

## LETTER TO THE EDITOR

### NEGLECTED TROPICAL DISEASES: BEYOND THE WARS

São Paulo, April 16, 2008

Sir:

Armed conflict and several infectious diseases, as HIV infection, have had a profound impact on the societies of sub-Saharan Africa. We have the perception that will be difficult to perform a safe and effective program of neglected tropical disease (NTD) eradication in areas where food, shelter, water and sanitation, basic medical care, and personal security are priorities of survival. Nevertheless, it is not acceptable to wait until all these problems are over before mounting a preventive chemotherapy program.

The prevention and the control of infections and their respective agents may be achieved by several levels of intervention which are determined by different patterns of responsibility and complexity. For the control of pandemics, endemic or epidemics diseases, global strategies are needed<sup>4</sup>.

Since September of 2000, within the Millenium Development Goals, several ambitious targets have been suggested by the United Nations (UN), for example, to eliminate the hunger and the poverty in the world, and to combat against HIV infection, malaria and other diseases. It would appear that the UN believe that it is easier to eliminate the poverty and the hunger than infectious illnesses because their target is "to eliminate" for poverty and "to fight" for the HIV-AIDS and malaria<sup>3</sup>. It is obvious that fighting infectious diseases are a real challenge.

A recent paper published in the *New England Journal of Medicine*, HOTEZ *et al.* had revised the impact of the 13 neglected tropical diseases (NTD) in the populations that harbor them, as well as describing perspectives of eradication or reduction of the impact of them on the risk populations<sup>3</sup>. Their argument is based on the large scale treatment (Mass Drug Administration - MDA) of the population from endemic areas, reducing the number of carriers and consequently reducing the cycle of the parasite/vector. This measure is called preventive chemotherapy (PC). "Preventive chemotherapy does not necessarily stop infection taking place but it can help to reduce transmission", the Director of the UN World Health Organization Department for the Control of Neglected Tropical Diseases, Lorenzo Savioli, said. "The benefit of PC is that it immediately improves health and prevents irreversible disease in adults"<sup>2</sup>. A meeting on "Monitoring of drug efficacy in large scale treatment programmes in human helminthiasis", jointly organized by WHO and the World Bank, took place in Washington, November 2007, with the aim of addressing the issue of monitoring of anthelmintic drug efficacy in a comprehensive way. The discussion considers the method to evaluate the clinical outcome of PC. This evaluation will be expensive but important to determine the efficacy of this strategy for a future decision.

In Brazil, PC had resulted in important reduction of filariasis in the Northeast region. The most important factor for this successful approach was including the participation of the population in the control and education regarding the illness<sup>5</sup>.

Projections of costs on PC suggest that they represent better value for the funds invested in the control of tuberculosis and HIV-AIDS. Of this point of view, they might consider temporary resources for the control of the seven main NTD<sup>1</sup>.

Although this is an encouraging profile on the NTD in relation to the large scale integrated PC, we find some logistical barriers: 1) the time taken for the epidemiological studies needed to determine the current prevalence of NTD in the tropical world, (to reduce the unnecessary use of the PC in areas of low prevalence); 2) definition of a profile of illnesses for each region in order to diminish the "pool" of drugs used in the PC, diminishing adverse effects and cost; 3) studies to prove the efficiency of the selected strategy; 4) even though PC seems cost-effective, it still depends on significant initial investment for compromised health-systems, like the SUS (*Sistema Unico de Saúde*) in Brazil. The World Bank and the International Monetary Fund imposed structural adjustment policies to ensure debt repayment and economic restructuring that have resulted in a net reduction in expenditure on health, education and development.

Other challenges could be cited, but it is necessary to remember that the real effectiveness of these measures will depend on mutual agreement among neighbor countries. Unfortunately, the regional panorama of developing countries can be of conflicts and wars, in which case the search for a health improvement is not a priority. The greatest constraint to measures for the control of these endemic diseases, even with support from investment fund organizations, international development agencies, and foundations total, will be civil conflicts. The financial resources offered to these countries will probably not be used to PC, but army reinforces.

Armed conflict and several infectious diseases, including HIV infection, have had a profound impact on the societies of sub-Saharan Africa, but this panorama has emerged in several continents. In Latin America, recent political conflicts due to exploration of mineral resources (Brazil and Bolivia) as well as suspect of river pollution by international building (Argentina and Uruguay) are less trouble than those found between African countries, but any political disorders disregard the social and health discussion. A recent intra-country armed conflict from People's Revolutionary Army in Colombia generates a tension among Venezuela, Colombia and Ecuador. These unstable political conditions are against the WHO plans and globalization, and probably will retard PC investment.

Conflict also causes considerable disability, with the direct disabling effects and indirect manifestation. These indirect effects are difficult to measure and, we believe that is difficult to UN or WHO understand the real condition of conflict areas, including the safe or a good use of resources in these zones.

The definition of term “neglected disease”, the program of eradication of these illnesses, proposal of the PC, projects that can be adjusted in agreement to the region of intervention and adjusted financial support are fundamental steps for this project. The transfer of technology to poor countries will be another advantage with this plan. Lee RILEY<sup>6</sup> described that the definition of “neglected” illness is sufficiently clear when there are extreme concern and expenditure of billions of dollar in the expectation of a possible pandemic of avian flu and bioterrorism while the world stands by and ignores the epidemic of tropical chronic illnesses of high morbidity and the fifth cause of life-years lost to disability and premature death.

Sanitation and safe water supplies are extremely basic commodities with the highest impact on survival and disease control, but they are being held back by the emphasis on HIV infection, malaria, tuberculosis, neglected diseases and war.

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