

# Exploring Health Disparities in Africa

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The introduction of new vaccines have been highlighted as an opportunity to reduce child mortality in sub-Saharan Africa and other regions. Donors recently committed billions of dollars to introduce new vaccines for diarrhea and respiratory infections. However the impact of these vaccines depends on the ability of national programs to reach the most vulnerable children. While some countries have succeeded in doing this, others continue to struggle. This year we began a project funded by the Bill and Melinda Gates Foundation to examine the patterns and causes of disparities in childhood vaccinations and their effect on the potential benefits of introducing new vaccines. The work considers traditional factors such as geography and socio-economic status, as well as the social and physical mobility of young mothers. In addition to a series of publications, we are hoping that this will lead to a growing partnership of researchers and policy makers to use this information to develop more effective and equitable vaccination strategies.

This was our 5th year of a partnership with CARE, Great Lakes University of Kisumu, and Emory University to examine the effects of school environmental interventions on health and education outcomes in Kenya. This year we published a range of qualitative and quantitative work demonstrating the complexity of effective and sustainable interventions. The first published results of our randomized trial showed that improving water and sanitation can significantly reduce absenteeism for girls. At the same time a series of qualitative studies have demonstrated that effective and sustainable



change in school water and sanitation is challenging – adolescent girls face unique problems around menstrual hygiene management which are not adequately addressed by most programs; interventions often lack basic components like anal cleansing materials; and schools often fail to sustain intervention activities due to the lack of resources and accountability. During the coming year we will continue to work with colleagues in the Ministry of Education to promote policies and practices which target these critical elements. Funding for this project is provided by a grant from the Bill and Melinda Gates Foundation

Poor water and sanitation are almost synonymous with poverty and marginalization. At the same time, global policy efforts like the Millennium Development Goals do not prioritize improving sanitation for the poor. In fact, global efforts have generally failed to improve sanitation for the poor, especially in urban areas in sub-Saharan Africa. In collaboration with the London School of Hygiene and Tropical

Medicine's SHARE Research Consortium and with funding from the UK Department for International Development, we are developing a model to estimate disparities in the health burden associated with poor sanitation and the health benefits of sanitation investment across the economic spectrum in rural and urban areas. We are also working with key policy actors such as UNICEF and WHO to use the results to target investments to the poorest and most vulnerable households.

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