

Sudan

Maternal, Newborn & Child Survival

March 2010

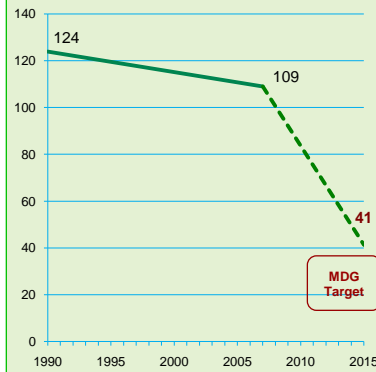
Sudan

DEMOGRAPHICS

Total population (000)	41,348	(2008)
Total under-five population (000)	5,836	(2008)
Births (000)	1,296	(2008)
Under-five mortality rate (per 1000 live births)	109	(2008)
Infant mortality rate (per 1000 live births)	70	(2008)
Neonatal mortality rate (per 1000 live births)	27	(2004)
Total under-five deaths (000)	138	(2008)
Maternal mortality ratio, adjusted (per 100,000 live births)	450	(2005)
Maternal mortality ratio, reported (per 100,000 live births)	1,100	(2006)
Lifetime risk of maternal death (1 in N)	53	(2005)
Total maternal deaths (number)	5,300	(2005)

Under-five mortality rate

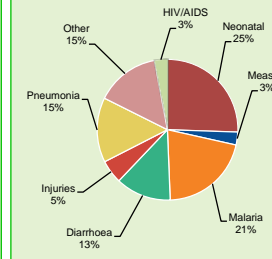
Deaths per 1000 live births



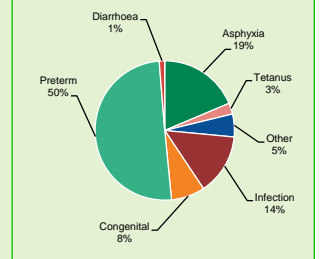
Causes of under-five deaths

Globally more than one third of child deaths are attributable to undernutrition

Causes of under-five deaths



Causes of neonatal deaths



INTERVENTION COVERAGE FOR MOTHERS, NEWBORNS AND CHILDREN

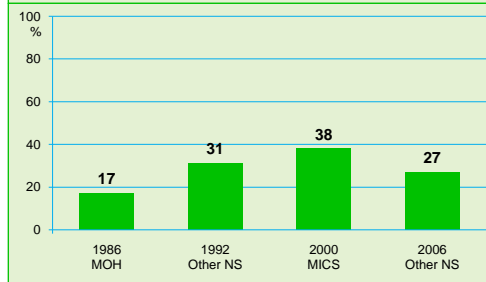
NUTRITION¹

Stunting prevalence (based on 2006 WHO reference population, moderate and severe, %)	40	(2006)	Wasting prevalence (based on 2006 WHO reference population, moderate and severe, %)	16	(2006)	Complementary feeding rate (6-9 months, %)	56	(2006)
Stunting prevalence (based on NCHS/WHO reference population, moderate and severe, %)	33	(2006)	Wasting prevalence (based on NCHS/WHO reference population, moderate and severe, %)	15	(2006)	Low birthweight incidence (%)	31	(1999)

Underweight prevalence

Percent children < 5 years underweight for age

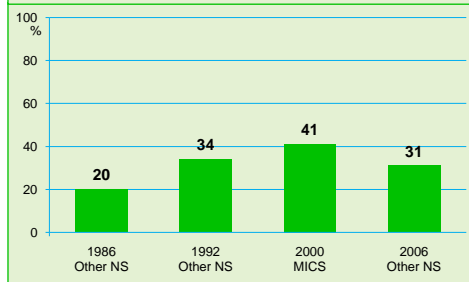
Based on 2006 WHO reference population



Underweight prevalence

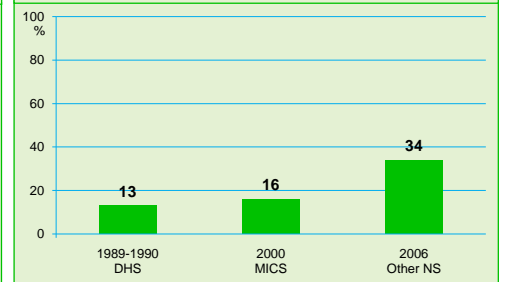
Percent children < 5 years underweight for age

