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GLOBAL  
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THE HEALTH OF MOTHERS AND CHILDREN  
IN THE CONTEXT OF HIV/AIDS

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# The health of mothers and children in the context of HIV/AIDS

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## Introduction

The emergence of the HIV/AIDS epidemic as a problem confronting practically all countries and regions of the world has made the need for broad-based mother and child health policies increasingly apparent. For despite the many improvements that have occurred in overall public health as a result of the socioeconomic and demographic changes of the last fifty years, rates of morbidity and mortality among mothers and children remain unacceptably high in many parts of the world.

Nowhere is this more evident than in developing countries and in some minority groups in industrialized countries. In some developing countries, maternal mortality rates are still up to 200 times higher than those in industrialized countries. Similarly, infant mortality rates are often up to 10 times higher than in industrialized countries.

In Africa, for example, the risk of maternal mortality during the course of an average life-span is approximately 1 in 21. In comparison, the risk for women in northern Europe has progressively decreased to about 1 in 10 000.

The emergence of HIV/AIDS in what are already health compromised populations highlights not only the vulnerability of mothers and children, but also the concomitant social stresses that have traditionally been imposed on them as a result.

These statistics are a reminder not only of the way in which women's and children's health has been neglected, but also of the complexity of their needs and the difficulties that many maternal and child health services have encountered in responding to them. Nevertheless, where primary health care and carefully coordinated health and social interventions have been possible, significant improvements have been achieved.

The impact of HIV-related diseases among mothers and children will, if no action is taken, inevitably reverse whatever gains have been achieved and impose even greater demands on health and social services. WHO estimates that by 1990 almost 2 million women of childbearing age throughout the world will have been infected with HIV; about 80% of these women will be living in sub-Saharan Africa where a variety of social, economic, and demographic factors have limited the capacity of health and social services to meet evolving needs. In countries with HIV/AIDS epidemiological pattern II, it is projected that by the end of 1992 about a million children will have been born to HIV-infected women; about a quarter of them will be HIV-infected, and most of them will die of AIDS. The remaining 750 000 will have lost, or can expect to lose, one or both parents as a result of AIDS.

The need to improve the health and well-being of mothers and children thus remains a major, and possibly increasing, challenge in many countries, particularly those that are least economically developed and consequently have the most fragmented health care and social service infrastructures.

## **The status of women and maternal and child health**

The low priority often given to the health and well-being of mothers and children reflects the relatively weak influence mothers and children have had in determining how national resources should be allocated and health care decisions made.

In many communities, the status of women still depends upon their capacity to bear children. Because children represent an important economic and human resource to the family, the security of women and the attention given to them has all too often been linked to their reproductive capacity. Partly as a result of this, family planning efforts have met with cultural and personal resistance, and at times have been seen by women as a threat to their relationships with partners, immediate and extended family, the community, and to their self-esteem. Little change can be envisaged in this area unless women gain more power, especially with regard to decision-making on fertility-related issues.

The contribution of women to the community, however, extends well beyond their reproductive and child-caring role. In most countries they continue to play a primary production role and make an indispensable contribution to the domestic, local, and national economies as well as being the mainstay of family life. Women account for up to 80% of the labour engaged in agriculture and food production in some communities. The demands placed on their health and well-being as a result of physical workloads, however, especially during pregnancy and the immediate postpartum period, together with the biological challenge of too frequent and closely spaced pregnancies, are a major source of concern.

Educational opportunities available to girls and women have also continued to be limited in many parts of the world. Improvements in education have not become available to them in the same way as they have to men, and their levels of literacy and the possibilities for professional/occupational advancement continue to be significantly inferior to those of men. Today, two-thirds of all women in developing countries are still unable to read and write. Yet studies from many countries show that as the level of schooling among women increases so their fertility decreases. Women with no education have twice as many children as those with seven or more years' schooling, while women with at least secondary education are four times more likely to use effective contraception.

Comprehensive approaches to improving the health and social well-being of women and to enhancing HIV/AIDS prevention and control initiatives will increasingly need to address this issue.

