

Editorial

Control of neglected tropical diseases: the need to integrate knowledge, social, and political processes

The World Health Organization has long been committed to working to reduce the burden of disease that compromises the health and well-being of people throughout the world. Millions of people who live in poor areas of the world are differentially affected by what are known as the neglected tropical diseases or NTDs [1]. It is estimated that 1.4 billion people are living in extreme poverty particularly subsistence farmers and urban slum dwellers [2]. Moreover, for the next generations of nations at the bottom, billions will still live in poverty [1, 2], despite that combating HIV/AIDS, malaria, and other diseases is on the list of 2000 Millennium Development Goals. Many other diseases are now recognized as the neglected tropical diseases or NTGs, which include three soil-transmitted helminthes, onchocerciasis, lymphatic filariasis, and trachoma [1]. The prevalence of helminthiasis as reported by Wongsaroj et al. in this issue highlights the fact that even in a middle income country like Thailand, the burden of NTDs is still high in poor areas [3].

The NTGs have been linked to higher unwanted consequences such as HIV/AIDS, malaria, and noncommunicable diseases [4]. There is a higher prevalence of HIV/AIDS among millions of girls and women with female genital schistosomiasis [4]. NTDs reduce productive capacity, impair intellectual and physical development in children because of anemia and undernutrition, and cause adverse pregnancy outcomes [5]. Chagas disease and loiasis are important causes of cardiovascular diseases [6]. Liver fluke and schistosomiasis are leading causes of cholangiocarcinoma [7]. Paragonimiasis and toxocariasis are leading causes of chronic pulmonary diseases [8]. These unwanted consequences have compounded the hidden burden of NTGs. It is estimated that the burden of all 17 NTDs listed by the WHO combined are at least as high as the burden of HIV, tuberculosis, and malaria [1].

Peter Hotez introduced the concept of “*Blue Marble Health*” to raise awareness of neglected

tropical diseases and their disproportionate impact on the extreme poor living in the wealthiest countries [9]. People are not strictly divided into the developed and developing countries, but can be also linked to the level of wealth and poverty within countries [9]. In his argument, the concept of Blue Marble Health recognizes that, as a fundamental prerequisite for the well-being and richness in human lives, health must not be limited by simplistically defined boundaries, be they geographical or economic.

The current control strategies include mass drug administration by scaling up the use of rapid impact drugs such as albendazole, ivermectin, praziquantel, and azithromycin for hookworm, lymphatic filariasis, onchocerciasis, schistosomiasis, strongyloidiasis, and trematodiasis [10]. “Antipoverty” vaccines are being developed and many have advanced into Phase II clinical trials. This is despite the modest portfolio of NTD vaccines [10] as the support for vaccine development often falls through cracks of public policy and the interests of product development companies [10].

The experiences in Thailand as reported in this issue demonstrated that the prevalence of NTGs can improve despite the fact that “antipoverty” vaccines are in development [3]. This is because of the improvement of sanitation and public health interventions. Nevertheless, it is important to highlight that the community of researchers and research institutions including biomedical and social scientists, humanists, health economists, healthcare professionals, and public health workers must work together to highlight health disparities among the poor and otherwise disadvantaged populations, who are often neglected in the world’s middle- and high-income countries. By doing this, the community of scientists, policy makers, and health workers will be able to bring knowledge to stimulate social and political processes that will apply the knowledge for the benefit of people regardless of their ethnicity or sociocultural background [11].

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