Based on NCHS/WHO reference population



Exclusive breastfeeding

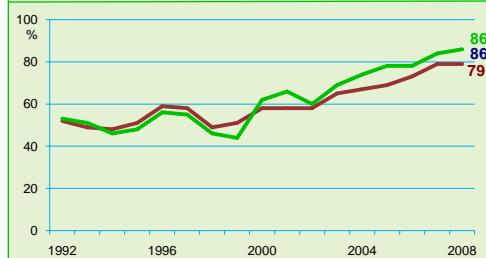
Percent infants < 6 months exclusively breastfed



CHILD HEALTH

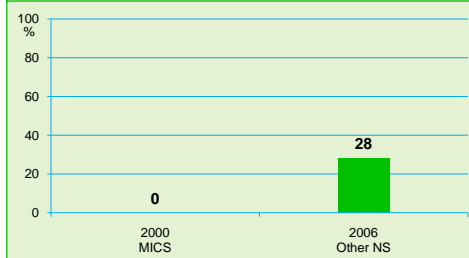
Immunisation

Percent of children immunised against measles
Percent of children immunised with 3 doses DPT
Percent of children immunised with 3 doses of Hib



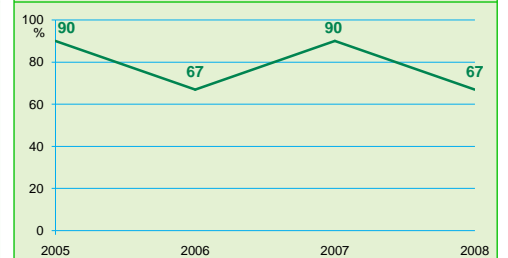
Malaria prevention

Percent children < 5 years sleeping under ITNs



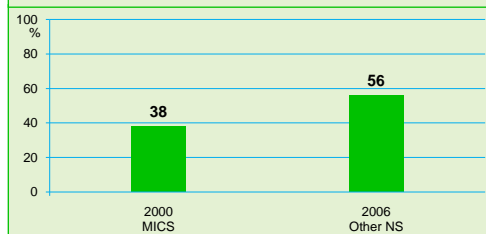
Vitamin A supplementation

Percent children 6-59 months receiving two doses of vitamin A during calendar year



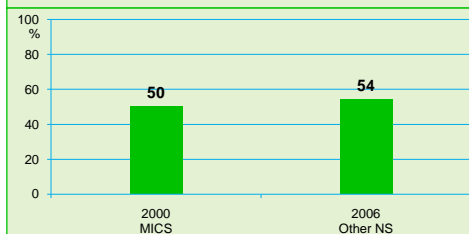
Diarrhoeal disease treatment

Percent children < 5 years with diarrhoea receiving oral rehydration therapy or increased fluids, with continued feeding



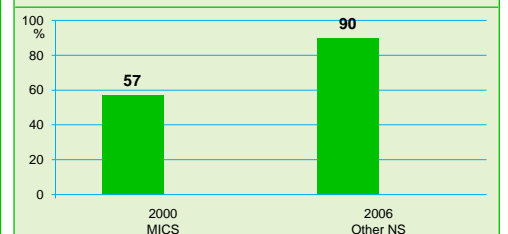
Malaria treatment

Percent febrile children < 5 years using anti-malarials



Pneumonia treatment

Percent children < 5 years with suspected pneumonia taken to appropriate health provider
Percent children < 5 years with suspected pneumonia receiving antibiotics



