinking water

As show in (Table 13 Standard), the Autonomous Sector of Bissau (SAB) is the region in which 44.6 percent are using piped water and all other regions use the water from protected or not protected well.

The population using *safe drinking water* sources are those who use any of the following types of supply: piped water, public tap, borehole/tubewell, protected well, protected spring. Overall, 59.9 percent of the population has access to safe drinking water – 79.2 percent in urban areas and 49 percent in rural areas. The situation in the Oio is considerably worse than in other regions; only 39.4 percent of the population in this region gets its drinking water from a safe source.

The concept of safe water as established in the MICS questionnaire can be questionable given the frequent scarcity of water in urban centres and the lack of quality controls.

### **Use of sanitation**

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrheal diseases and polio. *Sanitary means of excreta disposal* include: flush toilets connected to sewage systems or septic tanks, other flush toilets, improved pit latrines, and traditional pit latrines. 62.8 percent of the population of Guinea-Bissau is living in households with sanitary means of excreta disposal (Table14). This percentage is 95.2 in urban areas and 44.4 percent in rural areas. Residents of Biombo are much less likely than others to use sanitary means of excreta disposal. Most of this population 54 percent use traditional latrines and 36.2 use field, bush, or has no facilities.

### **E. Child Malnutrition**

#### **Nutritional status**

Children's nutritional status is a reflection of their overall health. When children have access to an adequate food intake, they are not exposed to repeated illness, and are well cared for, they reach their growth potential.

In a well-nourished population, there is a standard distribution of height and weight for children under age five. Undernourishment in a population can be gauged by comparing children to this standard distribution. The standard or reference population used here is the NCHS standard, which is recommended for use by UNICEF and the World Health Organization. Each of the three nutritional status indicators are expressed in standard deviation units (z-scores) from the median of this reference population.

Weight for age is a measure of both acute and chronic malnutrition. Children whose weight for age is more than two standard deviations below the median of the reference

population are considered *moderately or severely underweight* while those whose weight for age is more than three standard deviations below the median are classified as *severely underweight*.

Height for age is a measure of linear growth. Children whose height for age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as *moderately or severely stunted*. Those whose height for age is more than three standard deviations below the median are classified as *severely stunted*. Stunting is a reflection of chronic malnutrition as a result of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

Finally, children whose weight for height is more than two standard deviations below the median of the reference population are classified as *moderately or severely wasted* while those who fall more than three standard deviations below the median are *severely wasted*. Wasting is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

In (Table 15 Standard) children who were not weighed or measured (approximately 2.8 percent of children) and those whose measurements are outside a plausible range are excluded. In addition, a small number of children whose birth dates were not known were excluded.

Almost one in four children (25.0%) under age five in Guinea-Bissau are underweight and 6.5 percent are classified as severely underweight (Table 15A Standard). 30.4 percent of children are stunted or too short for their age and 10.3 percent are wasted or too thin for their height.

Children in the region of Oio (33.1 percent) are more likely to be underweight and stunted than other children. In contrast, the percentage wasted is lower in SAB. Those whose mothers have secondary or higher education are the least likely to be underweight and stunted (8.4 percent) compared to children of mothers with less education (27.3 percent). Boys (24.8 percent) appear to be slightly more likely to be underweight, stunted, and wasted than girls (25.2 percent). The age pattern shows that a higher percentage of children aged 12-23 months are undernourished according to all three indices in comparison to children who are younger and older. This pattern is expected and is related to the age at which many children cease to be breastfed and are exposed to contamination in water, food, and environment.

## **Breastfeeding**

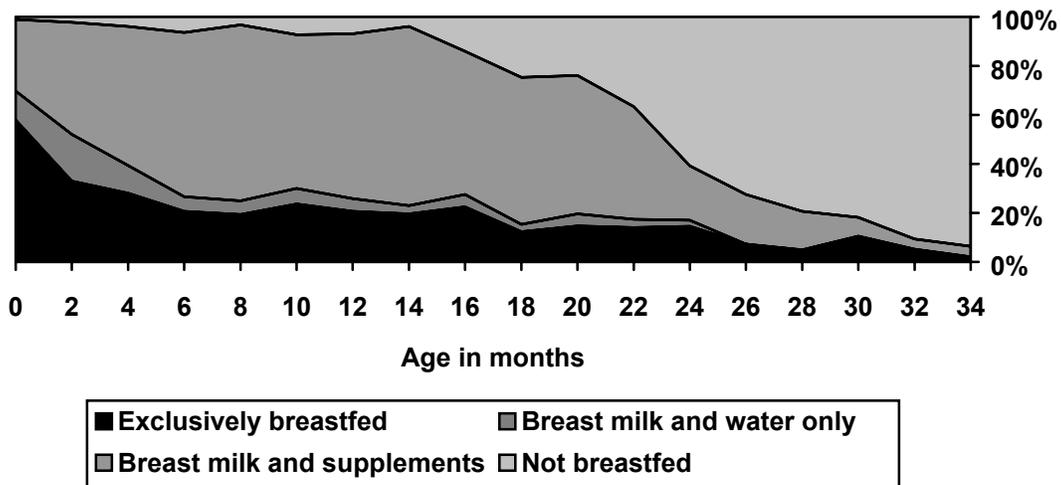
Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon, and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and is unsafe if clean water is not readily available. The World Summit for Children goal states that children should be exclusively breastfed for four to six months, that breastfeeding should be complemented with appropriate foods from the age of around six months, and that children continue to be breastfed for two or more years.