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## **The social and health service context**

In many of the countries most affected by the AIDS epidemic, and especially those in which AIDS is a heterosexual phenomenon affecting the pattern of human reproduction and hence child health (Pattern II countries), the organization of health and social services has been poorly supported. Outside the major urban centres, there are few organized health care facilities specifically designed to meet even the most basic needs of mothers

and children. Thus, while in industrialized countries 99% of all deliveries are now attended by a trained health care worker, the proportion in certain Pattern II countries is often as low as 29%. In Latin America as a whole, it is estimated that only 64% of deliveries are attended by a trained health care worker; in Asia the corresponding figure is 49% and in Africa 34%.

The numbers of pregnant women receiving prenatal care involving at least one visit to a trained health care worker are, nevertheless, increasing and these services will eventually constitute an important opportunity for education and counselling on HIV/AIDS related issues.

Specifically with regard to family planning and postponement of pregnancy however, experience suggests that even where services do exist, and where logistic problems have been solved, many family planning services actually achieve only a fraction of their potential. Subtle barriers, involving cultural attitudes and beliefs about child-bearing, and provider-client relationships, both of which are often exacerbated by poverty and poor education, continue to be obstacles to better utilization of services. Unless problems of this nature are overcome, the role of family planning programmes in the overall improvement of maternal and child health, as well as AIDS prevention and control, will continue to be constrained.

Low levels of education, inadequate outreach, and resistance in many communities to the concept of family planning, have contributed to wide variations in knowledge about, and use of, modern contraceptive methods.

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## The health context

Current patterns of morbidity and mortality from all causes, although changing, can be generally classified into three major groups. In the first group, which includes many of what are now HIV/AIDS Pattern II countries, morbidity and mortality are high due to infectious and parasitic diseases, acute respiratory tract infections, malnutrition, and high fertility.

A second group, including many countries in the process of industrialization, but still involving some HIV/AIDS Pattern II and some Pattern III countries, is typified by relatively rapid change in demographic and epidemiological conditions in which infant mortality rates have declined and life expectancy at birth has increased, often in close association with decreasing rates of infectious and parasitic disease-related mortality. In these countries, improvements in the overall socioeconomic conditions have coincided with child survival initiatives and improved coverage of maternal health care.

A third group, more typical of industrialized and economically developed countries, exhibits a predominance of noncommunicable diseases, low infant and maternal mortality, as well as low fertility. Although the extension and use of health and social services in these countries is typically high, there are still some ethnic minorities whose access to, and use of services is poor. Their health status is often similar to that of people in developing countries.

The impact of HIV/AIDS on the health and well-being of mothers and children and these different patterns of morbidity and mortality will vary considerably.

In Pattern I countries, where the HIV/AIDS epidemic has primarily affected homosexual men and people who inject drugs, the number of mothers and children affected is increasing as HIV/AIDS becomes more common among drug injectors, their sexual partners, and the heterosexual community as a whole. Recent data show that up to 55% of European women and 52% of American women with AIDS have a history of injecting drugs.

In Pattern II countries, where the HIV/AIDS epidemic is a heterosexual phenomenon and where equal numbers of men and women are infected, large numbers of infants are already, and will continue to be, infected with HIV. AIDS is already a major paediatric problem in these countries. They are at the same time the countries in which the health and well-being of mothers and infants in general are the poorest, and in which the capacity of the health and social services to meet their needs is the weakest.

During the early to mid-1990s, most countries in sub-Saharan Africa can expect to see significant increases in morbidity due to HIV/AIDS among children under 5 years of age, and adults aged 20-49 years. In areas where the child mortality rate is 100 per 1 000 live births, increases of over 50% can be expected where HIV seroprevalence rates reach 30% among pregnant women. In areas where decreases in the mortality rate in the under 5 year age group have occurred, such high HIV seroprevalence rates may well eliminate previous gains in infant and child health. Current HIV infection rates among adults in many Central African cities could mean a doubling or tripling of adult mortality rates by the early 1990s. Deaths due to AIDS in these cities could go on to equal or exceed expected adult deaths from all other causes. Where one or both parents die, the implications for child health will need to be increasingly monitored irrespective of whether the children themselves are also infected.

Pattern III countries continue to have the lowest prevalence of HIV/AIDS but many children, especially those who have been treated for haemophilia with contaminated blood and blood products, and those who live in the streets, will continue to be at high risk of developing AIDS and will need careful follow-up and support.

