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DHS+ Dimensions

A semiannual newsletter of the Demographic and Health Surveys project

Better understanding of the reproductive health of adolescents leads to more informed policy decisions.

MEASURE *DHS+*

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MEASURE *DHS+* Increases Efforts to Better Understand Adolescent Health

Adolescence is a critical stage in a person's life, a period in which physical, psychological, and social changes take place. It is a phase in which children become adults, when major decisions about roles in life are made. Since young people represent a significant portion of the population of many developing countries, and one that is expected to grow substantially in the coming decade, adolescent health is a vital priority of national health programs.

Generally, young people have limited access to reproductive health services that focus on their special needs. Inadequate understanding about adolescents' lives, sexual behavior, contraceptive practices, reproductive health knowledge and often the judgmental attitudes of adults towards them, all hinder the provision of reproductive health education and services to young people. It is therefore essential to have data on the extent and characteristics of adolescent sexual activity and contraceptive use, pregnancy rates and outcomes, and other reproductive health issues affecting adolescents.

Whereas young women, and in many countries young men, have traditionally been included in standard DHS surveys, MEASURE *DHS+* has recently embarked on a more elaborate research agenda to tackle the dynamics of adolescent health. Recently, it has conducted three in-depth analyses using data from DHS surveys to examine the health of adolescents. These reports—

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Reproductive Health of Young Adults in Uganda, *Youth Reproductive Health in Ethiopia*, and *Profile of Young Women and Young Men in Haiti*—take a closer look at adolescent health and offer more comprehensive findings than the final survey reports.

As important as quantitative data are in designing effective programs, it is in the details of the local context that programs succeed or fail. The report *Coping with Pregnancy: Experiences of Adolescents in Ga Mashi, Accra* based on qualitative data, examined the sociocultural context in which teenage pregnancy occurs in an inner-city community in Accra, and the decision-making processes of adolescent girls who become pregnant (see box, page 3).

In addition, surveys are currently being conducted which specifically target young adults. In Indonesia, the Indonesian Young Adult Reproductive Health Survey has begun interviews with never-married women and men age 15-24. Also, the Alan Guttmacher Institute has requested assistance in carrying out four household-based surveys on adolescent reproductive health in sub-Saharan Africa, with interviews of respondents as young as 12-14 years. The surveys will be carried out in Burkina Faso, Ghana, Malawi, and Uganda in 2003 and 2004.

Reproductive Health of Young Adults in Uganda

An in-depth analysis of the data from the 2000-2001 Uganda DHS provides a demographic and health profile of teenage and young adult women and men age 15-24.

Speculation that women have recently started to begin sexual intercourse at a younger age is not supported by data in the Uganda DHS. The age by which half of young women had initiated sexual intercourse in fact increased from 16.1 to 16.7 years; the corresponding ages for young men are 17.5 and 18.8 years. Overall, 42 percent of women age 15-24 and 77 percent of men age 15-24 have never been married and a sizable proportion have never had sex (27 percent of women and 41 percent of men).

Cathryn Wilcox, JHU/CCP

Four adolescent boys sitting together in Java,Indonesia

Most young adults in Uganda have heard of contraception. Overall contraceptive use is low among younger Ugandan women; 10 percent of all women 15-19 are currently using contraception. However, among sexually active, unmarried young women, more than half are using some family planning method. Adolescents who are using a method are much more likely to use condoms than older users.

In general, children born to young mothers have higher risks of illness and even death. This is supported by data in Uganda, where children born to mothers under age 20 have a 30 percent higher risk of dying before their first birthday than children born to mothers age 20-29.

Overall, although knowledge of AIDS is practically universal, only 78 percent of women age 15-19 and 83 percent of those age 20-24 know two or three important ways to avoid it. While 69 percent of women age 15-19 and 83 percent of men age 15-19 know that using condoms can protect against getting the AIDS virus, only 53 percent and 76 percent, respectively, know a source for condoms. Finally, among teenagers, 6 percent of women and 3 percent of men had been tested for the AIDS virus, and among those not tested, 62 and 69 percent respectively want to be tested. Yet, knowledge of a source for the test is limited among that group: only 27 percent of women and 42 percent of men not tested know a source for a test.

Youth Reproductive Health in Ethiopia

Youth Reproductive Health in Ethiopia is an in-depth analysis of data on over 6,500 women and 1,000 men age 15-24 interviewed during the 2000 Ethiopia Demographic and Health Survey.

The study shows that a sizable proportion of young Ethiopians know about family planning, but most sexually-experienced young women and men do not use contraception; nearly one-third of sexually-experienced women age 15-24 have an unmet need for family planning. Health providers do not take adequate advantage of contact with young nonusers to discuss family planning.

As in Uganda, childbearing in Ethiopia begins at an early age. Among teenage women, 13 percent have given birth to at least one child, and among women in their early twenties, more than one-third have two or more children. The majority of young mothers do not receive any antenatal care during pregnancy. A small percentage (7 percent) receive delivery assistance from a health professional, and only 6 percent of births to young women take place in health facilities.

Children born to mothers in their teens have a substantially higher risk of dying young; the probability of an Ethiopian child dying within the first month of life among children born to teen mothers is 60 percent higher than among children born to mothers in their early twenties.

Although AIDS awareness is relatively high among youth in Ethiopia, nearly one-third of young women and one-sixth of

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young men do not know a specific way to avoid contracting the infection. Less than 2 percent of women age 15-24 who were sexually active in the year before the survey used a condom during their last sexual intercourse.

Profile of Young Women and Young Men in Haiti

The report entitled *Profil des jeunes femmes et des jeunes hommes en Haïti* focuses on women and men age 15-24 who make up close to one-fifth of Haiti's total population. Data come from the *Enquête Mortalité, Morbidité et Utilisation des Services (EMMUS-III)* that took place in Haiti in 2000.

