

Title: Water, sanitation, and hygiene (WASH) practices in Africa: exploring the effects on public health and sustainable development plans

Author Names: Olalekan John Okesanya, Gilbert Eshun, Bonaventure Michael Ukoaka, Emery Manirambona, Olaleke Noah Olabode, Ridwan Olamilekan Adesola, Inibehe Ime Okon, Safayet Jamil, Amandeep Singh, Don Eliseo Lucero-Prisno III, Habib Mohammad Ali & A. B. M. Alauddin Chowdhury

Abstract: Background Suboptimal water, sanitation, and hygiene (WASH) practices constitute a serious public health risk, affecting one-third of the world's population. Remarkable progress has been made to improve WASH; however, challenges remain, with rapid population growth adding pressure on WASH systems. This study explores the current state of WASH practices and diseases in Africa, identifies challenges, and proposes public health recommendations for sustainable implementation.

Main body The staggering burden of WASH-related diseases in low- and middle-income countries (LMICs), particularly in Africa, threatens public health, with millions of deaths and disability-adjusted life years (DALYs) attributed to poor WASH practices annually. Notable challenges plaguing WASH practices in the region include poverty, malnutrition, poor data reporting, illiteracy, climate change, and poor healthcare financing. This results in adverse health consequences, including waterborne infections like cholera, typhoid, dysentery, and diarrheal diseases. Additionally, neglected tropical diseases (NTDs) such as intestinal worms, schistosomiasis, trachoma, lost productivity, and environmental pollution from soil and underground water contamination have been implicated. Geographical disparities, cultural norms, and inadequate funding further complicate efforts to improve WASH infrastructure and practices. Globally concerted efforts are required to address these issues and permit WASH practices to protect human health by preventing infectious diseases and contributing to economic growth. Strong financial frameworks, skills training, and tools like WASH Fit are recommended for a stronger WASH approach in Africa.

Conclusion The consequences of poor WASH extend beyond public health, impacting economic growth, gender equality, and environmental sustainability. WaterAid's policy recommendations prioritizing government administration, institutional capacity enhancement, and more financial resources are expedient.

Keywords: Water, sanitation and hygiene (WASH) Public health Africa Waterborne diseases Neglected tropical diseases (NTDs) Diarrheal diseases

<https://tropmedhealth.biomedcentral.com/articles/10.1186/s41182-024-00614-3>