In (Table 16 Standard), breastfeeding status is based on women’s reports of children’s consumption in the 24 hours prior to the interview. *Exclusive breastfeeding* refers to children who receive only breast milk and vitamins, mineral supplements, or medicine. *Complementary feeding* refers to children who receive breast milk and solid or semi-solid food. The last two columns of the table include children who are continuing to be breastfed at one and at two years of age. Percentages according to region and mother’s education are not shown due to small sample sizes. For the same reason, the sex and urban-rural residence breakdowns should be interpreted with caution.

Approximately 41.5 percent of children under four months are exclusively breastfed, a level considerably recommended. At age 6-9 months, 35.6 percent of children are receiving breast milk and solid or semi-solid foods. By age 12-15 months, 95 percent of children are still being breastfed and by age 20-23 months, 67 percent are still breastfed.

Figure 3 shows the detailed pattern of breastfeeding status by the child’s age in months. Even at the earliest ages, the majority of children are receiving liquids or foods other than breast milk. The percentage of children exclusively breastfed diminishes rapidly to close to zero after three months. By the end of one year, fewer than half of children are still breastfed.

**Figure 3: Percent distribution of living children by breastfeeding status, Guinea Bissau , 2000**



### Salt iodization

Deficiency of iodine in the diet is the world’s single greatest cause of preventable mental retardation and can lower the average intelligence quotient (IQ) of a population by as much as thirteen points. Salt iodization is an effective, low-cost way of preventing iodine deficiency disorders (IDD). *Adequately iodized salt* contains 15 ppm (parts per million) of iodine or more. In MICS, interviewers tested household salt for iodine levels by means of a testing kit.

Approximately 99 percent of households had salt which was tested during the MICS (Table 17 Standard). Among households in which salt was tested, 1.7 percent had adequately iodized salt. The percentage of households with adequately iodized salt ranges from 0.01 percent in Biombo and Cacheu to 4.5 percent in the Bolama region.

1.0 percent of urban households had adequately iodized salt compared to 2.0 percent of rural households. The percentage of the salt iodized is very low, due to the absence of policy for iodization of salt. A Project on salt iodization has been initiated this year.

### **Vitamin A supplementation**

Vitamin A deficiency (VAD) impairs children's immune systems, increasing their chances of dying of common childhood diseases and undermines the health of pregnant and lactating women. It can also cause eye damage and blindness in children. Yet it can be easily prevented by vitamin A supplementation or food fortification. UNICEF and WHO recommend that all countries with an under five mortality rate exceeding 70 per 1000 live births, or where vitamin A deficiency is a public health problem, should put in place a programme for control of vitamin A deficiency. Based on UNICEF/WHO guidelines, the Guinea-Bissau Ministry of Health recommends that children aged 6-12 months be given one dose Vitamin A capsule of 100,000 IU every six months, and children older than one year be given one high dose of 200,000 IU every six months.

Within the six months prior to the MICS, 28.4 percent of children aged 6-59 months received the high dose of Vitamin A supplement (Table 18 Standard). Approximately 9.3 percent did not receive the supplement in the last 6 months but did receive one prior to that time. Almost one percent of children received a Vitamin A supplement at some time in the past but their mother/caretaker was unable to specify when. Vitamin A supplementation coverage is lower in the Tombali region than in other regions. These data are not consistent with Vitamin A supplementation in combination with NIDs which show a much higher coverage (over 80%). This could be explained by the lack of understanding of mothers when children receive both the vaccine and the vitamin A supplement.

The age pattern of Vitamin A supplementation shows that supplementation in the last six months rises from 27 percent among children aged 6-11 months to 30 percent among children aged 12-23 months and then declines steadily with age to 26.4 percent among the oldest children.