As in Uganda and Ethiopia, data show a very early initiation to sexual intercourse and low contraceptive use, which has resulted in high levels of teenage pregnancy. More than one-quarter of teenage girls had begun their reproductive lives by age 18 years, with most of them having had at least one child.

Among teenage women, 38 percent say that they have suffered from physical violence. One in 4 say that this has occurred in the previous year, and 11 percent report violence while they were pregnant. Among women ever in union age 20-24, 1 in 6 say that they experienced emotional violence involving their partner, and 1 in 3 report that physical or sexual violence took place. Alcohol consumption was found to be directly related to increased domestic violence. Whereas it is very rare (2 percent) for young women to drink alcohol, men are much more likely to do so: 8 percent at 15-19 years and 21 percent at 20-24.

Programmatic Implications

The results of the special analyses of the Uganda, Ethiopia, and Haiti data for adolescents and young adults point to some common concerns.

It is imperative for national health programs to be geared toward educating health care providers to be more sensitive to the special needs of youth. Increased access to information about family planning and improved contraceptive services for young women at risk, for example, have the potential to greatly reduce maternal and childhood mortality and morbidity.

Adolescents need to be active participants in program design. It is necessary to involve adolescents in the reproductive health programs intended for them. Adolescents should not be regarded as a "problem" to be solved, but rather as part of the solution. The potential of adolescents should be stressed at all stages of program development, implementation, monitoring and evaluation.

Coping with Pregnancy: Experiences of Adolescents in Ga Mashi, Accra

The 1998 Ghana Demographic and Health Survey found early pregnancy loss among girls age 15-19, especially those residing in urban areas, to be approximately twice as high as among other women. To better understand these findings and to improve reproductive health services for adolescents, a qualitative study looked in-depth at the sociocultural factors leading adolescent girls to become pregnant and how they decide whether to keep or abort a pregnancy.

The study found that girls' sexual relationships typically began after girls had dropped out of school. Forced sex initiated by a boyfriend at his home was a common first sexual experience among these girls leading them to begin sexual relationships earlier than desired. Although girls did make efforts to practice a local version of periodic abstinence, their efforts were based on non-biological interpretation of fertile period reinforced by parents and some life-skills teachers.

The decision to continue or terminate a pregnancy was usually made by the girl and her boyfriend as a first step in forming stable child-rearing unions in the community. These decisions were also influenced by the need for women to keep or establish stable independent means of financial support. Parents made the decision to keep or terminate a pregnancy when the girl was completely financially dependent upon them. A minority of boyfriends denied paternity, causing girls to obtain an abortion by their own means, putting them at more risk to use unsafe methods. Often with the help of boyfriends, girls were able to raise fees to have an abortion; they usually had first trimester clinic abortions and described few, if any complications.

Program implications were tailored to the sociocultural circumstances of adolescent pregnancy in inner-city Accra described in the study. These included how to reach out-of-school girls with contraceptive education, and, recommendations to inform the general public about the circumstances of forced sex among adolescents and health care providers about the varying social circumstances of girls when making decisions about pregnancy, leaving some more vulnerable than others.

MEASURE *DHS+* assists countries worldwide in the collection and use of data to monitor and evaluate population, health, and nutrition programs. Funded by the United States Agency for International Development (USAID), MEASURE *DHS+* is implemented by Macro International Inc., an Opinion Research Corporation company (ORC Macro), in Calverton, Maryland, with the Population Council and the East-West Center. *DHS+* Dimensions is published twice a year to provide information about the program and the status of *DHS+* surveys. Send correspondence to MEASURE *DHS+*, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA (tel.: 301-572-0200; fax: 301-572-0999; www.measuredhs.com). Project Director: Martin Vaessen.

Fertility and Mortality Decline in Nicaragua; Contraceptive Use Increases

Findings from the 2001 Nicaragua Demographic and Health Survey (Encuesta Nicaragüense de Demografía y Salud, or ENDESA) show important changes from the previous survey conducted in 1998. Three of the most significant changes are a reduction in fertility, a reduction in mortality, and an increase in contraceptive use—particularly the use of modern methods.

Reduction in fertility

The current total fertility rate (TFR) in Nicaragua is estimated to be 3.2 children per woman. This is a drop from the previous survey which showed a TFR of 3.6 children per woman.

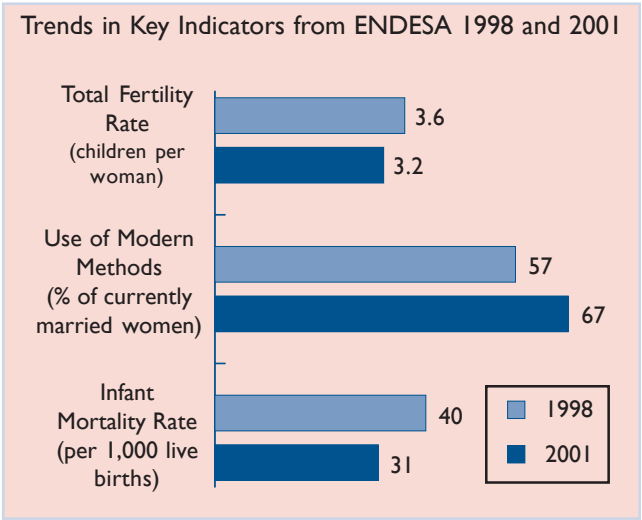
Fertility has dropped 11 percent in the general population since the 1998 survey. This drop in fertility applies to all ages and includes both urban and rural areas, although the drop in urban areas was not as large as that in rural areas (0.3 versus 0.5 children per woman).

Fertility levels vary greatly depending on the area of the country in which a woman lives. Rural fertility levels exceed those in urban areas by almost 2 children (4.4 and 2.6, respectively).

