# Health Status in Africa

#### Mame Birame DIOUF

Maladies Infectious Disease Clinic, Dakar University, Senegal

#### INTRODUCTION

An attempt to make clear a picture of health problems in Africa seems to be a difficult because of tremendous difficulties of having relevant data. For example, in many African countries, less than 10 percent of infant deaths are registered. However, some international agencies such as WHO and the World Bank are making big effort to get data recorded in many countries. Thus using those availabel data from international agencies, we will try to find out the trends and levels of health in Africa.

Further, we will find out a priority concern and of which conditions and diseases are placing the greatest burden on the population.

## Socio Economic Characteristics

The African continent occupies about 30 million-km square and its population is 613 million who speak more than 2000 languages. It includes countries like Nigeria and Seychelles, which has 118 million people and has only 100,000 respectively. In terms of economy, South Africa contributes 40 percent of the sub-Saharan Africa's gross national product and the Somalia has only 0.3 percent.

Using the World Bank data, we can point out the poor achievement of sub-Saharan Africa in term of average annual growth. It is only 0.6% even though Latin America and the Caribbean countries are 2.3 aversely. This low economic growth countries might be worsen by the highest fertility rate in the world (6.6). (Table 1,2)

## Health Status

The health status indicators such as life expectancy at birth, infant mortality rate and maternal mortality rate are the worst in the world. The average life expectancy at birth for sub-Saharra is 51 years compared to 62 years in other low-income countries. The infant mortality rate in sub-Saharan region is 104 per 1000 live births and the maternal mortality rate is 686 per 100,000 live births. The health sector should give a high priority to development policy throughout the continent and efforts should be made in every country.

#### Burden of Diseases

The measure of global burden of diseases using the disability adjusted life years (DA-LYs) show that the burden of communicable diseases has a big burden in Africa (Table 3). Malaria, respiratory infectious deseases and diarrhea are the main burdens facing the African

continent. Further, major public health concern is HIV/AIDS, sexually transmitted diseases, and tuberculosis.

**Table 1.** Indicators of Mortality, Fertility, Education, and Economic Performance in Sub-Saharan Africa and Other Regions.

		GNP	per capita				Total	Secondary
	Population, 1988 (millions)	Dollars,	Average annual growth, 1965-87 (percent)	Life expectancy and mortality, 1988 <sup>a</sup>			fertility rate,	school enrollment,
Region		1987		e(0)	e(10)	q(5)	1988 b	1986 °
Sub-Saharan Africa	467	330	0.6	51	53	172	6.6	16
Latin America and the Caribbean	424	1,790	2.1	67	62	67	3.6	48
3. Middle East and								.0
North Africa	410	1,401 <sup>d</sup>	2.8 <sup>d</sup>	60	58	118	5.6	47
4. Asia	2,595	402	3.8	64	60	87	3.3	39
5. Industrial nonmarket economies	423	п.а.	n.a.	70	62	27	2.3	93
6. Industrial market								
economies	782	14,137	2.3	76	67	18	1.8	92
7. World	5,101	n.a.	n.a.	65	61	94	3.4	54

#### n.a. Not availabel.

**Note:** South Africa is in region 6; the boundary between regions 3 and 4 is at the Pakistan-India border; regions 5 is the U.S.S.R. and all the countries of Eastern Europe; and Oceania (but not Australia and New Zeland which are in region 6) and China are in region 4.

a. Life expectancy at age zero, e (0), is the number of years a newborn infant would live if he or she were subject to the overall patten of mortality prevailing at the time, assuming this pattern remained unchanged.

Life expectancy at age 10, e (10), is the number of years a person who has reached age 10 would live on average after exact age 10, assuming the prevailing pattern of mortality would remain unchanged. Child mortality risk, q (5), is the probability of dying before reaching exact age 5 and is expressed here per thousand.

- b. Total fertility rate is the mean total number of children that a woman would bear were she to experience the current age-specific fertility rates.
- c. Percentage of the school-age population enrolled.
- d. Excludes Iran and Iraq.