From a purely biological and psychosocial perspective, the health needs of mothers, infants, young children, and adolescents are different from those of men and older children. Pregnancy, child-bearing and rearing place special demands on women in terms of both their physical and psychological health. They restrict their capacity to allocate time to their own health care and that of their children. Their need to participate in the overall social and economic activities of the community imposes competing pressures on them. The frequent and poorly spaced pregnancies referred to above, which typify the lives of many women, constitute an additional load.

Infants, young children, and older siblings who dependent on their mothers for nurturing and stimulation also have special needs. Because mothers are the main caretakers of children, the well-being of the two groups is intimately linked. Where maternal health is impaired, the well-being of infants and young children may be threatened.

In much of Africa, it is estimated that, given current fertility rates, the average woman will have 6.3 live births; in Asia and Latin America she will have 3.6 live births. Meanwhile, in industrialized countries, the average number of live births per woman is less than 2. The risk of dying as a result of any given pregnancy in industrialized countries is at least one hundred times lower than in developing countries. Among the many additional consequences of high fertility are low birth weight and an increased risk of diarrhoeal and respiratory infections in young infants.

It is known that when the total fertility rate (TFR) is lowered, the life-time risk for pregnancy-related deaths in women is also lowered. The lowering of TFR in developing countries (which is more than twice that in developed countries) should be sought as part of the educational campaigns aimed at decreasing maternal mortality.

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### **The impact of health and social services**

Irrespective of level of socioeconomic development, however, the impact of HIV/AIDS on all countries, represents an additional major challenge to already overburdened health and social services. The range of physical and psychosocial problems experienced by people with HIV and HIV-related diseases is such that they often require constant medical, custodial, and psychosocial care. In many instances, the type and quality of the care required will place new demands on service infrastructures that will be difficult to meet, especially where existing health and social services have limited resources available to them.

This will be more evident in developing countries, many of which fall into the Pattern II category for HIV/AIDS, and where overall maternal, infant, and young child morbidity and mortality are already high.

The increased loss of women in their reproductive years who have families and children still dependent on them for physical and psychosocial care, will have serious implications for the future health and well-being of children, both those who are infected and those who are not. Psychosocial problems related to issues of fear, neglect, and stigmatization already call for attention and will become increasingly apparent.

In industrialized countries typical of the Pattern I epidemiology, some of the women and mothers who are at higher risk of HIV/AIDS may also be at risk of other health and social problems associated, for example, with injecting drugs and prostitution. Many of these women at risk have become less able and/or willing to utilize what health and social services are available. They may have become distant from their families and may now be unable to mobilize the type of support they need. Meanwhile, the organization of specialized services designed to help deal with their problems has been late in coming.

The nature of the health and social problems experienced by any member of a family affected by HIV is likely to be so complex that current services may have difficulty in coping, and new approaches to health care and social services will increasingly be called for.

Services related to maternal and child health/family planning (MCH/FP), in particular, will need to be improved and their scope of activities broadened within existing or new primary health care initiatives in order to address the problems of HIV/AIDS prevention, as well as provide basic care for mothers, infants, young children, and adolescents.

Questions of contraception in women who are at high risk of HIV or who are already infected will increasingly need to be addressed. Similarly, in countries where pregnancy termination represents a legally and culturally viable option for HIV-infected women, counselling and medical services will need to be given greater priority. In terms of the early diagnosis of HIV and its relevance to reproductive options, MCH/FP services may also represent an important vehicle for HIV screening and/or prevention. The

implications of this, however, are considerable, and the technical, social, ethical, and legal problems associated with HIV testing will need to be addressed and dealt with.

The AIDS epidemic is already having, and will continue to have, significant economic implications for the support of health and social services. Where economically productive populations become increasingly affected, so will their ability to contribute to the economic base of local health and social services. The cost of providing for AIDS-related care could well be in excess of current capacities and may, in many instances, affect the economic base of other health and social services.

If the overall health and well-being of mothers and children are not to be seriously affected, either directly or indirectly, by the AIDS epidemic, urgent, innovative, collaborative action is called for, involving all sectors of society at both national and international levels. Current trends in the epidemiology of HIV/AIDS for mothers and children make it a new and important threat to the health and well-being of these populations everywhere.