*Am. J. Trop. Med. Hyg.*, 96(4), 2017, pp. 767–769
doi:10.4269/ajtmh.16-0791


**Perspective Piece**

# The Global in Global Health is Not a Given

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*Abstract.* The process of globalization is commonly espoused as a means for promoting global health. Efforts to "go global" can, however, easily go awry as a result of lack of attention to local social, economic, and political contexts and/or as a result of commercial and political imperatives that allow local populations to be exploited. Critical analysis of the processes of globalization is necessary to better understand the local particularities of global projects and confront challenges more transparently. We illustrate the potential adverse impacts of globalization in the global health setting, through examination of international tuberculosis control, global mental health, and the establishment of transnational biobank networks.

## INTRODUCTION

The process of globalization is commonly promoted as a means for promoting global health. In this context, globalization tends to be characterized as the systematic dissemination of biomedical practices, goods and services across national borders, and their integration into local health-care systems. In practice, however, efforts to "go global" can easily go awry.[1] There are two (nonmutually exclusive) ways in which global projects can be compromised. First, globalization may fail to attend to local social, economic, and political contexts making them ineffective and impacting negatively on local structures, systems, and cultures. Second, globalization may sometimes be driven not by a concern for human well-being, but by commercial or political imperatives and can result in the exploitation of local populations and increases in global inequalities.

Because the intensification of human movement and exchange across national borders can be both beneficial and harmful to global health and local communities, policymakers and practitioners need to avoid oversimplifying, and either valorizing or demonizing the process. By examining the shortcomings in the global rollout of infectious disease control blueprints, the potential consequences of globalizing acultural models of mental health care, and unequal transnational "partnerships" being established by global biobanks, we seek to expose key ways in which global health efforts can both fail to achieve their goals and have morally perverse effects.

## GLOBAL APPROACHES TO TUBERCULOSIS CONTROL: HOW STANDARDIZATION FAILS TO ACCOUNT FOR LOCAL CONTEXT AND RENDERS GLOBALIZATION EFFORTS INEFFECTIVE

Hypothetically, in a globalized world where microorganisms easily travel between and across national borders, everyone should be at equal risk of contracting an airborne infectious disease. However, the distribution of pathogenic microbes throughout human populations follows social, economic, and political gradients, as evidenced by the fact that the vast majority of all tuberculosis cases occur in low- and middle-income countries, and disproportionately affect the poorest people within these countries. That a curable disease is currently the world's leading infectious killer indicates that global tuberculosis control blueprints have been ineffective.

Internationally standardized World Health Organization protocols that attempt to stop tuberculosis through passive case finding and the treatment of active cases have clearly decreased the gap between estimated incident and notified patients in select countries (i.e., have increased the number of patients identified and treated). However, the fact that incidence continues to rise despite better case identification suggests that such standardized strategies may not be well suited to local conditions.[2–4] There is, for example, marked variations by gender in tuberculosis incidence across countries,[5] which is a clear indication that cultural factors influence the spread and control of tuberculosis. Standardized strategies also fail to meet the educational needs of different populations, such as basic tuberculosis health education programs that are tailored to local understandings of infectious disease and attitudes toward preventive, screening and treatment programs.[6] The branding of Directly Observed Therapy short-course (DOTs) therapy has been politically successful in attracting funding, but has also created tensions when implemented prescriptively in diverse cultural contexts.[4,7] The focus of DOTs on treatment outcomes, for example, has perpetuated power relations between medical professionals and patients and simultaneously compromised patient support and the control of drug resistance.[7,8]

Importantly, generalized and top-down approaches to decision-making may not simply create tensions in their local adaptation, but may also have other adverse consequences, such as fostering the emergence of multidrug resistance through the use of standardized drug regimens on patient populations with heterogeneous strains of tuberculosis.[9,10] With the continuation of existing programmatic strategies in countries like Papua New Guinea, for example, the proportion of incident cases attributable to drug-resistant tuberculosis are projected to more than double within a decade.[11] Clearly, a blanket global approach to a heterogeneous problem inadequately addresses the needs of diverse tuberculosis patients and drives the survival and evolution of infectious microorganisms.

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## GLOBAL MENTAL HEALTH CARE: HOW FAILURE TO ACCOUNT FOR LOCAL CONTEXT CAN IMPACT NEGATIVELY ON LOCAL STRUCTURES, SYSTEMS, AND CULTURES

International efforts to improve mental health similarly illustrate key challenges of globalizing health-care delivery. Although these efforts are based on the sound moral foundation that anyone with mental illness deserves attention, regardless of their gender, ethnicity, or location,[12,13] some of these efforts potentially obscure the social, economic, and political histories of the locations where projects are implemented, as well as the plurality of knowledge and values within and across communities. Well-meaning mental health initiatives in Nepal, for example, have prioritized universalistic psychiatric perspectives and treated social obstacles to well-being as mental health problems requiring pharmaceutical treatment.[14] By reducing adverse social conditions such as poverty, war, famine, and structural violence to a diagnostic label, the pharmaceuticalization of mental illness in low- and middle-income countries can, in turn, reinforce existing local economic inequalities.[12,14,15] Although psychotropic pharmaceuticals may globalize easily, and be less costly, time consuming, and labor intensive for governments, they can make it too easy for sociostructural approaches to be overlooked.