The mother's level of education is also related to the likelihood of Vitamin A supplementation. The percentage receiving a supplement in the last six months increases from 24 percent among children whose mothers have no education to 45.5 percent of those whose mothers have primary education and 53.6 percent among children of mothers with secondary or higher education.

### **Low birth weight**

Infants who weigh less than 2500 grams (2.5 kg.) at birth are categorized as low birth weight babies. Since many infants are not weighed at birth and those who are weighed may be a biased sample of all births, reported birth weight cannot be used to estimate the prevalence of low birthweight among all children. Therefore, the percentage of births weighing below 2500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's **size** at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's **weight** or the weight as recorded on a health card if the child was weighed at birth. Seventy nine percent of births in the Guinea-Bissau MICS were weighed at birth.

First, the two items are cross-tabulated for those children who were weighed at birth to obtain the proportion of births in each category of **size** who weighed less than 2500 grams. This proportion is then multiplied by the total number of children falling in the size category to obtain the estimated number of children in each size category who were of low birth weight. The numbers for each size category are summed to obtain the total number of low birth weight children. This number is divided by the total number of live births to obtain the percentage with low birth weight.

In Guinea-Bissau, approximately 5.1 percent of infants are estimated to weigh less than 2500 grams at birth (Table 20a Standard). This percentage is less than the average for the Latin America and Caribbean region (9 percent according to UNICEF 2000). The prevalence of low birth weight births varies across regions as per 6.2 percent in urban and 4.6 percent rural areas and by mother's non education 4.8 percent and 6.3 percent for secondary education.

## ***F. Child Health***

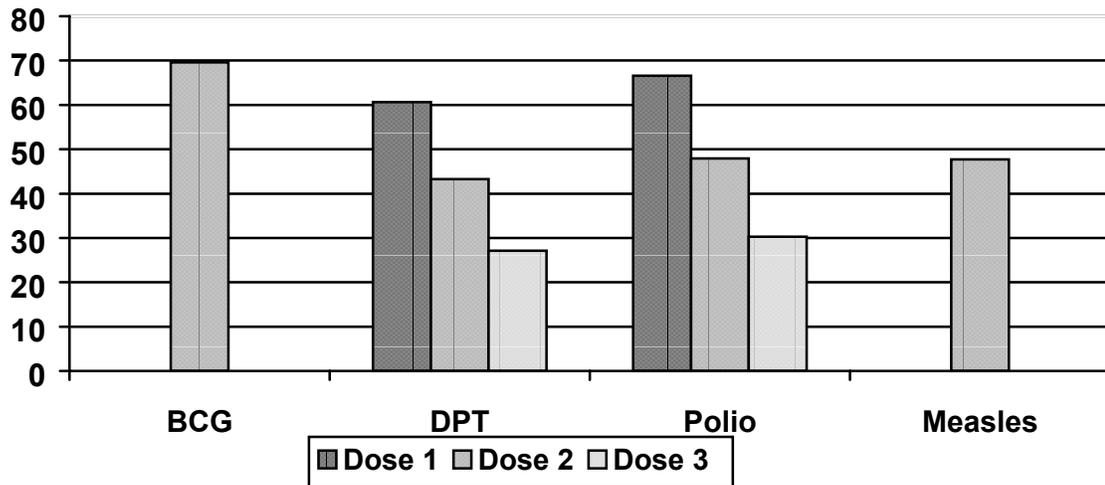
### **Immunization coverage**

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 12 months. In MICS, mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards into the MICS questionnaire. Mothers were also probed to report any vaccinations the child received that did not appear on the card. Overall, 62.6 percent of children had health cards. If the child did not have a card, the mother was read a short description of each vaccine and asked to recall whether or not the child had received it and, for DPT and Polio, how many times.

Table 21 Standard shows the percentage of children aged 12 to 23 months who received each of the vaccinations. The denominator for the table is comprised of children aged 12-23 months so that only children who are old enough to be fully vaccinated are counted. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the bottom panel, only those who were vaccinated before their first birthday are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Approximately 69.6 percent of children aged 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 60.6 percent. The percentage declines for subsequent doses of DPT to 43.3 percent for the second dose, and 27.1 percent for the third dose (Figure 4). Similarly, 66.6 percent of children received Polio 1 by age 12 months and this declines to 30.3 percent by the third dose. The coverage for measles vaccine by 12 months is 47.7 percent. As a result, the percentage of children who had all eight recommended vaccinations by their first birthday is low at only 11.4 percent. About 20 percent of mothers/caretakers were able to show the vaccination card.