Source: World Bank data. (Richard G. Feachem, Dean T. Jamison, and Eduard R. Bos)

Table 2. Indicators of Economic Performance, Population, Fertility, and Education in Sub-Saharan Africa

	GNP per	capita	Populat	ion			
<del>-</del>	Dollars,	Average annual growth, 1965-87	Size, 1987	Average annual growth, 1965-87	Total fertility rate, 1987	Secondary school enrollment, 1986	
Country	1987	(percent)	(thousands)	(percent)	1907		
Low-income economies							
Semiarid				2.2	5.0		
Chad	150	-2.0	5,267	2.2	5.9	6	
Burkina Faso	190	1.6	8,312	2.3	6.5	6	
Mali	210	n.a.	7,774	2.2	6.5	7	
Gambia,	220	1.2	797	3.1	6.5	12	
Niger	260	-2.2	6,787	2.8	7.0	6	
Somalia	290	-0.3	5,711	2.8	6.8	12	
Other							
Ethiopia	130	0.1	44,786	2.5	6.5	12	
Zaire	150	-2.4	32,604	2.9	6.1	n.a.	
Malawi	160	1.4	7,905	3.2	7.6	4	
Guinea-Bissau	160	-1.9	922	2.6	6.0	n.a.	
Mozambique	170	n.a.	14,555	2.6	6.3	7	
Tanzania	180	-0.4	23,870	3.4	7.0	3	
Madagascar	210	-1.8	10,902	2.7	6.4	36	
Burundi	250	1.6	4,990	2.1	6.8	4	
Uganda	260	-2.7	15,666	3.0	6.9	n.a.	
Togo	290	0.0	3,249	3.2	6.5	21	
Sierra Leone	300	0.2	3,841	2.1	6.5	n.a.	
Benin .	310	0.2	4,313	2.8	6.5	16	
Central African Republic	330	-0.3	2,720	2.0	5.8	13	
Rwanda	330	1.6	6,434	3.3	8.0	3	
	330	1.9	22,096	3.7	7.7	20	
Kenya	330	-0.5	23,119	2.9	6.4	20	
Sudan	390	-1.6	13,571	2.5	6.4	35	
Ghana	520	-0.6	6,950	2.6	6.5	13	
Senegal Guinea	n.a.	n.a.	6,479	2.0	6.2	12	
	11.00		•				
Middle-income economies							
Oil importers	2		7.012	3.1	6.8	19	
Zambia	250	-2.1	7,213	2.5	5.8	22	
Lesotho	370	4.7	1,639	2.3	6.5	15	
Mauritania	440	-0.4	1,860	3.1	6.5	n.a	
Liberia	450	-1.6	2,324	3.3	5.9	46	
Zimbabwe	580	0.9	9,044	3.0	n.a.	n.a	
Swaziland	700	2.4	712	3.0 4.2	7.4	20	
Cote d'Ivoire	740	1.0	11,126		5.0	3:	
Botswana	1,050	8.9	1,135	3.5	2.1	51	
Mauritius	1,490	3.2	1,038	1.5	2.1		
Oil exporters						<u>.</u>	
Nigeria	370	1.1	106,638	2.7	6.5	n.a	
Congo	870	4.2	2,018	2.9	6.5	n.a	
Cameroon	970	3.8	10,859	2.8	6.5	23	
Gabon	2,700	1.1	1,050	3.8	5.5	27	
Angola	n.a.	n.a.	9,180	2.6	n.a.	13	
Sub-Saharan Africa	330	0.6	452,820	2.9	6.6	10	

n.a. Not available.

Note: See table 1-1 for difinitions.

Source: World Bank socioeconomic data base.

Table 3. Distribution of DALY loss by cause and demographic region, 1990

	Sub- Saharan				Other Asia	Latin America and	Middle Eastern	Formerly socialist economies of	Established market
Cause	World	Africa	India	China	and islands	the Caribbean	Crescent	Europe	economies
Population(millions)	5,267	510	850	1,134	683	444	503	346	798
Communicable diseases	45.8	71.3	50.5	25.3	48.5	42.2	51.0	8.6	9.7
Tuberculosis	3.4	4.7	3.7	2.9	5.1	2.5	2.8	0.6	0.2
STDs and HIV	3.8	8.8	2.7	1.7	1.5	6.6	0.7	1.2	3.4
Diarrhea	7.3	10.4	9.6	2.1	8.3	5.7	10.7	0.4	0.3
Vaccine-preventable childhood infections	5.0	9.6	6.7	0.9	4.5	1.6	6.0	0.1	0.1
Malaria	2.6	10.8	0.3	*	1.4	0.4	0.2	*	*
Worm infections	1.8	1.8	0.9	3.4	3.4	2.5	0.4		*
Respiratory infections	9.0	10.8	10.9	6.4	11.1	6.2	11.5	2.6	2.6
Maternal causes	2.2	2.7	2.7	1.2	2.5	1.7	2.9	0.8	0.6
Perinatal causes	7.3	7.1	9.1	5.2	7.4	9.1	10.9	2.4	2.2
Other	3.5	4.6	4.0	1.4	3.3	5.8	4.9	0.6	0.5
Noncommunicable diseases	42.2	19.4	40.4	58.0	40.1	42.8	36.0	74.8	78.4
Cancer	5.8	1.5	4.1	9.2	4.4	5.2	3.4	14.8	19.1
Nutritional deficiencies	3.9	2.8	6.2	3.3	4.6	4.6	3.7	1.4	1.7
Neuropsychiatric disease	6.8	3.3	6.1	8.0	7.0	8.0	5.6	11.1	15.0
Cerebrovascular disease	3.2	1.5	2.1	6.3	2.1	2.6	2.4	8.9	5.3
Ischemic heart disease	3.1	0.4	2.8	2.1	3.5	2.7	1.8	13.7	10.0
Pulmonaty obstruction	1.3	0.2	0.6	5.5	0.5	0.7	0.5	1.6	1.7
Other	18.0	9.7	18.5	23.6	17.9	19.1	18.7	23.4	25.6
Injuries	11.9	9.3	9.1	16.7	11.3	15.0	13.0	16.6	11.9
Motor vehicle	2.3	1.3	1.1	2.3	2.3	5.7	3.3	3.7	3.5
Intentional	3.7	4.2	1.2	5.1	3.2	4.3	5.2	4.8	4.0
Other	5.9	3.9	6.8	9.3	5.8	5.0	4.6	8.1	4.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Millions of DALYs	1,362	293	292	201	177	103	144	58	94
Equivalent infant deaths (millions)	42.0	9.0	9.0	6.2	5.5	3.2	4.4	1.8	2.9
DALYs per 1,000 population	259	575	344	178	260	233	286	168	117

\*Less than 0.05 percent.

Note: DALY, disability-adjusted life year, STD, sexually transmitted disease; HIV, human immunodeficiency virus.

Source: World Bank data. (Richard G. Feachem, Dean T. Jamison, and Eduard R. Bos)

## Infectious Diseases

Africa is not uniformly affected by HIV/AIDS. The mosaic epidemics can be observed between urban and rural areas within a country. However, regarding to people living with HIV/AIDS in the world, six out of 10 infected male adults, eight out of 10 infected female adults and seven out of 10 children infected reside in Africa. The estimated number of adults and children living with HIV/AIDS is 20.8 million.

TB cases have also increased as a result of HIV/AIDS epidemic and have become a

leading cause of death among HIV infected individuals. Roughly one third of Africa's population is infected with TB.

Malaria remains Africa's most important cause of mortality. 300-500 million clinical cases are reported globally and more than 90 per cent of them are estimated to be in Sub-Sahara Africia. At least one million African children under the age of 5 will die from malaria this year according to WHO.

#### Health Determinants

The reason why diseases occur is an important question of in the African setting. The behavioral risk factors may contribute to the incidence of disease. The determinants of the crisis of Africa's health development can be grouped into several categories like socio-economic factors, demographic factors and environmental factors. Despite the fact that all of these factors are crucial, some of them will be elaborated as examples.

Political instability often leads to civil strife and the ethnic conflicts, which eventually leads to a large number of refugees. These people crowded together in unsanitary accommodations are predisposition to diseases and epidemics. The women, children and the elderly people are the most vulnerable in the population. The high population growth rate has lead to rapid urbanization and to the increase in urban slums. Because of climatic conditions, Africa became a spot of a number of disease. In addition, the poor sanitation and limited access to safe water seen in many urban slums has led to widespread environmental degradation and pollution. Moreover, in the process of improving the health status of our population, we must be aware of some threatening like political instability, poverty, high population growth rate and rapid urbanization, deterioration of social structures and support systems, cultural beliefs and practices.

## Conclusion

Health problems in Africa are complex. However, establishing a tentative agenda for disease specific priority, which may be appropriate for Sub-Saharan African countries, would be a relevant methodology in solving health problems.

Further, cost effective interventions are not yet available. We already know that expanded program on immunization and ORS are effective enough. We have a good basis for action. To prevent diseases more effectively, I would like to know how the adequate community participation is.

The major causes of mortality and morbidity in Africa are preventable. Therefore, we must pay much more attention to diseases prevention and control programs and make them sustainable by involving the community. Further, to involve the community effectively, public health officials must be able to understand the ethno-cultural diversity.