Adult Morbidity and Mortality in Sub-Saharan Africa

"A single death is a tragedy, a million deaths is a statistic".-Joseph Stalin

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Demographic estimation techniques suggest that worldwide about 50 million deaths occur each year, of which about 39 million are in the developing countries.1

The principal focus of public health research and policy formulation in the developing countries has been children. This attention has been easy to justify, particularly in environments of high infant mortality from preventable causes, and it has led to major advances in the case management and prevention of communicable diseases of childhood.2 Nearly 90% of children born in developing countries now survive to be 15 years old owing to substantial reductions in child mortality.3 However, many of the health problems of adults, including most non-communicable diseases and injuries, have been neglected.

Factors such as socioeconomic development, educational attainment, technological developments and their dispersion among populations, as well as exposure to hazards such as tobacco are important determinants of rates and patterns of ill health.4 To prevent and control disease and injury, information about the leading medical causes of illness and exposures or risk factors are required. But the assessment of these has been hampered by lack of common methods to investigate the overall worldwide disease burden mostly in the developing countries. The Global Burden of Disease Study (GBD) provides a standardized approach to epidemiological assessment, that uses a standard unit, the Disability Adjusted Life Year (DALY) to aid comparisons.5 However many developing countries are yet to "catch on".

Adults for the purpose of this article will be defined as those individuals between 15 and 59 years of age. This population comprises most members of the society who are economically productive and responsible for the support of the children and elderly dependents. Despite the importance of this group, the society

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remains ignorant about the nature and extent of health problems of this group. Adult health in developing countries receives scant attention in public health forums, in journals devoted to epidemiology and health services and in international policy making.2 The health of adults is essential for the well being of young and old, hence, there is an urgent need to predict the trends and develop policies that deals with the causes of adult morbidity and mortality.4, 6, 7

Global Health Status

In considering the health information needs of developing countries, one cannot ignore the essential fact that poverty is the leading cause of poor health across the globe.9-11 In 1996, a report showed that 358 billionaires controlled assets greater than the annual incomes of countries representing 45% of the world's population -2.5 billion people.12 It is further noted that in this age of potential abundance, more are hungry than ever before. Oxfam reported that a third of people in Asia, Africa, Latin America and the Caribbean are too malnourished to lead fully productive lives.13 Poverty not only excludes people from benefits of health-care systems but also restricts them from participating in decisions that affect their health. The resulting health inequalities are well documented and the search for greater equity attracts many concerned players and initiatives. Fundamental to the success of these efforts, however, is the need for people to be able to negotiate their own inclusion into health systems and demand adequate health care.14

Of the global total of 30 million persons living with HIV in 1997 some two-thirds (21 million) are in Sub-Saharan Africa. Infection is concentrated in the socially and economically productive groups aged 15-45 with slightly more women infected than men. It is estimated that 12 million persons have died from HIV-related illnesses since the start of the epidemic worldwide, of which approximately 9 million were

Africans. Hence, it is inferred that, this has cumulative impact on more than 150 million Africans taking into account spouses, children and elderly dependents of the productive population. "This is a staggering proportion of the total population in Sub-Saharan Africa - more than one quarter of Africans are directly affected by the HIV epidemic. Few people can remain unaffected in indirect ways, i.e. through the illness and death of relatives and colleagues."15 (See fig 1).

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Level of Adult Ill Health

The general common assumption is that, once a child survived childhood, the survival disadvantage of living in a developing country is small. In fact, the risk of a 15-year-old dying before reaching 60 years of age is 25% for men and 22% for women in developing countries, more than double that in the industrialized market economies, where the respective figures are 12% and 5%.16 In some African countries (e.g. Sierra Leone), the adult mortality risk is more than 50%.2 The estimated risk of death in Sub-Saharan Africa adults is 38% for male and 32% for female compared to 18% and 16% for risk of death between birth and 5 years of age respectively.2

Documenting the overall nature of adult morbidity is much more difficult. Although specific disease studies are relatively common (and show high rates in adults for several important diseases), it is not easy to combine these to produce a balanced picture of the burden of morbidity.2

