

## Water Sanitation and Hygiene for Disease Prevention and Control in Rural Communities in Nigeria During COVID-19 Pandemic

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### ABSTRACT

Rural communities in developing countries have water sanitation and hygiene (WASH) needs. The absence of this has led to a high prevalence of diseases as the life cycle of several neglected tropical diseases has revealed. Transmission of diseases such as helminths, schistosomiasis, cholera can be prevented by high standards of sanitation and hygiene. With the emergence of the novel coronavirus, there is an increased need for maintenance of these standards.

### REVIEW

Rural communities in developing countries have water sanitation and hygiene (WASH) needs. The absence of this has led to a high prevalence of diseases as the life cycle of several neglected tropical diseases has revealed. Transmission of diseases such as helminths [1,2], schistosomiasis [3,4], cholera [5,6] can be prevented by high standards of sanitation and hygiene. With the emergence of the novel coronavirus, there is an increased need for maintenance of these standards. The distribution and prevalence of diseases such as schistosomiasis, has been adduced as an indicator of poor water sanitation and hygiene standards in endemic areas.

Promoting health through social behavior change communication (SBCC) helps to minimize disease burdens and risk factors for control. It provides information on behavioral measures to reduce risk of contracting a disease (prevention), and if the disease is already prevalent within a population, these measures mitigate further spread of the disease (control) at the individual and community levels [7]. Social behavior changes communication (SBCC) usually leads to positive health outcomes, healthy living conditions, lifestyles, behavior and friendly environment.

Activities to control schistosomiasis such as mass drug administration (MDA) in endemic areas have been put on hold due to the COVID-19 pandemic. The WHO has urged the use of health education and social behavior change communication for schistosomiasis control to promote hygiene in vulnerable communities. Some commonly used SBCC methods are: (a) mass media campaign (b) dose-

response which involves continued and repeated information over a long period of time until it gradually informs people's reasoning and behavior, (c) person-centered counseling which tells the individual about how to perform the new behavior being promoted [8].

During this COVID-19 pandemic, some hygiene standards were suggested to be maintained such as, the use of face masks, hand washing and the maintenance of two-meter social distance between persons in public places and hand-hygiene in hospitals by health workers.

With an eventual ease of the lockdown, there is need to promote hygiene standards in rural communities as these standards are presently low due to limited access to safe water. While rural communities in developing countries have their unique challenges, they also have unique opportunities. Strategies for hygiene promotion tailored towards the unique challenges and opportunities in rural communities should be employed.

Community health education via Social Behavior Change

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Communication and participation in developing strategies could be taken into account to ensure collaboration by community members to maximize the impact and sustainability of control interventions.

According to World Bank (2018), 49.66% of Nigeria population of 167.9 million people consists of rural community dwellers. Only 41.1 % of rural communities have access to electricity. About 40 million people have never had access to any form of telephone services which means no access to internet services as well (Nigeria Communications Commission, 2020). With the coronavirus present at the community levels already, rural communities are highly vulnerable to the spread of disease due to poor WASH standards; they are also prone to misinformation and disinformation about the COVID-19 if not properly informed.

It is therefore necessary to fashion effective messages and messaging methods with full participation/cooperation of the community members for disease prevention and control in rural communities with limited access to mass media health education to empower them to protect themselves and their community from the COVID-19 disease.

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