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Editorial

PARASITIC DISEASES AND POVERTY IN TROPICAL AFRICA.

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Life in tropical Africa is characterized by the terrible trinity of poverty, ignorance and diseases. Parasitic diseases, such as malaria, schistosomiasis and filariasis, have contributed to undermining the health status of the people and jeopardizing the economic development of nations in tropical Africa. Malaria still remains the most important parasitic disease of humans and over 500 million people contract malaria each year, with about 1 to 2 million deaths attributed to it. About 90% of malaria deaths occur in Africa; most of them in children under the age of five years. Helminth infections also contribute significantly to the burden of disease in developing countries, with about 3.5 billion people infected with various soil-transmitted nematodes. The pathogenic effects of these parasitic infections on man may be so subtle as to be unrecognizable, or they may be strikingly obvious, usually depending parasite strain, the intensity of infection and the physiological state of the infected individual. Each infection has its own unique `pathology- falciparum malaria is particularly associated with sequestration of infected red blood cells in the brain; schistosomiasis with pathology of the liver or urinogenital organs; lymphatic filariasis with the deformities of elephantiasis; onchocerciasis with blindness and skin lesions; leishmaniasis with an array of different pathologies depending on whether the skin, mucous membranes or internal organs are involved and African trypanosomiasis with lesions of the central nervous system. A large percentage of children and adults that survive some of these infections are often left with one form of impairment or the other.

Parasitic diseases, therefore, hinder the healthy growth and development of young children and can affect the economic activities of adults. Hence they are a major cause of the poverty in tropical countries and a significant disruptive factor in their social stability and economic progress. Though often neglected, they constitute important obstacles to reaching national poverty reduction targets. There is a direct and self-reinforcing effect of poor health on poverty, through the vicious circle of poverty, i.e. malnutrition , disease, unemployment or underemployment, low income, poor housing, low level of education, low productivity, no access to drinking water, no access to health care services, larger number of children, unwanted pregnancies, substance abuse (Currant, 2002). Poverty and ill health are therefore, locked in a vicious circle of mutual reinforcement.

Malaria, for example, affects productivity of the community because the peak period of transmission occurs during the wet season, which is the peak period of agricultural activity. In Africa, an estimated US$12 billion is lost in productivity to malaria (Hotez, 2001). The seasonality of guinea worm attacks coincides with the planting and harvesting seasons, with the crippling effects of the disease actually accounting for great economic losses. About 40 – 50% of infected people in the 15 – 40 years age group are usually incapacitated or completely disabled for periods lasting 1 – 3 months, thus experiencing significant losses in agricultural productivity. Affected families suffer during the remainder of the year as a result of poor agricultural earnings and inadequate food supplies for home consumption.

The pattern of village abandonment in the savanna belt of West Africa correlates strongly with the geographical pattern of onchocerciasis and blindness. This has far-reaching effects on the agricultural production and economy of the people by forcing them to desert rich fertile and productive lands in favour of upland, watershed areas. Many onchocerciasis endemic communities, particularly those with low rates of onchocercal blindness, have a significant burden of onchocercal skin disease and they spend more (15% of

their annual income) on health related expenditures than people without onchocercal skin disease (WHO, 1999). The ravages of African trypanosomiasis on man and cattle renders 7 million km^2 unsuitable for crop farming or pasture development and cattle raising in tropical Africa (Ukoli, 1984).

Parasitic diseases have been incriminated as the major cause of low productivity of livestock and poultry in the tropics. Parasitic disease can prevent access to non-human resources that would otherwise contribute to the economic wellbeing of the people.

Poverty in itself, limits the ability of individual or communities to prevent/control parasitic infections. Because of the lopsided socio-economic order, severe poverty is the lot of most tropical countries, hence the budgetary allocations to the health sector in many African countries is exceedingly low (1 - 14.5% of total budget).This is below the African Union (AU) target of at least15% of government budgets to health (WHO, 2004), hence no effective control programmes for parasitic diseases are ever initiated without external funds or assistance. Many of the existing control programmes are initiated through the assistance of International agencies like WHO, UNICEF, World Bank and developed countries. In most of these poor communities, malnutrition is highly prevalent and malnutrition reduces resistance to infections, including parasitic infections.

There is a need for all African nations to recognize the importance of parasite control, using broad-based sustainable approach. The usual response to parasitic diseases in many African nations has been that of reacting to epidemics, if they are ever reported. It was only recently, on 25 April 2000, that 44 African leaders met in Abuja, Nigeria to pledge the commitment of their governments to laying the foundation for a long battle against malaria. Sustained prevention and treatment of parasitic diseases should be top priorities in not only saving lives, reducing morbidity and human suffering, but also in limiting the negative impact of the diseases on cognitive performance, school performance, growth of children and poverty reduction efforts. Parasite control can therefore, be integrated into Primary Health Care (PHC) structure where they exist. We must begin to appreciate the importance of parasite control programmes for the fight against poverty. Some African countries, like Nigeria, are currently spending so much on poverty reduction/alleviation programmes that are not well targeted. Poverty reduction strategies should among others, focus on the health problems of the rural poor people. The new strategy of WHO/TDR to focus on addressing key bottlenecks in getting health care treatments to poor and remote populations is a welcome development.

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