The percent of women 15-19 years old who are already mothers or who are currently pregnant has dropped from 27 percent in 1998 to 25 percent in ENDESA 2001.


JHU/CCP

The survey also highlighted the relationship between fertility and education; on average, the more educated the woman, the fewer children she had. Women of reproductive age with no education averaged 5.2 children. Women with secondary or higher education averaged 2.5 and 1.7 children, respectively.



Increase in contraceptive use

Among married women, almost 9 in 10 have at some point used a form of family planning. Eighty-six percent have used modern methods, and 19 percent have used traditional methods such as periodic abstinence or withdrawal.

An increase in the use of contraception does much to explain Nicaragua's decrease in fertility. The current rate of contraceptive use is 69 percent. Among Latin American countries with a DHS survey, only Brazil and Colombia have higher rates of usage. Sixty-seven percent of women are using a modern method (such as oral contraceptives and injections), up from 57 percent in 1998. The level of contraceptive use rises with levels of education, with slightly more than half of women with no education using contraception, and almost two-thirds of women with university-level education using some form of family planning.

Reduction in mortality

Nicaragua has also made extraordinary progress in reducing infant mortality. The infant mortality rate (IMR) for the 5 years preceding the survey is 31 deaths per 1,000 live births. Only 15 years ago infant mortality in the country was as high as 57, and as recently as 1998, levels were found to be 40 per 1,000. This represents less than half the rates found in Bolivia and Haiti, each with infant mortality rates of over 70. Among Latin American countries with a DHS survey, only Colombia has lower infant mortality rates than Nicaragua. Mortality rates in the first five years of life have also dropped dramatically, from 70 per 1,000 live births 15 years ago, to the current level of 40 per 1,000.

The drop in the IMR is partially due to Nicaragua's progress in reducing the prevalence of vaccine-preventable diseases, diarrhea and respiratory infections, as well as a reduction in complications related to pregnancy and childbirth. ENDESA 2001 found that 72 percent of children ages 18-29 months had received the complete schedule of immunizations. Only 2 percent had not received any immunizations. Although this is a drop from levels found in the 1998 survey (where 80 percent of children had received the complete schedule), it still ranks as one of the highest rates of vaccination in Latin America, behind only Brazil.

Also, according to the 2001 survey, 86 percent of Nicaraguan women who gave birth in the previous 5 years had some type of antenatal care—up from 84 percent in 1998—with close to 70 percent of ANC visits given by medical personnel. Two-thirds of births currently take place in health facilities, an increase of almost 5 percentage points from 1998.

Bangladesh Service Provision Assessment Shows Services Offered Widely

The 1999-2000 Bangladesh Service Provision Assessment Survey (BSPA) reveals that health services are widely available in the country, but quality of services and medications are often lacking.

The BSPA collected information on the provision of reproductive and child health services in Bangladesh in conjunction with the 1999-2000 Bangladesh Demographic and Health Survey (BDHS). A modified SPA instrument from the MEASURE *DHS*+ program was used in the survey. It included questions on service provision and interviewed both service providers and field-workers.

The survey provides information to program managers on the extent to which facilities have the equipment supplies and staff to deliver high quality services.

Facility and Staffing Characteristics

Overall, only about a third of the facilities had all the requisite equipment for providing appropriate services for clients, including blood pressure machines, adult and baby scales, stethoscopes, cold chain equipment, autoclaves, and disposable needles. The majority of health facilities surveyed had supplies of disposable needles available at the time the BSPA was carried out. However, less than half of the facilities had cold chain equipment available. Facilities were most likely to have blood pressure machines (93 percent) and stethoscopes (96 percent). Aside from cold chain equipment, they were least likely to have baby scales and autoclaves (68 and 77 percent, respectively).

Approximately 90 percent of the facility-based providers and 2 out of 3 fieldworkers reported having basic training. Regular supervision, one of the main elements of health facility management, was nearly universal at 98 percent.

Family Planning Services

Family planning concerns remain high on the agenda of the government of Bangladesh, and this is reflected in the high number of facilities (over 80 percent) offering family planning services. The most frequently offered family planning methods are pills and condoms, at 95 and 96 percent of facilities, respectively. The least-frequently offered services are male and female sterilization, at only 36 and 37 percent of facilities.

Although most of the Bangladeshi health and family planning facilities offer a wide range of methods, many facilities did not have the supplies and equipment to offer high-quality services. For example, although almost 90 percent of the facilities offered injectables, 10 percent were periodically unable to deliver injectables because of stock-outs. Eighty-seven percent of facilities offered IUDs to their clients, but only half of these facilities had an autoclave and running water. Approximately 2 in 3 facilities offering sterilization did not have an autoclave and running water.

Maternal and Child Health Services

Eighty-eight percent of facilities surveyed in the BSPA provided antenatal care. However, only 6 in 10 facilities provided tetanus injections. Delivery care was provided in only half of all facilities. Slightly more than one-third of health facilities provided all the components of maternal health services, including antenatal care, tetanus injections, delivery care, and postpartum care. Among NGO facilities providing delivery and postpartum care, only 7 percent had all the appropriate medicines in stock to provide this care.

Approximately 90 percent of all the facilities surveyed (in both the public and private sectors) provided at least some child health services. However, only slightly more than one-third of the facilities provided all components of child health services, including vitamin A capsules, growth monitoring, ORS packets, and immunization. Except for drugs for dysentery and ORS, about 80 percent of facilities had all essential oral drugs available. However, 1 in 4 facilities experienced stock-outs of the first-line drug for pneumonia, the second-line antibiotic, and anti-pyretic drugs. NGO health facilities were twice as likely to have all essential drugs available as government health centers.