**Figure 4: Percentage of children aged 12-23 months who received immunizations by age 12 months, Guinea-Bissau , 2000**



In Table 22 Standard, the percentage of children age 12-23 months currently vaccinated against childhood diseases is shown according to background characteristics. Unlike the previous table, the estimates in this table refer to children who received the vaccinations by the time of the survey, even if they did not occur prior to the age of 12 months.

Male and female children are vaccinated at roughly the same rate. Urban children are more likely to be vaccinated than rural children. Regional breakdowns are based on small numbers of cases and should be viewed with caution, but it appears that the SAB region has the highest coverage rates for most vaccinations and the highest percentage of children who have received all of the recommended vaccinations. The region of Bolama has the highest percentage of children with health cards at 94.4 percent. Vaccination coverage is higher among children whose mothers have some kind of education level. The education differences are greater for the third doses of DPT and Polio, suggesting that drop out rates are higher among children with less educated mothers.

### **Diarrhea**

Dehydration caused by diarrhea is a major cause of mortality among children in Guinea-Bissau. Home management of diarrhea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) - can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhea.

In the MICS questionnaire, mothers (or caretakers) were asked to report whether their child had had diarrhea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than the child usually ate and drank. Overall, 31.5 percent of under five children had diarrhea in the two weeks preceding the survey (Table 23 Standard). Diarrhea prevalence was significantly higher in Oio at 45.5

percent than in other regions. The peak of diarrhea prevalence occurs in the weaning period, among children age 6-23 months.

Table 23 Standard also shows the percentage of children receiving various types of recommended liquids during the episode of diarrhea. Since mothers were able to name more than one type of liquid, the percentages do not necessarily add to 100. 47.6 percent of children received breast milk while they had diarrhea. Children under age 12 months are especially likely to have received breast milk. 17.3 percent of children received gruel and 39 percent received ORS. The percentage does not vary too much according to the mother education. Approximately 85.3 percent of children with diarrhea received one or more of the recommended home treatments (i.e., were treated with ORS or RHF).

Slightly 17.3 percent of under five children with diarrhea drank more than usual while 26.8 percent drank the same or less (Table 24 Standard). About 35.2 percent ate somewhat less, the same, or more than usual while 59.5 percent ate much less than usual or none. Overall, only 13.1 percent of children with diarrhea received increased fluids and continued eating as recommended.

### **Acute respiratory infection**

Acute lower respiratory infections, particularly pneumonia, are one of the leading causes of child deaths in Guinea-Bissau. In the MICS questionnaire, children with acute respiratory infection are defined as those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were due to a problem in the chest, or both a problem in the chest and a blocked nose, or whose mother did not know the source of the problem. Only 10.1 percent of under five children had an acute respiratory infection in the two weeks prior to the survey according to these criteria (Table 25 Standard). Of these, 38.2 percent were taken to a doctor for treatment, and 29.3 percent were taken to a nurse or health assistant. 64 percent of children with ARI were taken to an appropriate health provider (i.e., doctor, specialist, nurse/health assistant, hospital).

### **IMCI initiative**

The Integrated Management of Childhood Illnesses (IMCI) is a programme developed by UNICEF and WHO that combines strategies for control and treatment of five major killers of children – acute lower respiratory tract infections, diarrheal dehydration, measles, malaria, and malnutrition. The programme focuses on the improvement of case management skills by health workers, improvement of the health system, and improvement of family and community practices in the prevention and early management of childhood illnesses. Appropriate home management of illness is one component of IMCI. The approach teaches mothers that appropriate home management of diarrhea or any other illness requires giving more fluids and continuing to feed sick children as they are normally fed.

Table 26 Standard presents information on the drinking and eating behavior of sick children. 47 percent of children were reported to have had diarrhea or some other illness in the two weeks preceding the survey. Of these, 21.1 percent drank more liquids during the illness and 37 percent continued eating (i.e., ate somewhat less, the same, or more). Only 16.7 percent of ill children received increased fluids and continuous feeding as recommended under the IMCI programme.

Promoting knowledge among caretakers about when it is appropriate to seek care for ill children is another important component of the IMCI programme. In the Guinea-Bissau MICS, mothers or caretakers of children were asked to name all of the symptoms that would cause them to take a child to a health facility right away. The most common response, given by 65 percent of mothers, was that they would take their child to a health facility right away if he/she developed a fever (Table 27 Standard). 17 percent said that the child becoming sicker would cause them to take the child to a health facility and 38 percent mentioned difficulty in breathing. Between 18.9 and 47.1 percent of mothers cited inability to breastfeed, fast breathing, blood in stools, and drinking poorly as reasons for taking a child to a health facility right away.

Among the regions, Bafata with (95.7 percent) and Gabu with (87.5 percent) are more likely than other regions to know the signs for seeking care immediately. Quinara is the region in urban area (74.1 percent) know at least two signs and the rural area is (61 percent). According to the education level mothers more than 2/3 of all level know at least two signs.