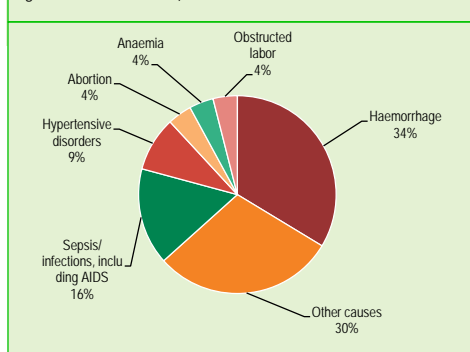
Sudan

MATERNAL AND NEWBORN HEALTH

Proportion of women with low BMI (< 18.5 Kg/m ² , %)	-	-
Unmet need for family planning (%)	26	(1993)
Total fertility rate	4.2	(2008)
Adolescent birth rate (births per 1000 woman aged 15-19 yr)	72	(1997)
Antenatal visit for woman (4 or more visits, %)	-	-
Early initiation of breastfeeding (within 1 hour of birth, %)	-	-
Institutional deliveries (%)	19	(2006)
Postnatal visit for baby (within 2 days for home births, %)	-	-
Postnatal visit for mother (within 2 days, %)	-	-

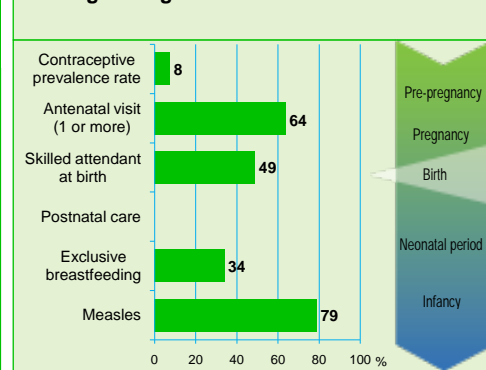
Causes of maternal deaths

Regional estimates for Africa, 1997-2002



Source: Khan, Khalid S., et al, Lancet 2006;367:1066-74

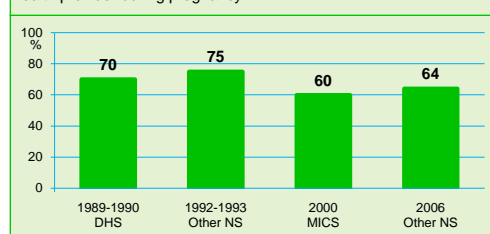
Coverage along the continuum of care



Source: DHS, MICS, Other NS

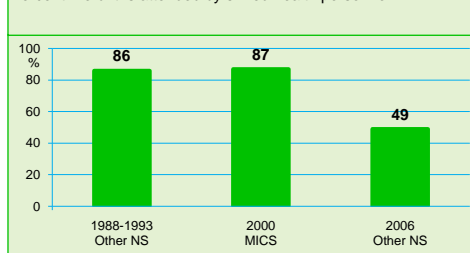
Antenatal care

Percent women aged 15-49 years attended at least once by a skilled health provider during pregnancy



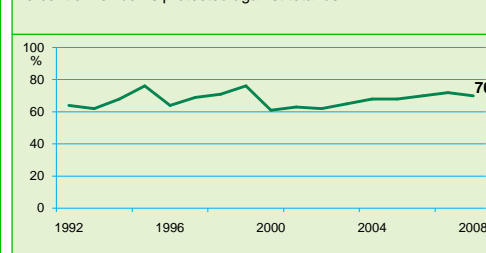
Skilled attendant at delivery

Percent live births attended by skilled health personnel



Neonatal tetanus protection

Percent of newborns protected against tetanus



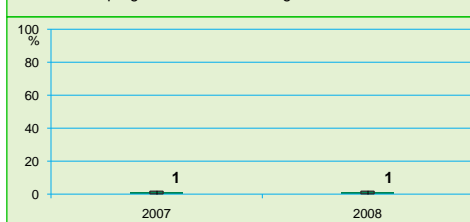
Source: WHO/UNICEF

HIV AND AIDS

HIV prevalence among young women (15-24 yrs.%)	1.0	(2007)
HIV prevalence among young men (15-24 yrs.%)	0.3	(2007)
HIV+ children receiving ART (%)	2	(2008)
Orphan school attendance ratio	0.96	(2000)