Summary of Demographic and Health Surveys

COUNTRY SURVEY	IMPLEMENTING ORGANIZATION
SOUTH/SOUTHEAST ASIA	
Bangladesh 2003/04	Mitra & Associates
2001 (Special)*	Mitra & Associates/ACPR/NIPORT
1999/2000	Mitra & Associates/NIPORT
1999/2000 (SPA)	Mitra & Associates/NIPORT
1996/97	Mitra & Associates/NIPORT
1993/94	Mitra & Associates/NIPORT
Cambodia 2000	National Institute of Statistics/MOH
1998	SAWA Cam./Nat. Inst. of Public Health
India 1998-2003*	Various Organizations
1998/99	International Inst. for Population Sciences
1992/93	International Inst. for Population Sciences
Indonesia 2002	Central Bureau of Statistics/NFPCB/MOH
2002 (Special)*	Central Bureau of Statistics
1997	Central Bureau of Statistics/NFPCB/MOH
1994	Central Bureau of Statistics/NFPCB/MOH
1991	Central Bureau of Statistics/NFPCB/MOH
1987	Central Bureau of Statistics/NFPCB
Myanmar 1996 (Special)	Settlmt. and Land Rec. Dep., Min. of Agr.
Nepal 2001	New ERA
1996	Ministry of Health/New ERA
1987 (In-depth)	New ERA
Pakistan 1990/91	National Institute of Population Studies
Philippines 2003	National Statistics Office/Dept. of Health
1998	National Statistics Office/Dept. of Health
1993 (In-depth)*	National Statistics Office
1993	National Statistics Office
Sri Lanka 1987	Dept. of Cen. & Stat., Min. of Plan Impl.
Thailand 1987	Inst. of Pop. Studies, Chulalongkorn U.
Vietnam 2002	Nat. Comm. on Pop. and FP/Gen. Stat. Off.
1997	Nat. Comm. on Pop. and FP/Gen. Stat. Off.
NORTH AFRICA/WEST ASIA/EUROPE	
Armenia 2000	Nat. Stat. Service/MOH
Egypt 2002 (SPA)	Min. of Health & Pop./El-Zanaty & Associates
2000	National Population Council
1998 (Interim)	El-Zanaty & Associates
1997 (Interim)	El-Zanaty & Associates
1996/97 (In-depth)*	National Population Council
1995	National Population Council
1992	National Population Council
1988	National Population Council
Jordan 2002	Department of Statistics
1997	Department of Statistics
1990	Department of Statistics
Morocco 2003	SEIS - Ministry of Health
1995 (Panel)	Ministère de la Santé Publique
1992	Ministère de la Santé Publique
1987	Ministère de la Santé Publique
Tunisia 1988	Office Nat. de la Fam. et de la Population
Turkey 1998	Hacettepe Inst. of Population Studies
1993	Hacettepe Inst. of Population Studies/MOH
Yemen 1997	Central Statistical Organization
1991/92	Central Statistical Organization

COUNTRY SURVEY	IMPLEMENTING ORGANIZATION
CENTRAL ASIA	
Kazakhstan 1999	National Institute of Nutrition
1995	Inst. of Obst. & Ped., MOH
Kyrgyz Republic 1997	Settlmt. and Land Rec. Dep., Min. of Agr.
Turkmenistan 2000	MCH/MOH/MIT
Uzbekistan 2002 (Special)*	Min. of Macroeconomics/MOH
1996	Inst. of Obst. & Gynec./MOH
LATIN AMERICA & CARIBBEAN	
Bolivia 2003	Instituto Nacional de Estadística
1998	Instituto Nacional de Estadística
1993/94	Instituto Nacional de Estadística
1989	Instituto Nacional de Estadística
Brazil 1996	Soc. Civil Bem-Estar Familiar no Brasil
1991 (Northeast)	Soc. Civil Bem-Estar Familiar no Brasil
1986	Soc. Civil Bem-Estar Familiar no Brasil
Colombia 2000	PROFAMILIA
1995	PROFAMILIA
1990	PROFAMILIA
1986	Corp. Cen. Reg. de Pob./Min. de Salud
Dominican Rep. 2002	CESDEM
1999 (Pre-test)	CESDEM
1996	CESDEM/PROFAMILIA
1991	PROFAMILIA
1986	Consejo Nacional de Población y Familia
1986 (Experimental)	Consejo Nacional de Población y Familia
Ecuador 1987	Cen. de Estud. de Pob. y Paternidad Responsible
El Salvador 1985	Asociación Demográfica Salvadoreña
Guatemala 1998/99 (Interim)	Instituto Nacional de Estadística
1997 (In-depth)*	Instituto Nacional de Estadística
1997 (SPA)	Instituto Nacional de Estadística
1995	Instituto Nacional de Estadística
1987	Inst. de Nutrición de Cent. y Panamá
Haiti 2004	Institut Haïtien de l'Enfance
2000	Institut Haïtien de l'Enfance
1994/95	Institut Haïtien de l'Enfance
Mexico 2000 (SPA)	Nat. Institute of Public Health
1987	Dir. Gen. de Plan. Fam., Sec. de Salud
Nicaragua 2001	Instituto Nacional de Estadísticas y Censos
1997/98	Instituto Nacional de Estadísticas y Censos
Paraguay 1990	Centro Paraguayo de Estudios de Poblacion
Peru 2002	Instituto Nacional de Estadística
2000	Instituto Nacional de Estadística
1996	Instituto Nacional de Estadística
1992	Instituto Nacional de Estadística
1986	Instituto Nacional de Estadística
1986 (Experimental)	Instituto Nacional de Estadística
Trinidad & Tobago 1987	Family Planning Association of Trinidad/Tobago