Medications are not the only products whose globalization can impact negatively on local structures, systems, and cultures. Globalizing psychiatric nosologies and textual resources such as the *Diagnostic and Statistical Manual of Mental Disorders* can sideline local understandings of mental health, override local buffers against psychopathology, and (as described earlier) make it easier for governments to overlook sociostructural approaches to healing. Furthermore, by placing both physical (drugs) and epistemic (diagnostic) resources in the hands of "experts," family can be displaced as the primary caregivers and the home as the site of care, which can fuel social stigma and impact negatively on the social inclusion of those with mental illness. In this way, western models of mental health can obscure the marginalization of vulnerable communities and perpetuate structural inequalities.

Whether it is pills or nosologies, mental health interventions cannot simply be transported from one setting to another.[16] Neglecting mental illness in vulnerable populations is obviously unethical, but this should not be a license for western institutions to impose their views of mental illness and its treatment without careful adaptation and testing. The tendency for this to happen also highlights the ways in which so-called "partnerships" can in fact be unidirectional and primarily service the interests of western institutions rather than those of local communities.[17]

## THE GLOBALIZATION OF RESEARCH BIOBANKS: HOW GLOBALIZATION CAN BE DRIVEN BY COMMERCIAL AND POLITICAL IMPERATIVES

Research biobanks are collections of human tissue and data used by molecular epidemiologists, geneticists, and cellular biologists to explore the association between particular genetic and molecular profiles, and the etiology, incidence, prevalence, and treatment responsiveness of disease. Originally housed within single institutions within national borders, biobanks are increasingly "going global" to maximize their utility and sustainability and to take advantage of scientific and political enthusiasm for "big data."

Although enthusiasm to globalize biobanks is founded on the idea that doing so creates intellectual networks of global benefit, the reality is that countries dominant in the field are setting the agenda and financial feasibility of this research model, and reaping the financial benefits of the resulting research networks. The financial cost of maintaining biobanks, for example, can encourage commercial arrangements that enhance a biobank's global competitiveness but undermine or displace national structures and create further disincentives for sharing the benefits of the research (particularly new medicines) with those who have participated in the research. Whether biobanks centralize their resources (such as the Red de Bancos de Tumores de la América Latina y Caribe[18] and the Biobanking and Biomolecular Resources Research Infrastructure[19]) or distribute and compartmentalize financial, scientific, and sample collection operations in different locations (such as the Kadoorie,[20] Taizhou,[21] and Guangzhou[22] biobanks), their social and economic organization usually benefits the biobank rather than the local community.

In this regard, it is significant that existing models of biobank governance were developed while biobank research was conducted and administered within local (institutional, state, or national) borders. As a result, these systems of governance focus primarily on ways of obtaining informed consent from defined research populations and protecting their privacy. They are not well designed to oversee the broad social organization of biobanks (e.g., their ownership by multinational pharmaceutical companies) or to ensure the equitable distribution of benefits.

In addition to showing how globalization can be driven by commercial imperatives and lead to the exploitation of local populations, the globalization of biobanks illustrates the need for processes of research and scientific governance to be tailored to local conditions. Just as standardized therapies for tuberculosis or acultural psychiatric nosologies can be ineffective or destructive if they are applied in an overgeneralized and top-down manner, the globalization of biobanks can have profound consequences on local populations as they struggle to make sense of the control and custodianship of biological samples and biodata, including informed consent, the right to withdraw, return of results, and the idea that their tissue and data may be used for unspecified future research by transnational groups with no link or commitment to their community. Local communities must also accommodate ongoing uncertainty regarding how data will be analyzed and interpreted, and results communicated and translated into policy and practice. Innovative ethical governance frameworks are clearly required to oversee the global spread of the scientific standards and practices of biobanks, their local implementation in diverse cultural settings, and the equitable distribution of benefits.

## CONCLUSION

Efforts to control the global spread of infectious diseases, to promote mental health, and to create transnational research networks reveal the complexity of going

global, and the potential adverse consequences of otherwise well-intended international projects. Ignoring heterogeneity, insufficiently accounting for local context, and neglecting balanced reciprocity with local actors are common traps of global health initiatives. Globalization can be both beneficial and harmful to local communities and economies, which reminds us that human topography is a complex patchwork of social, economic, and political structures and processes, and that the global is at once both impersonal and intimate—impersonal because global strategies can sweep across populations; intimate because these global efforts can be so disruptive to the daily lives of people around the world. Challenging the dominant structures that maintain social inequalities worldwide will undoubtedly require global strategies, but also demands that we think more critically about the global.

Received October 7, 2016. Accepted for publication December 22, 2016.

Published online January 30, 2017.

Acknowledgments: We thank Aaron Denham for his assistance and the reviewers for their valuable guidance.

Financial support: This work was funded by a grant from the Australian NHMRC, APP1083980: Biobank Networks, Medical Research and the Challenge of Globalization.

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