Prevention of mother-to-child transmission of HIV

Percent HIV+ pregnant women receiving ARVs for PMTCT



Source: MOH/UNAIDS/WHO

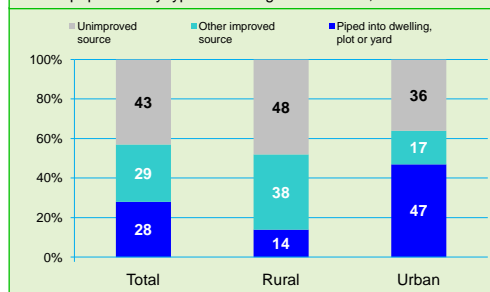
EDUCATION

Survival rate to last grade of primary school (% administrative data)	62	(2006)
Survival rate to last grade of primary school (% survey data)	56	(2000)
Primary school net enrolment or attendance ratio (% total)	54	(2006)
Primary school net enrolment or attendance ratio (% male)	56	(2006)
Primary school net enrolment or attendance ratio (% female)	52	(2006)

WATER AND SANITATION

Drinking water coverage

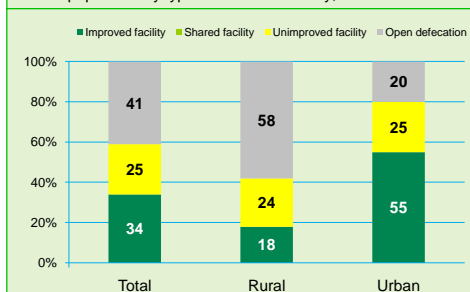
Percent population by type of drinking water source, 2008



Source: WHO/UNICEF JMP, 2010

Sanitation coverage

Percent population by type of sanitation facility, 2008



Source: WHO/UNICEF JMP, 2010

CHILD PROTECTION

Women aged 20-24 years who were married or in union by age 18 (%)	34	(2006)
Birth registration (%)	33	(2006)
Female genital mutilation/cutting (%)	89	(2006)

POLICIES *(being updated)*

International Code of Marketing of Breastmilk Substitutes	Partial	(2008)
New ORS formula and zinc for management of diarrhoea	Partial	(2008)
Community treatment of pneumonia with antibiotics	Yes	(2008)
IMCI adapted to cover newborns 0-1 week of age	No	(2008)
Costed implementation plan(s) for maternal, newborn and child health available	Yes	(2008)
Midwives to be authorised to administer a core set of life saving interventions	-	-
Maternity protection in accordance with ILO Convention 183	No	(2008)
Specific notification of maternal deaths	-	-

SYSTEMS *Financial Flows and Human Resources (being updated)*

Per capita total expenditure on health (US\$)	61	(2006)
General government expenditure on health as % of total government expenditure (%)	7	(2005)
Out-of-pocket expenditure as % of total expenditure on health (%)	61	(2005)
Density of health workers (per 1000 population)	1.2	(2006)
Official Development Assistance to child health per child (US\$)	9	(2005)
Official Development Assistance to maternal and neonatal health per live birth (US\$)	15	(2005)
National availability of Emergency Obstetric Care services (%)	35	(2005)

