Letters

HIV/AIDS control needs a clear plan of action

Editor – Nelson Mandela's call for unity at the XIIIth International AIDS Conference (*1*) highlighted the need for all countries to combine their efforts in the fight against the HIV/AIDS epidemic, particularly in the developing world where HIV infection is mainly concentrated. Most major public health programmes implemented by the governments of developing countries have been planned or advised by WHO, for example, smallpox eradication, the Expanded Programme on Immunization, primary health care, DDT spraying for malaria control, multidrug therapy for leprosy, poliomyelitis surveillance and eradication, and the DOTS strategy for tuberculosis control. There is an urgent need for WHO and UNAIDS to provide such central leadership in formulating similar clear plans of action for HIV/AIDS control.

One important point needs to be highlighted: the preventive strategies should emphasize only the feasible, clear programmes that are urgently required to control the epidemic, and should not contain vague, humanistic plans to incorporate all aspects of the disease which would dilute the strategies and make the task impossible to implement. Other issues not directly related to control could be tackled separately or later. In all the public health programmes mentioned above, plans of action to achieve the specific goals were clearly spelled out.

The strategies planned by WHO and UNAIDS would, of course, have to be implemented by national governments with the help of national AIDS centres and other government offices. Examples of possible HIV/AIDS prevention strategies that could be immediately applied in most countries are: (*a*) regular broadcasting through television and cinema of short educational spots or songs (*2*) of a few minutes duration; (*b*) inclusion of HIV/AIDS education in the school curriculum; (*c*) vigorous promotion of condom use, aiming at 100%, in all commercial sex establishments; (*d*) increasing coverage of antiretroviral preventive therapy in pregnancy, ensuring confidentiality and offering counselling; and (*e*) outreach activities, possibly with the help of nongovernmental organizations, with locally important high-risk groups such as commercial sex workers, injecting drug users, homosexuals, prisoners, migrants, and transient populations.

Clear recommendations by WHO and UNAIDS would no doubt generate proper response from governments in the developing countries, as has been the case concerning other public health problems in the world. ■

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Relationship between malaria endemicity and acute febrile illness mortality in children

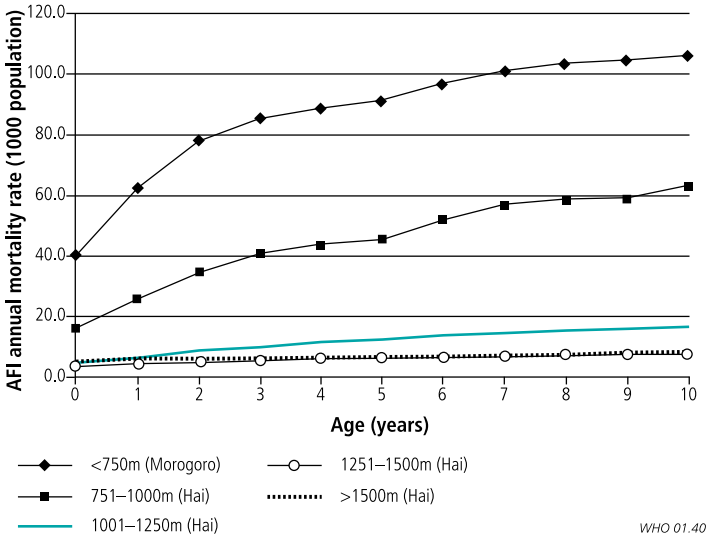
Editor – The relationship between the intensity of malaria transmission and the degree of malaria risk was discussed recently in the *Bulletin*'s theme section on malaria (*1*). In their study in the *Lancet* of hospital admissions in Kenya and the Gambia, Snow et al. (*2*) found that the cumulative risk of severe malaria by 5 years of age was higher in areas of low-to-moderate transmission (mesoendemic) than in hyperendemic and holoendemic areas (i.e. medium high and high transmission, respectively). They concluded that in highly endemic areas, interventions that reduce transmission of malaria, and thus immunity, might lead to changes in both the clinical spectrum of severe disease and the overall burden of severe malaria morbidity. Recent results from the United Republic of Tanzania do not support this assertion.

Since 1992, the Tanzanian Ministry of Health, through the Adult Morbidity and Mortality Project (AMMP), has assessed age and cause-specific mortality in three districts using a demographic surveillance system (DSS). Key informants record all deaths occurring and inform project clinical officers who conduct verbal autopsy interviews (*3*). The AMMP DSS populations in rural areas live in Morogoro Rural District, a highly malaria endemic area, and Hai District, on the slopes of Mount Kilimanjaro, where the level of transmission of malaria varies between different altitude zones.

We estimated the cumulative risk of death from acute febrile illness (AFI) between July 1992 and June 1998 from infancy to the age of 10 years in the two rural surveillance areas. Villages in Hai were grouped into four transmission zones based on altitude levels measured using a global positioning system: moderately high or "mesohyperendemic" (750–1000 m), moderate or "mesoendemic" (1001–1250 m), low moderate or "hypoendemic" (1251–1500 m), and non-endemic (>1500 m). Mortality from AFI was compared between all areas and was found to decrease progressively with increasing altitude; older children did not show an increase in mortality as might have been anticipated (Fig. 1). Similarly, in the Muheza District of the United Republic of Tanzania, Ellman et al. (*4*) compared the prevalence of febrile malaria and anaemia among six groups of villages at different altitudes and with varying parasite prevalence (33–84%). These results did not show the inverse relationship between the level of exposure and malaria morbidity observed by Snow et al.

Interpretation of our observations in relation to the long-term effects of control measures that reduce malaria transmission needs caution. Firstly, we do not have data on intensity of transmission of malaria in the different altitude zones of Hai. Since several other factors such as rainfall, vegetation, vector dynamics, and human population density, migration, and behaviour (*5*) can

Fig. 1. **Age-specific cumulative acute febrile illness (AFI) mortality rates in Hai and Morogoro Rural Districts, United Republic of Tanzania, 1992–98**



alter the intensity of transmission, the classification of intensity of transmission based on altitude alone is necessarily crude. Secondly, we assume that the majority of AFI deaths are attributable to malaria. Because of the nature of the verbal autopsy technique, the exact proportion cannot be determined; it is likely to change, depending upon malaria endemicity. However, this implies that our findings underestimate the gap in mortality and risk of death among the transmission zones. Thirdly, the confounding effects of socioeconomic factors and factors related to health services are not taken into account. In spite of these potential shortcomings, however, we believe that the mortality patterns observed in the AMMP data suggest that malaria mortality is not inversely related to intensity of transmission in "stable" malaria transmission areas in Africa. Furthermore, AMMP data are community-based and hence not subject to selection bias from health facility use.

The immediate benefits of the use of insecticide-treated bednets (ITNs) in reducing morbidity and mortality in children have been well established. Some researchers have argued that the long-term costs of increased morbidity and mortality (presumed to be caused by reduced immunity attributable to ITN use) counterbalance or even outweigh the short-term benefits in reduced morbidity and mortality (*5*). The evidence presented here suggests there may not be any long-term adverse effects on mortality of interventions to reduce transmission. ■

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