COUNTRY SURVEY	IMPLEMENTING ORGANIZATION
SUB-SAHARAN AFRICA	
Benin 2001	Institut Nat. de la Stat. et de l'Ana. Écon.
1996	Institut National de la Statistique
Botswana 1988	Ministry of Health
Burkina Faso 2003	Inst. Nat. de la Statistique et la Démo.
1998/99	Inst. Nat. de la Statistique et la Démo.
1992/93	Inst. Nat. de la Statistique et la Démo.
Burundi 1987	Dép. de la Pop., Min. de l'Intérieur
Cameroon 2003	DSCN and BUCREP
1998	Bur. Cen. Recensements et Études de Pop.
1991	Min. du Plan et de l'Amén. du Terr.
Central African Rep. 1994/95	Dir. des Stat. Dém. et Sociales
Chad 2004	Inst. de la Stat., des Études Écon. et Démogra.
1996/97	Bureau Central du Recensement
Comoros 1996	Centre National de Doc. et de Rech. Sci.
Côte d'Ivoire 2004	Inst. National de la Statistique
1998/99	Inst. National de la Statistique
1994	Inst. National de la Statistique
Eritrea 2002	National Statistics and Evaluation Office
1995	National Statistics Office
Ethiopia 2000	Central Statistical Authority
Gabon 2000	Direction Générale de la Statistique
Ghana 2003	Ghana Statistical Service
2002 (SPA)	Ghana Statistical Service
1998	Ghana Statistical Service
1993/94	Ghana Statistical Service
1988	Ghana Statistical Service
Guinea 1999	Direction Nationale de la Statistique
1992	Direction Nationale de la Statistique
Kenya 2003	Central Bureau of Statistics
1999 (SPA)	National Council for Population and Dev.
1998	National Council for Population and Dev.
1993	National Council for Population and Dev.
1989	National Council for Population and Dev.
Liberia 1986	Min. of Planning & Economic Affairs
Madagascar 2003	Institut Nat. de la Stat.
1997	Institut Nat. de la Stat.
1992	Centre Nat. de Recherches sur l'Env.
Malawi 2000	National Statistical Office
1996 (KAP)	National Statistical Office
1992	National Statistical Office
Mali 2001	CPS/MSSPA et DNSI
1995/96	CPS/MSSPA et DNSI
1987	CERPOD
Mauritania 2003 (Special)	Office National de la Statistique
2000/01	Office National de la Statistique
Mozambique 2003	Instituto Nacional de Estatística
1997	Instituto Nacional de Estatística
Namibia 2000	Min. of Health and Social Services
1992	Min. of Health and Social Services
Niger 1998	Care International
1992	Dir. de la Stat. et des Comptes Nat.
Nigeria 2003	Nat. Pop. Commision
1999	Nat. Pop. Commision
1990	Federal Office of Statistics
1986 (Ondo State)	Ministry of Health, Ondo State
Rwanda 2001 (SPA)	Office National de la Population
2000	Office National de la Population
1992	Office National de la Population
Senegal 2003	Dir. de la Prévision et de la Stat.
1999	SERDHA
1997	Min. de l'Economie et des Finances
1992/93	Dir. de la Prévision et de la Stat.
1986	Min. de l'Economie et des Finances
South Africa 1998	Dept. of Health/Med. Research Council
Sudan 1990	Dept. of Stat., Min. of Fin. & Econ. Plan.
Tanzania 1999 (Interim)	National Bureau of Statistics
1996	Bureau of Statistics, Planning Comm.
1995 (In-depth)*	Bureau of Statistics, Planning Comm.
1994 (KAP)	Bureau of Statistics, Planning Comm.
1992	Bureau of Statistics, Planning Comm.
Togo 1998	Direction de la Statistique
1988	Unité de Rech. Dém., Dir. de Stat., Dir. Gén. Santé
Uganda 2000/01	Uganda Bureau of Statistics
1995/96 (In-depth)*	Inst. Stat. & Applied Econ., Makerere U.
1995	Dept. of Stat., Min. Fin. & Econ. Plan.
1988	Ministry of Health
Zambia 2001/02	Central Statistical Office
1996	Central Statistical Office
1992	University of Zambia
Zimbabwe 1999	Central Statistical Office
1994	Central Statistical Office
1988	Central Statistical Office

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***Bangladesh:**	Maternal Health Services and Maternal Mortality Survey
***Egypt:**	Reasons for Nonuse in Upper Egypt
***Guatemala:**	Health Expenditure Survey
***India:**	Benchmark Surveys/Various Topics
***Indonesia:**	Young Adult Reproductive Health Survey
***Philippines:**	Safe Motherhood Survey
***Tanzania:**	Estimation of Adult and Childhood Mortality in a High HIV/AIDS Population
***Uganda:**	Negotiating Reproductive Outcomes
***Uzbekistan:**	Health Examination Survey

Qualitative Study Examines Process of Informed Consent for HIV Testing

A study combining observations and interviews was conducted in conjunction with the 2001 Demographic and Health Survey in Mali to enable researchers to better understand the process of informed consent surrounding blood testing. The study examined how the informed consent statement was presented in the survey and what individuals understood when they were asked to give blood for anemia and for HIV.

The 2001 Demographic and Health Survey in Mali was a standard national-level DHS survey. However, in addition to the core questionnaires and several modules, the Mali DHS included the drawing of blood for anemia and HIV testing in a subsample of those interviewed. While anemia testing has been a part of DHS surveys for many years, this marked the first time that a DHS survey has included the taking of blood for HIV testing.

This first experience of including a blood test for HIV as part of a standard DHS survey raised many ethical issues new to the DHS program: What kind of informed consent is appropriate for these blood tests? How well is the consent statement understood? What do people recall about the statement after the tests? How and why would some individuals refuse to participate? In short, how well did the consent statement work in the field, and what can be done to make it more effective?

Many studies of the use of informed consent statements have examined the extent to which participants understood or retained the information contained in a written statement of the possible risks and benefits of their participation. The settings for these consent statements have nearly always been medical treatments or clinical trials. Researchers who have examined informed consent statements have found that the language used is often too complex for easy understanding. Studies of what patients retained from an informed consent statement have shown that a significant proportion did not well understand the risks and benefits of the procedures they had accepted. The lack of understanding may well be linked to the complexity of the language used.

A respondent to the 2001 Mali DHS is asked to consent to HIV testing.

In the study, the research team observed how the informed consent was presented to participants, asked what these people understood from the informed consent that they had just heard, discussed with participants the reasons for accepting or refusing to participate in the blood testing, and observing how the card to be used for obtaining voluntary counseling and testing (VCT) services was offered and accepted.

The study resulted in several general conclusions. First, if requested by a medical team, people will be willing to participate in blood tests for unfamiliar conditions, even if they have only a vague idea of the condition in question. In that, they are just like many westerners who give assent to medical tests that they do not understand. In Mali, most people have only a vague idea, if that, of what anemia might be, and AIDS is not a disease that concerns many of them personally.

Second, informed consent statements should be formulated in simple and conversational language to increase the probability that the statements will be read or recited verbatim. This requires that members of the ethical or institutional review boards reviewing the statements be convinced that simple language can contain the information they deem indispensable. The reading of a speech in formal language is an unnatural act in these contexts, and the temptation to simplify by explanation should be removed.

Third, the study directors recommend that survey interviewers be trained to present informed consent statements by emphasizing a list of key items in the statements presented. Demonstration of the ability to present consent statements that include all these items should be part of the training. If the language is simple and conversational, learning what must be said will not prove difficult, and reading or reciting from a text can be performed by all interviewers.

Comparative Study of Fertility Levels, Trends from 1995-1999

One of the most significant contributions of the MEASURE *DHS+* project is the creation of an internationally comparable body of data on demographic and health characteristics of populations in developing countries. The *DHS Comparative Reports* series examines these data across countries in a comparative format. In the third report in the series, *Fertility Levels, Trends, and Differentials 1995-1999*, author Shea Rutstein compares fertility rates for 43 countries, based on data from DHS surveys conducted between 1990 and 1999.

The total fertility rate (TFR) for the three years preceding the survey in each country ranges from a high of 7.2 children per woman in Niger to 2.3 children per woman in Vietnam. Ten countries, Yemen and nine in sub-Saharan Africa, have TFRs of 6 children or more per woman. The high fertility in these countries is mainly due to early entry into motherhood and little action to prevent or space births.

Seven countries report TFRs below 3 children per woman. Relatively high levels of contraceptive use and long intervals between births are responsible for most of the low fertility levels in these countries.

There are substantial differences in fertility levels by socioeconomic characteristics. In all countries, fertility is higher in rural than in urban areas. Outside sub-Saharan Africa, urban fertility rates are less than 3 children per woman in all but a few countries. By education, women with at least a secondary education have the lowest fertility levels. The largest differences by education are found in the Latin America/Caribbean region, with an average difference between women with no schooling and women with secondary or more schooling of 3.1 children.

Women's work status is important for lowering marital fertility in all but six countries. In all but two countries, women whose husbands work in agriculture have the highest marital fertility rates. In all but five countries, fertility is most depressed among women whose husbands have professional or clerical occupations.

Fertility has declined in all countries except Colombia. The average decline per year for the 22 countries with more than one survey was 1.3 percent. Declines of one or more births over a period of four years occurred mostly in sub-Saharan Africa, where more than half of the surveyed countries had a decline of 20 percent or more.

New Publications

DHS Country Reports

Bangladesh	1999-2000 SPA (English)
Nicaragua	2001 Final Report (Spanish)
Mali	2001 Summary Report (English)
Mauritania	2001 Summary Report (Arabic)

Comparative Reports

Rutstein, Shea O. 2002. *Fertility Levels, Trends, and Differentials 1995-1999*. DHS Comparative Reports No. 3.

Qualitative Research Studies

Henry, Rebecca, and Clara Fayorsey. 2002. *Coping with Pregnancy: Experiences of Adolescents in Ga Mashi, Accra*.

Yoder, P. Stanley, and Mamadou Kani Konaté. 2002. *Obtaining Informed Consent for HIV Testing: The DHS Experience in Mali*.

Other Publications

Govindasamy, Pav, Aklilu Kidanu and Hailom Banteyerga. 2002. *Youth Reproductive Health in Ethiopia*.

Institut Haïtien de l'Enfance. 2002. *Profil des femmes en Haïti*.

All DHS publications may be ordered online at: http://www.measuredhs.com/pubs

Final Reports Coming Soon

Bangladesh Maternal Mortality and Maternal Health Survey
Eritrea DHS
Rwanda SPA
Uganda Health Facilities Survey
Zambia DHS

MEASURE *DHS+* Visitors and Events

July 2002

MEASURE *DHS+* participated in the XIVth International AIDS conference held in Barcelona, Spain on July 7-12. Mary Mahy presented the new HIV/AIDS Survey Indicators database at the Monitoring the AIDS Pandemic Network (MAP) meeting. Greg Pappas attended a session of the MAP meeting and presented the current DHS activities related to HIV testing at the Second Generation Surveillance (SGS) meeting. Martin Vaessen also attended the SGS meeting. During the main conference Greg Pappas presented the results of the HIV testing in the Mali DHS.

September 2002

A workshop on Analyzing the Nepal DHS Data from a Gender Perspective was held in Kathmandu, Nepal, on September 4-7. The workshop was conducted by Sunita Kishor with assistance from Diana Prieto, USAID. Eleven persons attended the workshop for almost all of the time, and another 7 persons attended some of the sessions.