Household surveys of general morbidity point to high levels of acute morbidity in developing country adults.17 Evidence from large-scale World Bank surveys in Cote d'Ivoire, Peru and Ghana, showed that 33% to 45% of adults claimed to have been ill in the past month, with adults accounting for more than 50% of day's ill and in the hospital. In Cote d'Ivoire, 20% of all adults claimed to be ill for at least one week in the past month and 7% of them reported being ill for the whole month.18

Public Health Realities in Developing Countries

For many African countries the mid-20th century saw dramatic improvements in health and life expectancy brought about by technological advances, the introduction of primary health care, increased literacy, access to safe water, sanitation and housing and better understanding of social behavior.18 However, political unrest, environmental disaster, declining economic performance, the introduction of structural adjustment programs, un-responsive governance, weak

public-health infrastructure, changing population dynamics, the advent of HIV/AIDS, and the onset of globalization have had great negative impact on these gains as the century ends.9

Substantial numbers of deaths resulting from infectious diseases particularly malaria, HIVAIDS and tuberculosis together with non-communicable diseases such as cancer and diabetes make up the double disease burden of many developing countries like Africa.19 To these are added threats related to risk taking behavior particularly among adolescents such as violence, road traffic accidents and psychological distress.15 (See Figure 2).

Measure of Health Status

The most useful and long-standing measure of health status continues to be cause of death based on the death certificate. The system of classifying causes of death developed by William Farr 150 years ago still form the basis of the International Classification of Diseases. This provides an invaluable source of information on causes of death and trends over time. Unfortunately, case-specific death data are routinely available for only a minority of the world's countries. Only 77 countries contributed age and sex death statistics and cause-specific death statistics to the latest World Health Organization (WHO) data bank.20 Less than one third of the world's population is adequately covered by national vital registration systems and there is a wide regional variation ranging from 80% population coverage in the European region to less than 5% population coverage in the Eastern Mediterranean and African regions of WHO. The most serious gap is for adult mortality8. Furthermore, there is insufficient emphasis given to disease surveillance in most national health systems of developing countries, a serious impediment to setting disease prevention and control priorities and for measuring progress.21 Despite the growing pressures of shrinking public-sector resources, there is an urgent need for a centralized organization to collect data in poor countries. In Africa, consistent time-series data on mortality are limited and those that exist are not universally accepted by demographers.22 In Sub-Saharan Africa, cogent data are lacking and the scant figures available are based on indirect estimation techniques whose results can be considered little more than suggestive22. Generally, more information is needed on adult mortality and morbidity in the poorest countries, particularly those in Sub-Saharan Africa and South Asia.