It is to be noted however, that the IMCI strategy is not used in Guinea-Bissau

### **Malaria**

Malaria is a leading cause of deaths of children under age five in Guinea-Bissau. It also contributes to anemia in children and is a common cause of school absenteeism. Preventive measures, especially the use of mosquito nets treated with insecticide, can dramatically reduce malaria mortality rates among children. In areas where malaria is common, international recommendations suggest treating any fever in children as if it were malaria and immediately giving the child a full course of recommended antimalarial tablets. Children with severe malaria symptoms, such as fever or convulsions, should be taken to a health facility. Also, children recovering from malaria should be given extra liquids and food and should continue breastfeeding.

The MICS questionnaire incorporates questions on the use of bednets among children. 67 percent of under five children slept under a bednet the night prior to the survey interview (Table 28 Standard). This percentage declines steadily with age. The vast majority of infants under 6 months of age (67 percent) sleep under a bednet compared to 69.6 percent of children aged 12-23 months and 62.3 percent of children aged 48-59 months. Most of the bednets are not treated with insecticide, and, if given treated there are no programs for re-impregnation.

Questions on the prevalence and treatment of fever were asked for all children under age five. Slightly more than one in three under five children were ill with fever in the two weeks prior to the MICS (Table 29 Standard). The prevalence of fever reaches 49.4 of all children aged 6-23 months then declines to around 43.1 percent for children aged 24-47 months and 40.7 percent among children aged 48-59 months. Differences in education of mothers in fever prevalence are not large, ranging from 40.3 to 52.4. Regional differences in fever prevalence are not large, ranging from 31 to 51 percent across the five regions.

Mothers were asked to report all of the medicines given to a child during their illness, both any medicine given at home and medicines given or prescribed at a health facility. Approximately 66.7 percent of children were given Paracetamol and 58.3 percent were

given Chloroquine while 2.5 percent were given Fansidar. A relatively large percentage of children (18.8 percent) were given some other medicine.

Urban children are more likely than rural children to be treated appropriately as are the children of mothers with secondary or higher education.

## **G. HIV/AIDS**

### **AIDS knowledge**

One of the most important strategies for reducing the rate of HIV/AIDS infection is the promotion of accurate knowledge of how AIDS is transmitted and how to prevent transmission. Among women aged 15-49 in Guinea-Bissau, 52.5 percent have heard of AIDS (Table 30 Standard). This percentage is high in urban areas (78.5 percent) and somewhat lower in rural areas (35.9 percent).

Women in the MICS were read several statements about means of HIV/AIDS transmission and asked to state whether they believed the statements were true. 20.9 percent believe that having only one uninfected sex partner can prevent HIV transmission. 25.4 percent believe that using a condom every time one has sex can prevent HIV transmission and 14.3 percent agreed that abstaining from sex prevents HIV transmission. Overall, 12 percent knew all three ways and 28.1 percent were aware of at least one of the means of preventing transmission.

Accurate knowledge of the means of HIV/AIDS transmission is substantially higher among women in the SAB than among other women. Also, education is a very important factor in AIDS knowledge. The percentage who know all three means of preventing transmission is more than seven times greater among women with secondary or more education compared to women with no education. Differences across age groups are not particularly large; the percentage of women who know all three means ranges from 26.3 percent among 20-24 year olds to 24.5 percent among 35-39 year olds.

22.6 percent of women correctly stated that AIDS can't be transmitted by supernatural means whereas 22.2 percent stated that AIDS can't be spread by mosquito bites (Table 31 Standard). 25.8 percent of women correctly believe that a healthy looking person can be infected. Women in Bafata are more likely to have misconceptions about AIDS transmission than other women. Women in the Bafata region are most likely to recognize all three misconceptions. Still, only 28.5 percent of these women correctly identified all three misconceptions.

24 percent of women in Guinea-Bissau know that AIDS can be transmitted from mother to child (Table 32 Standard). When asked specifically about the mechanisms through which mother to child transmission can take place, 22.7 percent said that transmission during pregnancy was possible, 51 percent said that transmission at delivery was possible, and only 21.7 percent agreed that AIDS can be transmitted through breast milk. Slightly less than one in three women knew all three modes of transmission. This percentage does not vary much across background categories.