Fred Arnold attended the Meeting on Malaria and Equity (Ensuring that Malaria Control Interventions Reach the Poor) at the London School of Hygiene and Tropical Medicine on September 5-6 and made a presentation on DHS data on malaria and equity.

Bernard Barrère attended the sixth meeting of the UNAIDS "Monitoring and Evaluation Reference Group" (MERG) held in Geneva, Switzerland, at WHO headquarters on September 10 and 11.

From September 15-27, Ahmed Al-Sabir, from Niport-Bangladesh, Kanta Jamil, from USAID-Bangladesh and Shams El-Az Ifeen, from ICCDRB-Bangladesh, visited ORC Macro offices to finalize the maternal mortality report.

At the World Alliance of Breastfeeding Action Forum II, held in Arusha, Tanzania, September 23-27, Altrena Mukuria made two presentations based on DHS data: "Early Breastfeeding Practices in Africa: Influences on Initiation," and "Process of Complementary Feeding of Children 6-23 Months in a Positive Breastfeeding Environment: The Experience in Ghana and Mali."

From September 30 through October 28, Aklilu Kidanu and Hailom Banteyerga (Ethiopia), visited ORC Macro offices to conduct further analyses.

October 2002

Tulshi Saha made a presentation entitled "Three Delays and Maternal Mortality in Bangladesh: An Exploratory Analysis" based on the findings from the recently completed Bangladesh Maternal Health Services and Maternal Mortality Survey at the International Conference on Best Practices in Safe Motherhood held in New Delhi from October 3-6.

The National Seminar of the 2001 Nicaragua Demographic and Health Survey was held in Managua on October 24.

The National Seminar of the 2001 Mali Demographic and Health Survey was held in Bamako on October 31.

Livia Montana made presentations on "Using DHS Data to Map and Monitor Millennium Development Goal Indicators" and "Small Area Estimates of Poverty and Health Indicators" to CIESIN and UN staff at Columbia University, New York.

November 2002

MEASURE *DHS+* participated in the annual meeting of the American Public Health Association (APHA) held in Philadelphia, Pennsylvania, November 9-13. Sri Poedjastoeti and Jasbir Saggu made a presentation entitled "Uganda Demographic and Health Survey: the First Population Based Survey to Assess Prevalence of Vitamin A Deficiency." Shea Rutstein made a presentation on "Birth Spacing and Newborn Health."

A workshop to disseminate the findings of the in-depth analysis of the 2000 Ethiopia DHS was held on November 15 at the Ministry of Health in Addis Ababa.

Gulnara Semenov made a presentation on the Uzbekistan Health Examination Survey at the 2002 Uzbekistan Interagency Health Fair, held November 18-19 in Tashkent and sponsored by the Ministry of Health and USAID.

December 2002

From December 9-13, Livia Montana taught a workshop on the analysis of the Nepal 2001 DHS data using GIS in Kathmandu.

Stan Yoder made a presentation entitled "The Prevalence of FGC in African Countries Using DHS Data" at the Meeting on Female Genital Cutting held in Brussels from December 10-11.

What's new on the DHS website?

Look for the following new features on our website: http://www.measuredhs.com

Additions to the STATcompiler

Now the STATcompiler includes data on:

- **men age 15-59.** Data on men cover such areas as: family planning knowledge and use, fertility preferences, age at first marriage and at first sexual intercourse.
- **female genital cutting (FGC)** in 14 sub-Saharan countries as well as Egypt and Yemen. Available information include prevalence and type of FGC, median age at FGC, and attitudes toward the practice.

The STATcompiler is the online database tool that allows users to build customized tables using DHS data from a combination of more than 70 countries and hundreds of indicators. Look for it at http://www.statcompiler.com.

HIV/AIDS Survey Database

The HIV/AIDS Survey Indicators Database now has two expanded features: data tables and country reports.

Similar to the STATcompiler, the **Data Tables** section allows users to generate their own data tables comparing HIV/AIDS indicators across countries by selecting 1. survey type and country; 2. HIV indicators; and 3. background characteristics. Users can choose from a variety of survey types (including Demographic and Health Surveys, Multiple Indicator Cluster Surveys, Reproductive Health Surveys, Sexual Behavior Surveys, and Behavioral Surveillance Surveys) and a variety of indicators.

The **Country Reports** section is designed to provide a concise source of HIV/AIDS data compiled for a single country. The user can select from a list of countries and automatically generate a report including available HIV/AIDS data from all available surveys. These reports, complete with data tables and commentary, provide a fast and easily-accessible country profile.

Look for these tools at http://www.measuredhs.com/hivdata

DHS Introduces the AIDS Indicators Survey

MEASURE *DHS+* is pleased to announce the introduction of a new monitoring and evaluation tool in response to the AIDS pandemic. The AIDS Indicators Survey (AIS) is a national sample survey of men and women designed to assist countries in obtaining the data needed to provide the core indicators developed by UNAIDS for monitoring and reporting on HIV/AIDS programs. The AIS was jointly developed as part of an international collaboration to assist global HIV/AIDS monitoring and evaluation efforts.

The AIS model survey instrument includes questions on respondent's background, the children they have given birth to, marriage and sexual behavior, their knowledge, attitudes and testing experience of HIV, their knowledge of sexually transmitted infections, and other information on reproductive health. Additional questions will be asked about orphans and vulnerable children.

The AIS is part of a broader package of AIDS-specific data collection tools including a protocol for HIV testing and a facility or service provision assessment survey. Modules can be added to the core AIS survey to expand the information collected; module topics include adult mortality, care and support, and IEC.

The AIS will shortly be downloadable from the MEASURE *DHS+* website.