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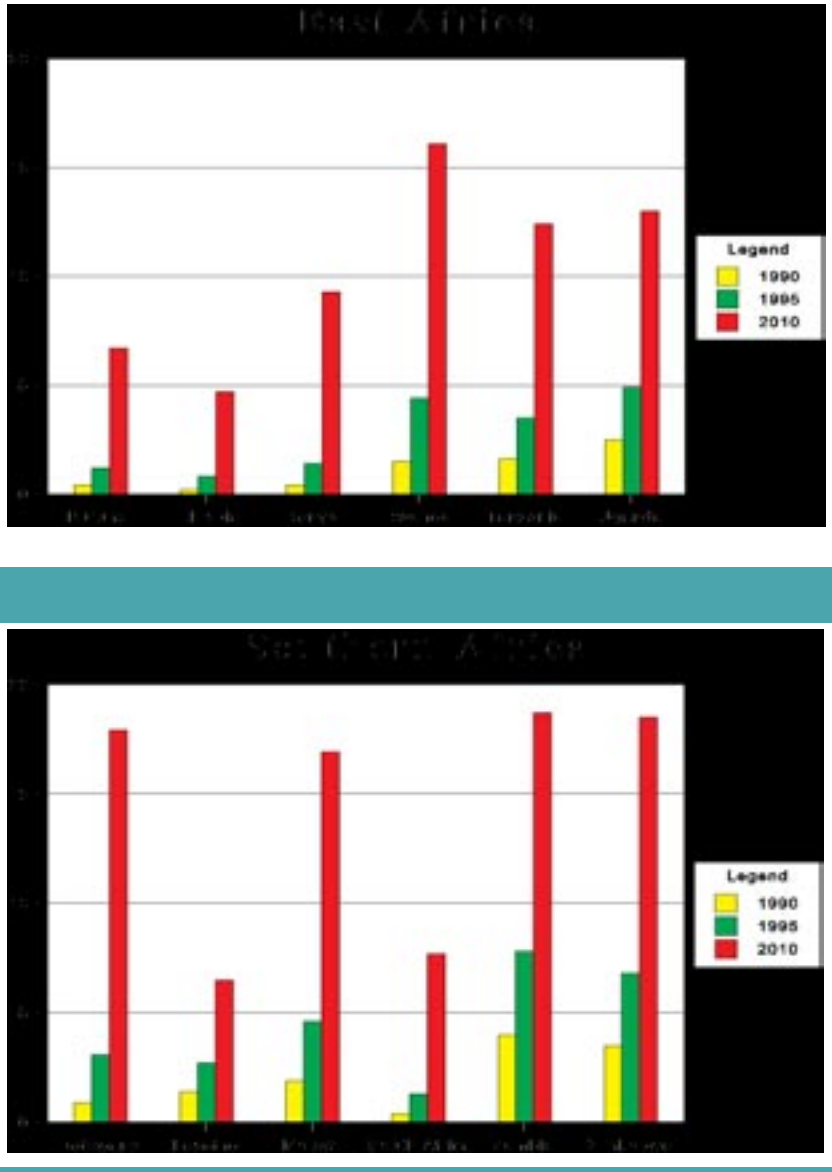
The consequences of adult ill health also deserve closer study. Basic research in developing countries on the pathology of diseases or on the nature of associations between adult diseases and their risk factors is difficult to justify in most cases2. It is a general consensus that developing countries do need data on the levels and determinants of exposure to major risk factors so that interventions can be appropriately designed and targeted.23 There is also a general consensus that a large body of research remains to be done on the cost-effectiveness of curative and preventive interventions against adult diseases.2 Furthermore, because of ignorance concerning the nature of

Figure 1: AIDS Orphans Under 15 Years of Age as A Percentage of the Total Population Under 15



Source: International Programs Center - Population Division, U.S. Bureau of Census, Washington, D.C.

Figure 2: Vital statistics for countries classified as demographically developing

	Human Development Index	Overall health System Attachment WHO index (1997 Estimate)	Life expectancy at birth (years)		Mortality rate under age 5 per 1000 live births)	
			Male	Female	Male	Female
Western Pacific Region						
Singapore*	22	88.9	75.1	80.8	4	5
Lao PDR!	140	60.1	54.0	56.6	143	126
South East Asia Region						
DPR of Korea*	30	85.7	713	78.2	100	99
Bangladesh!	150	67.6	57.5	58.1	113	116
African Region						
South Africa*	101.	61.0	47.3	49.7	85	67
Sierra Leone!	174	3 5. 7	33.2	35.4	326	298R
Americas Region						
Barbados*	29	84.9	72.7	77.8	11	10
Haiti!	152	618	50.6	55.1	120	111
Eastern Mediterranean						
Cyprus*	26	88.6	74.8	78.8	9	8
Djibouti!	157	69.0	45.0	45.0	169	162

Note: * Highest human development index. ! Lowest human development index for this WHO region.

adult ill health and the cost-effectiveness of potential interventions, policy development in the area of adult health is very poor.24

Finally, there are no adult equivalents to well researched, thoughtfully developed and enthusiastically promoted child health programs. The political pressures to respond to the health problems of adults will continue. It is foolhardy for any serious government to ignore the health status of this population. Serious governments need the courage and the facts to redirect expenditures into more cost-effective treatment or prevention, and "adult health" must be firmly on the agenda of developing country health policymakers and researchers.

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