The MICS survey also attempted to measure discriminatory attitudes towards people living with HIV/AIDS. To this end, respondents were asked whether they agreed with two questions. The first asked whether a teacher who has the AIDS virus but is not sick should be allowed to continue teaching in school. The second question asked whether

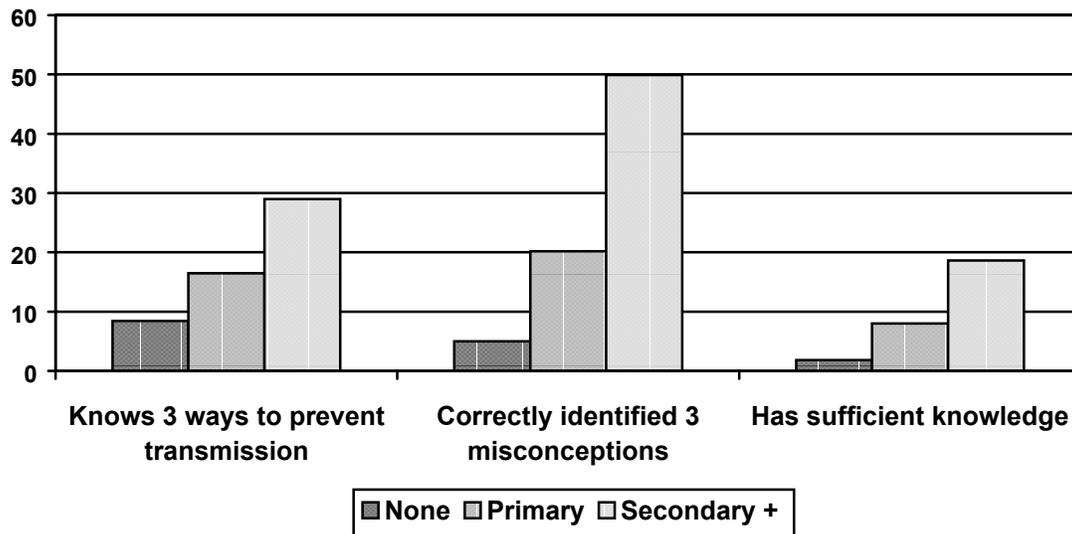
the respondent would buy food from a shopkeeper or food seller who the respondent knew to be infected with AIDS. The results are presented in Table 33 Standard.

19.9 percent of the respondents believe that a teacher with HIV/AIDS should not be allowed to work. This percentage is higher in SAB region at 40 percent and lower in the Quinara at 5.2 percent. Urban women and those with secondary or higher education are more likely to express this discriminatory attitude than rural women and those with no or primary education. 14.7 percent of women would not buy food from a person infected with AIDS. Interestingly, this measure shows a different regional pattern than the first question. Women in the SAB (37.1%) and women in the Bafata region (11.4 percent) are the most likely to express a discriminatory attitude on this question. Overall, 21.5 percent of women agree with at least one of the discriminatory statements.

Table 34 Standard summarizes information from two previous tables on AIDS knowledge (Tables 30 and 31 Standard). The second column shows the percentage of women who know all three means of preventing HIV transmission – having on faithful uninfected partner, using a condom every time, and abstaining from sex. Thirty seven percent of women know all three ways. The third column of the table shows the percentage of women who correctly identified all three misconceptions about HIV transmission – that HIV can be transmitted through supernatural means, that it can be transmitted through mosquito bites, and that a healthy looking person cannot be infected. Thirty nine percent of women correctly identified these misconceptions. Finally, the fourth column of the table shows the percentage of women who have ‘sufficient knowledge’ of HIV/AIDS transmission. These are women who know all three ways of preventing HIV transmission and correctly identified all three misconceptions. Only 4.6 percent of women aged 15-49 fall into this category.

Knowledge of HIV/AIDS transmission varies dramatically by level of education (Figure 5). Women with secondary or higher education are almost 3 times more likely to know all three ways to prevent transmission than women with no education. They are also seven times more likely to correctly identify all three misconceptions about AIDS and 14 times more likely to have sufficient knowledge of HIV/AIDS transmission

**Figure 5: Percentage of women aged 15-49 who have sufficient knowledge of HIV/AIDS transmission by level of education, Guinea-Bissau, 2000**



### AIDS testing

Voluntary testing for AIDS, accompanied by counseling, allows those infected to seek health care and to prevent the infection of others. Testing is particularly important for pregnant women who can then take steps to prevent infecting their babies. The indicators shown in Table 35 Standard are designed to monitor whether women are aware of places to get tested for HIV/AIDS, the extent to which they have been tested, and the extent to which those tested have been told the result of the test. In some places, a relatively large proportion of people who are tested do not return to get their results due to fear of having the disease, fear that their privacy will be violated, or for other reasons.

16.9 percent of women of reproductive age in Guinea-Bissau know a place to get tested for AIDS. Women living in SAB region are most likely to know a place, followed by Bafata Gabu Oio regions, respectively. Only 9.8 percent of women with no education know of a place to get tested compared to 23.9 percent of women with primary school education and 56.5 percent of women with secondary or higher education.

About 4.3 percent of women have been tested for AIDS. Again, this percentage is higher in SAB region at 10.3 percent, lower in Biombo at 0.7 percent and between 0.8 and 3.2 percent in the other regions. The vast majority of women who have been tested were told the result, however, there is some variation across regions, age groups, and education levels. Among the regions, women in the SAB are least likely to have been told their result. Women (age 15-19) are the least likely of any age group to have been tested and least likely to know the result. Finally, women with no education are less likely than women with more education to be tested and least likely to have been told the result of the test.

## **H. Reproductive Health**

### **Contraception**

Current use of contraception was reported by 7.6 percent married or in consensual unions (Table 36 Standard). The most popular method is the abstinence which is used by 2.5 percent of married women in Guinea-Bissau. The next most popular method is IUD, which accounts for 2.3 percent of married women. Between 0.1 and 0.9 percent of women reported use of the IVD and female sterilization, and the pill. Fewer than 0.1 percent use condom, withdrawal, male sterilization, vaginal methods.

Contraceptive prevalence is the highest in the SAB region at 20.5 percent and the next highest one is the Biombo region at 14.5 percent. Quinara is the last region with (0.5 percent).

Women's education level is strongly associated with contraceptive prevalence. The percentage of women using any method of contraception rises from 1.8 percent among those with no education to 11.9 percent among women with primary education, and to 20.9 percent among women with secondary or higher education. In addition to differences in prevalence, the method mix varies by education.

### **Prenatal care**

Quality prenatal care can contribute to the prevention of maternal mortality by detecting and managing potential complications and risk factors, including pre-eclampsia, anemia, and sexually transmitted diseases. Antenatal care also provides opportunities for women to learn the danger signs of pregnancy and delivery, to be immunized against tetanus, to learn about infant care, and be treated for existing conditions, such as malaria and anemia.

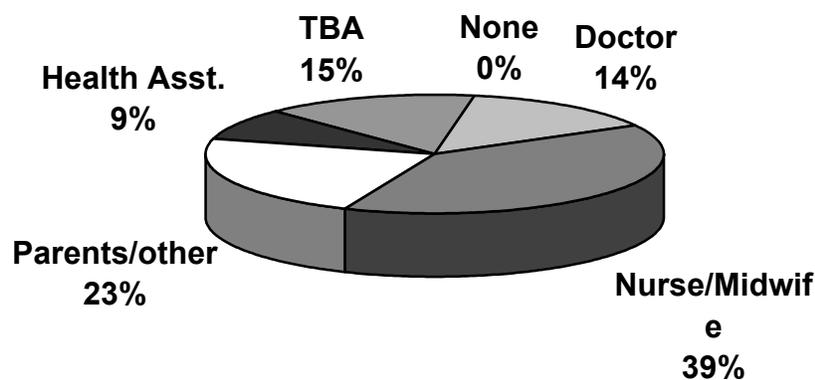
Tetanus toxoid injections are given to women during pregnancy to protect infants from neonatal tetanus, a major cause of infant death that is due primarily to unsanitary conditions during childbirth. Two doses of tetanus toxoid during pregnancy offer full protection. However, if a woman was vaccinated during a previous pregnancy, she may only need a booster to give full protection. Five doses are thought to provide lifetime protection.

66 percent of women with recent births in Guinea-Bissau are protected against neonatal tetanus (Table 37 Standard). The vast majority of these women received two doses of tetanus toxoid within the last three years. Among the regions, women living in the SAB are the most likely to be protected (86.1 percent) while those living in Tombali are the least likely to be protected (44.9 percent). Note, however, that the regional estimates are based on small numbers of cases and should be interpreted with caution. Women with secondary education are more likely to be protected against tetanus than those with either no education or primary education.

Female respondents who had had a birth in the year prior to the Guinea-Bissau MICS were asked whether they had received antenatal care and, if so, what type of person provided it. If the woman saw more than one type of provider, it was recorded in the questionnaire. Table 38 Standard presents the percent distribution of women with a birth in the year prior to the MICS by type of personnel who delivered antenatal care. If more than one provider was mentioned by the respondent, she is categorized as having seen the most skilled person she mentioned.

Virtually all women in Guinea-Bissau received some type of prenatal care and 62.1 percent received antenatal care from skilled personnel (doctor, nurse, midwife). 14.1 percent of women with a birth in the year prior to the survey received antenatal care from a doctor, 39.4 percent from a nurse and midwife (Figure 6). Health assistants provided prenatal care for 8.5 percent of women and traditional birth attendants for 15 percent. It is be noted that in some regions as Bolama and Biombo, nurse / midwife are more likely to provide prenatal care (85.6 et 43.5 respectively but doctors are also important providers in Bafata (25.6 percent).

**Figure 6: Percent distribution of women with a birth in the last year by type of personnel delivering antenatal care, Guinea-Bissau, 2000**



### **Assistance at birth delivery**

The provision of delivery assistance by skilled attendants can greatly improve outcomes for mothers and children by the use of technically appropriate procedures, and accurate and speedy diagnosis and treatment of complications. *Skilled assistance at delivery* is defined as assistance provided by a doctor, nurse, or midwife. About 34.7 percent of births occurring in the year prior to the MICS survey were delivered by skilled personnel (Table 39 Standard). This percentage is highest in the urban area 57.4 percent and 25.2 percent in rural area. A more educated woman is, more likely to have a delivery with the assistance of a skilled person.

More than one in three of the births in the year prior to the MICS survey were delivered with assistance by a midwife. Doctors assisted with the delivery of 7.8 percent of births and nurses assisted with 24 percent.

### **I. Child Rights**

#### **Birth registration**

The International Convention on the Rights of the Child states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for

children. The births of 42.1 percent of children under five years in Guinea-Bissau have been registered (Table 40 Standard). There are no significant variations in birth registration across sex, age, or education categories. Children in the Bolama region are somewhat less likely to have their births registered than other children but this appears to be due primarily to a relatively large proportion of mothers who do not know if their child's birth was registered. Most reasons for non-registered birth are high costs (28 percent) and travel too far to register the child (18.8 percent).

### **Orphanhood and living arrangements of children**

Children who are orphaned or living away from their parents may be at increased risk of impoverishment, discrimination, denial of property rights and rights to inheritance, various forms of abuse, neglect, and exploitation of their labor or sexuality. Monitoring the level of orphanhood and the living arrangements of children assists in identifying those who may be at risk and in tracking changes over time.

In Guinea-Bissau, 70.9 percent of children aged 0 -14 are living with both parents (Table 41 Standard). A substantial percentage - 9.8 percent – are living with their mother only although their father is alive. About 9 percent are living with neither parent although both parents are alive. Children who are not living with a biological parent comprise 12.4 percent and children who have one or both parents dead amount to 7.2 percent of all children aged 0-14. Older children are more likely to live away without their biological parents than younger children. While 12.4 percent of children under age five are not living with a biological parent, 19 percent of children aged 10-14 do so.

The situation of children in the SAB differs from that of other children in Guinea-Bissau. In the SAB region, only half of children live with both parents. 19.2 percent live with their mother only but their father is alive and a relatively large proportion (11.6 percent) are living with neither parent. This pattern is most likely due to cultural practices, migration labors and, to some extent internal migration of women from the SAB to other regions and neighboring countries.

### **Child labor**

It is important to monitor the extent to which children work and the type of work in which they participate for several reasons. Children who are working are less likely to attend school and more likely to drop out. This pattern can trap children in a cycle of poverty and disadvantage. Working conditions for children are often unregulated with few safeguards against potential abuse. In addition, many types of work are intrinsically hazardous and others present less obvious hazards to children, such as exposure to pesticides in agricultural work, carrying heavy weights and scavenging in garbage dumps.

In Guinea-Bissau, the MICS survey estimates that only about 5.1 percent of children aged 5-14 years engage in paid work (Table 42 Standard). About twice as many – 9.7 percent – participate in unpaid work for someone other than a household member.

‘Domestic work’ is defined as cooking, shopping, cleaning, washing clothes, fetching water, and caring for children. Slightly 71,8 percent of children do these tasks for less than four hours a day while 3.7 percent spend more than four hours a day on such tasks. Overall, girls are somewhat more likely than boys and older children (aged 10-

14) than younger children (aged 5-19 years) to do domestic work. Variations across regions are greater in the percentage of children who engage in more than four hours of domestic work a day. This percentage ranges from 0.1 percent in the Tombali region to 12.2 percent in the Gabu region.

Children who have done any paid or unpaid work for someone who is not a member of the household or who did more than four hours of housekeeping chores in the household or who did other family work are considered to be 'currently working'. Overall, 65.4 percent of children are classified as currently working. There is virtually no difference between boys and girls (65.2 percent of boys and 65.6 percent of girls). Regionally, the percentage of children working is lower in the Bolama and Gabu regions at 51.8 and 64 percent respectively and higher in Biombo at 85.7 percent. Rural children are far more likely to work than urban children.