Selected Statistics From DHS Surveys

REGION/ SURVEY COUNTRY	VITAL RATES: Total Fertility Rate[a]	VITAL RATES: Total Wanted Fertility Rate[a]	VITAL RATES: IMR/ Under-5 Mortality Rate[b]	USE OF CONTRACEPTION (Currently Married Women 15-49): % Currently Using Any Method[c]	USE OF CONTRACEPTION (Currently Married Women 15-49): % Currently Using Any Modern Method[d]	MATERNAL CARE (Births in Last 5 Years): % Women Receiving Antenatal Care[e]	MATERNAL CARE (Births in Last 5 Years): % Women Receiving Assistance at Delivery from Professional[e]	CHILD HEALTH INDICATORS: Median Duration (Months) of Breast-feeding[f]	CHILD HEALTH INDICATORS: % Children 0-59 Months Stunted[g]	CHILD HEALTH INDICATORS: % Children Fully Immunized[h]
CENTRAL ASIA										
Kazakhstan 1999	2.1	1.9	62/71	66	53	94	99	7[l]	10	81
Turkmenistan 2000	2.9	2.7	74/94	62	53	98[i]	97	18	22	90
LATIN AMERICA/CARIBBEAN										
Bolivia 1998	4.2	2.5	67/92	48	25	65	57	18	26[m]	26
Colombia 2000	2.6	1.8	21/25	77	64	91[i]	86	13	14	52[o]
Dominican Rep. 2002	3.0	‡	31/38	70	66	99	97	‡	9	35
Guatemala 1999	5.0	4.1	45/59	38	31	60	41	20	46	60
Haiti 2000	4.7[b]	2.7[b]	80/119	28	22	79	24	19	23	34
Nicaragua 2001	3.2	2.3	31/40	88	86	86	98	17	20	72[p]
Peru 2000	2.9	1.8	33/47	69	50	84[i]	59	22	25	66[p]
NORTH AFRICA/WEST ASIA/EUROPE										
Armenia 2000	1.7	1.5	36/39	61	22	92[i]	97	9	13	76
Egypt 2000	3.5	2.9	44/54	56	54	53	61	18	19	92
Jordan 2002	3.7	‡	22/27	56	39	99	98	‡	9	94[q]
Turkey 1998	2.6	1.9	43/52	64	38	68	81	12	16	46
SOUTH/SOUTHEAST ASIA										
Bangladesh 2000	3.3	2.2	66/94	54	43	33[i]	12	31[k]	45	60
Cambodia 2000	4.0[b]	3.1[b]	95/124	24	19	38[i]	32	24	45	40
India 1999	2.9	2.1	68/95	48	43	65[j]	42[j]	25	47[n]	42
Nepal 2001	4.1	2.5	64/91	39	35	49	13	33	51	66
Philippines 1998	3.7	2.7	35/48	47	28	86	56	13	†	73
SUB-SAHARAN AFRICA										
Benin 2001	5.6	4.6	89/160	19	7	87	73	22	31	49
Burkina Faso 1999	6.8[b]	6.0[b]	105/219	12	5	61	31	28	37	29
Cameroon 1998	5.2	4.6	77/151	19	7	79[j]	58[j]	18	29	36
Côte d'Ivoire 1999	5.2	4.5	112/181	15	7	84	47	21	25	51
Eritrea 2002	4.8	‡	48/93	8	7	70	28	‡	38	76
Ethiopia 2000	5.9[b]	4.9[b]	97/166	8	6	27[i]	6	25	52	14
Gabon 2000	4.3[b]	3.5[b]	57/89	33	12	95[i]	87	12	21	17
Ghana 1998	4.6[b]	3.7[b]	57/108	22	13	89	44	22	26	62
Guinea 1999	5.5	5.0	98/177	6	4	71	35	22	26	32
Kenya 1998	4.7	3.5	74/112	39	32	92[j]	42[j]	21	33	65
Malawi 2000	6.3	5.2	104/189	31	26	91[i]	56	24[i]	49	70
Mali 2001	6.8	6.1	113/229	8	6	57[i]	41	23	38	29
Mauritania 2001	4.7	4.3	74/116	8	5	65[i]	57	21	35	32
Namibia 2000	4.2	‡	38/62	44	43	91	78	‡	24	65
Niger 1998	7.5	7.2	123/274	8	5	40[j]	44[j]	21	41[n]	18
Nigeria 1999	5.2	4.8	140/75	15	9	64[j]	42[j]	21	46[n]	17
Rwanda 2000	5.8	4.7	107/196	13	4	92[i]	31	33[i]	43	76
South Africa 1998	2.9	2.3	45/59	56	55	94	84	16	†	63
Tanzania 1999	5.6	4.8	99/147	25	17	49[i]	36	21	44	68
Togo 1998	5.2	4.2	80/146	24	7	82[j]	51[j]	24	22	31
Uganda 2001	6.9	5.3	88/152	23	18	92[i]	39	22[i]	39	37
Zambia 2002	5.9	‡	95/168	34	23	93	43	‡	47	70
Zimbabwe 1999	4.0[b]	3.4[b]	65/102	54	50	93[i]	73	19	27	75

† Not available from survey data.
‡ Not available until publication of final report.
a Based on 3 years preceding survey (women 15-49).
b Based on 5 years preceding survey.
c Excludes prolonged abstinence.
d Excludes periodic abstinence, withdrawal, "other."
e Care provided by medically trained personnel.
f Children <3 years old (any breastfeeding).
g Height-for-age z-score is below –2 SD based on the NCHS/CDC/WHO reference population.
h Children 12-23 months vaccinated (BCG, measles, three doses each DPT and polio).
i Based on last birth.
j Based on births in the preceding 3 years.
k Based on births in the preceding 4 years.
l Children 0-59 months old.
m Children 3-35 months old.
n Children 0-35 months old.
o Excludes measles.
p Children 18-29 months old.
q Excludes BCG.

For more indicators, and to build custom tables with DHS data, visit the STATcompiler at www.measuredhs.com