DISPARITIES IN INTERVENTION COVERAGE ²

Indicator	Total	Gender			Residence			Wealth Quintile						Source
		Male	Female	Ratio of Male to Female	Urban	Rural	Ratio of Urban to Rural	Poorest	Second	Middle	Fourth	Richest	Ratio of Richest to Poorest	
NUTRITION ¹														
Low birthweight incidence (%)	31	-	-	-	-	-	-	-	-	-	-	-	-	MICS 1999
Underweight prevalence (based on 2006 WHO reference population, %)	27	28	26	1.1	21	30	0.7	31	33	30	23	17	0.5	Other NS 2006
Underweight prevalence (based on NCHS/WHO reference population, %)	31	32	30	1.1	-	-	-	36	37	34	27	18	0.5	Other NS 2006
Stunting prevalence (based on 2006 WHO reference population, %)	40	42	37	1.1	35	42	0.8	39	45	44	39	28	0.7	Other NS 2006
Wasting prevalence (based on 2006 WHO reference population, %)	16	17	15	1.1	14	18	0.8	24	20	15	12	11	0.5	Other NS 2006
Exclusive breastfeeding (0-5 months, %)	34	32	36	0.9	-	-	-	29	30	35	31	46	1.6	Other NS 2006
Complementary feeding (6-9 months, %)	56	58	54	1.1	-	-	-	30	43	60	70	76	2.5	Other NS 2006
CHILD HEALTH														
Careseeking for pneumonia (%)	90	90	90	1.0	-	-	-	90	87	90	93	95	1.1	Other NS 2006
Antibiotic use for pneumonia (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ORT (ORS or RHF) or increased fluids, with continued feeding (%)	56	56	56	1.0	-	-	-	53	54	57	63	59	1.1	Other NS 2006
Children sleeping under ITNs (%)	28	-	-	-	-	-	-	15	23	32	35	37	2.5	Other NS 2006
Children with fever receiving any anti-malarial medicines (%)	54	56	52	1.1	-	-	-	43	49	58	75	84	2.0	Other NS 2006
MATERNAL AND NEWBORN HEALTH														
Proportion of women with low BMI (< 18.5 Kg/m ² , %)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Antenatal care coverage at least one visit (%)	64	-	-	-	-	-	-	36	49	65	81	90	2.5	Other NS 2006
Antenatal care coverage (4 or more visits, %)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Skilled attendant at delivery (%)	49	-	-	-	-	-	-	15	30	52	78	90	6.0	Other NS 2006
Early initiation of breastfeeding (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WATER AND SANITATION ³														
Use of improved drinking water sources (%)	57	-	-	-	64	52	1.2	-	-	-	-	-	-	WHO/UNICEF JMP 2010
Use of improved sanitation facilities (%)	34	-	-	-	55	18	3.1	-	-	-	-	-	-	WHO/UNICEF JMP 2010
EDUCATION														
Survival rate to last grade of primary school (administrative data, %)	62	64	60	1.1	-	-	-	-	-	-	-	-	-	UIS 2009
Survival rate to last grade of primary school (survey data, %)	56	53	58	0.9	67	41	1.6	21	41	50	64	80	3.8	MICS 2000
Primary school net enrolment or attendance ratio	54	56	52	1.1	-	-	-	-	-	-	-	-	-	Other NS 2006
CHILD PROTECTION														
Women aged 20-24 years who were married or in union by age 18 (%)	34	-	-	-	24	40	0.6	50	50	41	28	10	0.2	Other NS 2006
Birth registration (%)	33	-	-	-	53	22	2.4	6	11	25	56	86	14.3	Other NS 2006
Female genital mutilation/cutting (%)	89	-	-	-	88	90	1.0	74	84	89	91	93	1.3	Other NS 2006

Note: The format for this Country Profile has been adapted from the Countdown to 2015, 2008 report (UNICEF, 2008). Coverage data have been largely derived from national household surveys such as the Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Surveys (DHS). For the majority of coverage indicators, UNICEF global databases were used. Other organizations such as the World Health Organization, UNAIDS, United Nations Population Fund, London School of Hygiene and Tropical Medicine and Saving Newborn Lives also provided data. Details on indicators, data sources, and definitions of indicators, can be found at www.childinfo.org.

1. **Anthropometric indicators - Reference Standards for Underweight, Stunting and Wasting.** New international Child Growth Standards for infants and young children were released by WHO in 2006, replacing the older NCHS/WHO reference population. During this transition period, the Country Profile provides underweight, stunting and wasting data based on both the 2006 WHO reference population and the older NCHS/WHO reference population, where available. In using the 2006 WHO reference population, estimates generally change in the following manner: stunting is greater throughout childhood; underweight rates are higher during the first half of infancy and lower thereafter; and, wasting rates are higher during infancy.

2. **Disparities.** Disparity information is only available for data directly derived from household surveys such as MICS and DHS. Therefore, disparity data are not available for the following indicators: mortality, vitamin A supplementation, immunization, and for HIV/AIDS. In addition, neither UNICEF Global Databases nor databases from partner organizations maintain disparity data for the following indicators: total fertility rate, unmet need, institutional deliveries, contraceptive prevalence, adolescent birth rate.

3. **Water and sanitation wealth quintile data** are derived from a MICS or DHS survey from 2004-2009. Sanitation wealth quintile data includes shared and public facilities of an improved type. Urban, rural and total coverage estimates provided are for 2008 and are those published by the WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation.