

SUMMARY

The 2004 Demographic and Health Survey (DHS) in Cameroon (*Enquête Démographique et de Santé au Cameroun [EDSC-III]*) is the third DHS survey carried out in that country. Like the previous surveys, it covers the entire population. The EDSC-III was conducted by the National Institute of Statistics (Institut National de la Statistique [INS]) in collaboration with the Ministry of Public Health and through the National AIDS Control Committee (Comité National de Lutte contre le SIDA [CNLS]). ORC Macro provided technical assistance through the MEASURE DHS project. Funding for the survey was provided by the World Bank (through its Multisectoral HIV/AIDS Project), the United States Agency for International Development (USAID), the United Nations Children's Fund (UNICEF), and the United Nations Population Fund (UNFPA). The Cameroonian Government contributed technical staff and logistical support, in addition to funding.

The EDSC-III provides information on fertility levels and preferences, sexual knowledge and sexual activity, use of family planning methods, breastfeeding practices, the nutritional status of women and children, infant and child mortality, adult mortality including maternal mortality, maternal and child health, and knowledge, attitudes and behavior regarding HIV/AIDS and other sexually transmitted diseases. For the first time, information was collected on female circumcision, the use of bednets, and domestic violence. Also for the first time, blood samples were taken for anemia and HIV testing. The data collected in the EDSC-III update the demographic and health indicators derived from the two previous DHS surveys (1991 and 1998).

The EDSC-III was carried out from February to August 2004, and covered 10,462 households, 10,656 women age 15-49 and 5,280 men age 15-59. A total of 5,227 women and 5,125 men were tested for HIV.

The population sampled in the EDSC-III is representative at the national level, the residential level (Yaoundé/Douala, Other Cities, and rural areas), and at the regional level. The twelve study regions are the city of Yaoundé, the city of Douala, the province of Centre (excluding Yaoundé), the province of Littoral (excluding Douala), and eight other provinces: Adamaoua, Est, Extrême-Nord, Nord, Nord-Ouest, Ouest, Sud, and Sud-Ouest.

Less than half of the households in Cameroon have electricity (47 percent). This is an improvement from 1991 and 1998 when 29 and 41 percent of households, respectively, had electricity. Just over half of the households (53 percent) have access to safe drinking water, compared with 45 percent in 1998.

A particular focus of the EDSC-III survey was the level of survival of parents of children under age 18. It was found that 56 percent these children live with both biological parents. The level of survival is slightly higher in rural areas (59 percent) and slightly lower in urban areas (53 percent).

Indicators of gender parity reveal the existence of a negative differential for girls' school attendance at the primary and secondary levels. The differential is more evident at the secondary level (sex ratio: 0.86) than at the primary level (sex ratio: 0.90). The strength of this differential varies by residence and region.

FERTILITY

Fertility levels and trends. Fertility remains high among women in Cameroon. At current levels, a woman will give birth to an average of 5.0 children by the end of her reproductive years. Childbearing begins early, with 29 percent of girls under age 20 either pregnant or having had at least one birth. Fertility has been declining in Cameroon since 1978 when the World Fertility Survey carried out the *Enquête Nationale sur la Fécondité du Cameroun* (ENF). At that time, a woman had an average of 6.4 children during her lifetime. The EDSC-I (1991) and the EDSC-II (1998) estimated the fertility level to be 5.8 and 5.2

children, respectively. In 2004, only 3.6 percent of currently married women age 35-49 had never had a child; these women can be considered sterile.

Differential fertility. There are marked differences in fertility by residence, region, mother's level of education, and living standard. Women in Yaoundé/Douala have a lower fertility level (3.2) than those in Other Cities (4.6), or in rural areas (6.1). By region, the mean number of children per woman varies from 3.7 in Sud-Ouest to 6.4 in Extrême-Nord. By level of education, the mean number of children per woman varies from 3.5 among women who have attended secondary education to 6.5 among those with no education. In the wealthiest households, women have an average of 3.2 children, compared with 6.3 children for women living in the poorest households.

MARRIAGE

Marriage is the approved framework for sexual activity and procreation in Cameroon. Sixty-seven percent of women age 15-49 were married at the time of the survey. The proportion of women still single at age 35-39 is just 2 percent. Polygyny is common, with three in ten women (30 percent) in a polygynous union. Cameroonian women generally marry at an early age. In 2004, 22 percent of women age 25-49 were already married by age 15, and half were married by age 18 (17.6). In 1991 and 1998, the median age at marriage was 16.5 and 17.4 years, respectively. Thus, there has been only a slight increase in the age at marriage. Paralleling age a marriage, age at first sex also occurs early in Cameroon (median 16.4 years). This is a slight increase from 1998 (median 15.8 years).

Men marry at a later age than women. The median age at first marriage for men is 25.2 years. Age at first sex has remained constant: 18.5 years in 2004 compared with 18.3 years in 1998.

FAMILY PLANNING

Knowledge of contraceptive methods. In 2004, more women knew about contraceptive methods (90 percent) than in 1998 (81 percent), particularly modern methods (90 percent and 80 percent, respectively). However, few women use contraceptive methods.

Contraceptive prevalence. Contraceptive use in Cameroon is low. Among currently married women, the rate is 26 percent for all methods and 13 percent for modern methods. The proportion of users of all methods has increased over the past fourteen years, from 16 percent in 1991 to 19 percent in 1998 and 26 percent in 2004. Use of modern methods has increased from 4 percent in 1991 to 7 percent in 1998 and 13 percent in 2004.

Unmet need in family planning. Because of the low level of contraceptive use in Cameroon, there is substantial unmet need for family planning. One in five women (20 percent) has expressed a need for contraception, primarily for birth spacing (14 percent). Only about half (56 percent) of the potential demand for family planning is being satisfied. It is estimated that if all unmet need were satisfied, contraceptive prevalence would be 46 percent, almost twice the current level.

MATERNAL HEALTH

Antenatal and delivery care. The majority of Cameroonian women receive antenatal care and assistance at delivery from a qualified health professional. For births in the past five years 83 percent of mothers had at least one antenatal care visit with a health professional and 72 percent received at least one dose of tetanus toxoid vaccine to protect against neonatal tetanus. About six in ten births (59 percent) take place in a health facility, compared with 40 percent that occur at home. The majority of births (62 percent) were assisted at delivery by a health professional. Women from rural areas (58 percent), those with no education (78 percent), those from the poorest households (71 percent), and those who received no antenatal care (89 percent) were more likely than other women to give birth at home and without the assistance of a trained professional.

Trends in antenatal care. The level of antenatal care increased between 1998 and 2004, from 79 to 83 percent; tetanus toxoid coverage increased from 69 to 72 percent; and there was a decline in the proportion of women giving birth at home from 44 to 40 percent.

CHILD HEALTH

Immunization of children. The majority of young children in Cameroon have been immunized against the major childhood diseases: 86 percent of children age 12-23 months have received BCG, 65 percent have received three doses of DPT, 67 percent

have received three doses of polio, and 65 percent have been vaccinated against measles. Overall, nearly half of children age 12-23 months (48 percent) have received all the vaccinations recommended by the Expanded Program on Immunization (EPI), except for yellow fever. Only 5 percent of children age 12-23 months have not received any vaccinations. Coverage increased substantially between 1998 and 2004. The percentage of children age 12-23 months fully vaccinated increased from 36 to 48 percent. Immunization coverage is highest for children living in urban areas (particularly Yaoundé/Douala), children whose mothers are educated, and children living in wealthier households.

Childhood diseases. Acute respiratory infections, fever, and diarrhea are significant health problems for children. In the two weeks preceding the survey, one in ten children (11 percent) had cough accompanied by short, rapid breathing, about one in four (24 percent) had fever, and about one in five (16 percent) had diarrhea. Among the children with diarrhea, 57 percent were treated with oral rehydration therapy (ORT).

Possession and use of bednets The use of bednets is an effective means of protection against mosquitoes that transmit malaria. Currently, only one in five households (20 percent) has at least one bednet. In Yaoundé/Douala nearly a third of households have a bednet (31 percent), compared with 17 percent of households in rural areas. In households with bednets and with children under age five, only 12 percent of these children slept under a bednet the night before the survey. A similar percentage of pregnant women (12 percent) slept under a bednet the night before the survey.

NUTRITION

Breastfeeding of small children. Almost all children in Cameroon are breastfed. For children born in the five years preceding the survey, 94 percent were breastfed, and the majority (60 percent) were breastfed within 24 hours after birth. In 62 percent of cases, infants were given food before the initiation of breastfeeding. The type of assistance at delivery and the place of delivery influence the commencement of breastfeeding. When the

mother was assisted at delivery by a health professional, more than one in three children (35 percent) were breastfed within an hour following the birth, compared with 29 percent of children whose mother gave birth with the assistance of a traditional midwife or another person (21 percent). Regarding place of delivery, 36 percent of children born in a health center were breastfed within the first hour after birth, compared with 27 percent of children born at home.

Weaning and supplemental foods. Starting at age six months, all children should be given supplemental foods because breast milk alone is not sufficient to ensure optimal growth. While a substantial proportion of children in Cameroon received cereals and root vegetables before age six months, 21 percent of those age 6-7 months did not receive any solid or semi-solid foods in addition to mother's milk.

Vitamin A supplementation. Deficiency in Vitamin A affects a child's immune system and thus increases the risk of dying from childhood diseases. Vitamin A deficiency also influences the health of pregnant or breastfeeding mothers and can cause night blindness. Vitamin A deficiency can be avoided through the use of vitamin A supplements or fortified foods. In Cameroon, more than two in five children (38 percent) under age three years have received vitamin A supplements. The proportion varies by residence: Yaoundé/Douala (44 percent), Other Cities (40 percent), and rural areas (35 percent). Twenty-eight percent of women received vitamin A supplements in the two months following the birth of their last child.

Nutritional status of children. Nutritional status indicators show that in Cameroon 32 percent of children under age five years exhibit chronic malnutrition; 5 percent exhibit acute malnutrition; and 18 percent are underweight.

INFANT AND CHILD MORTALITY

Levels of childhood mortality. Infant and child mortality remains high in Cameroon. The infant mortality rate for the five years preceding the survey is 74 per 1,000 (74 deaths per 1,000 infants less than one year of age). For children age 1 to 4, the mortality rate (child mortality) is 75 per 1,000. Overall, the risk of dying between birth and the fifth birthday (under-five mortality) is 144 per 1,000, or about one in seven children.

Mortality trends among children under five years. Between 1998 and 2004 childhood mortality levels decreased only slightly in Cameroon. Infant mortality declined from 77 to 74 per 1,000, and under-five mortality declined from 151 to 144 per 1,000.

Differential mortality. Infant and under-five mortality are substantially lower in urban areas (68 and 119 per 1,000, respectively) than in rural areas (91 and 169 per 1,000, respectively). Analysis by region also shows large disparities: infant mortality ranges from 48 per 1,000 in Douala to 111 per 1,000 in Est, and under-five mortality ranges from 75 per 1,000 in Douala to 205 in Nord region. There are substantial differences in mortality by mother's level of education. A child whose mother has no education is more likely to die in the first year of life (94 per 1,000) than a child whose mother has attended secondary education or more (59 per 1,000). The education differential is greater for under-five mortality (186 per 1,000 and 93 per 1,000, respectively).

FEMALE CIRCUMCISION

Prevalence. The practice of female circumcision is not common in Cameroon. Overall, only 1.4 percent of women reported that they were circumcised, but prevalence varies among subgroups. The highest proportions of circumcised women are found among women age 20-24 (2.5 percent), women in Extrême-Nord region (5.4 percent), women with no education (4.8 percent), women from the Arabe-Choa/Peulh/Maoussa/Kanuri ethnic groups (12.7 percent), Muslim women (5.8 percent), and women living in households in the second lowest wealth quintile (4.0 percent).

Perspectives. Less than 1 percent of respondents have a daughter who has already been circumcised and less than 1 percent say they intended to have a daughter circumcised. Overall, 1.5 percent of daughters of interviewed mothers have been circumcised (0.7 percent) or will be circumcised (0.8 percent). This level is almost the same as for interviewed women (1.4 percent). Thus, there appears to be no change in the practice of female circumcision in Cameroon.

DOMESTIC VIOLENCE

More than one in two women (53 percent) interviewed in the EDSC-III reported that they had experienced physical violence at some time since the age of 15. In 45 percent of cases, women had experienced these acts of violence within the past twelve months. The most frequent perpetrator of the violence is the husband/partner. Whatever the type of violence (physical or sexual), women often suffer grave consequences. In 21 percent of cases there was swelling or bruising and in 15 percent of cases there were wounds or broken bones.

HIV/AIDS AND OTHER STIs

Knowledge of HIV/AIDS. Almost everyone in Cameroon has heard about HIV/AIDS (98 percent of women and 99 percent of men). However, only 62 percent of women reported knowing that the risk of contracting HIV can be reduced by using condoms during sexual intercourse or by limiting sexual intercourse to a single uninfected and faithful partner. Among men, this proportion is considerably higher (75 percent).

Men are more likely than women to know that HIV can be transmitted from mother to child (72 and 60 percent, respectively).

HIV/AIDS and stigma. The behavior that people say they would adopt regarding people with HIV/AIDS shows the level of stigma and discrimination attached to people infected with the AIDS virus. Among women, 69 percent said they would take care of a family member who was sick with AIDS in their home. The proportion is higher for men (82 percent).

High-risk sex and condom use. One of the main objectives of the National AIDS Control Committee is to encourage the regular use of condoms by people who are sexually active. The EDSC-III data indicate that more than one-fourth of women (29 percent) had high-risk sex during the twelve months preceding the survey. Among men, this proportion is much higher (62 percent). More than a third of women (41 percent) and over half of men (55 percent) reported that they used a condom during their last high-risk sex.

HIV PREVALENCE

Coverage rates. More than 9 out of 10 respondents in the EDSC-III consented to give a few drops of blood for HIV testing. Coverage was slightly higher for women (92 percent) than men (90 percent) and higher among people in rural areas (95 percent) than those in urban areas (87 percent). The rate for Yaoundé/Douala was 82 percent, while the rate for Other Cities was 90 percent. By region, HIV testing coverage ranged from 76 percent in Yaoundé to 96 percent in Sud region. With the exception of Nord-Ouest and Ouest regions, coverage rates were always higher for women than men.

HIV and the vulnerability of women. The results of the HIV testing carried out during the EDSC-III indicate that 5.5 percent of adults age 15-49 in Cameroon are seropositive for HIV. The rate for women age 15-49 (6.8 percent) is higher than the rate for men in the same age group (4.1 percent). For every 100 men infected, 170 women are infected, giving an infection ratio of 1.7. This is comparable to ratios found in similar surveys in sub-Saharan Africa and implies that women are particularly vulnerable to HIV infection.

In general, women contract HIV at a younger age than men. The highest level of HIV infection among women is in age group 25-29 (10.3 percent); in contrast, the highest level of HIV infection among men is in age group 35-39 (8.6 percent).

HIV and residence. Residence in urban areas presents a greater risk of HIV infection than residence in rural areas. HIV prevalence is higher in Other Cities (6.9 percent) and in Yaoundé/Douala (6.4 percent) than in rural areas (4.0 percent). Additionally, prevalence in Yaoundé (8.3 percent) is higher than that in Douala (4.5 percent), both for women (10.7 percent compared with 5.5 percent) and for men (6.0 percent compared with 3.6 percent).

There are large regional differences in HIV prevalence in Cameroon. Overall, the highest levels are in Nord-Ouest (8.7 percent), Est (8.6 percent), and Sud-Ouest (8.0 percent) regions. The lowest levels are in Nord (1.7 percent) and Extrême-Nord (2.0 percent) regions. HIV prevalence among women is highest in Nord-Ouest (11.9 percent), Sud-Ouest (11.0 percent),

Yaoundé (10.7 percent), Adamaoua (9.8 percent), and Est (9.4 percent). The highest prevalence among men is in Est (7.6 percent), Nord-Ouest (5.2 percent), Ouest (5.2 percent), and Sud-Ouest (5.1 percent).