My Piece of Zed:

A Novel Adolescent-driven Behaviour Change Communication Strategy to Eliminate Cholera in Zambia 2025

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Summary

- Sustained long-term cholera prevention behavioural interventions are urgently required to achieve elimination of cholera in Zambia by the year 2025.
- We propose an adolescent focused behavioural intervention titled ***My Piece of Zed***, the first of its kind to be born from locally derived evidence and behaviour science, to improve three behaviours proven to be critical to interrupt faecal oral transmission of cholera among household members in both rural and urban Zambia.
- We recommend that ***My Piece of Zed*** be piloted for national scale-up in order to sustain behaviours that will eliminate cholera in Zambia by the year 2025.

Rational

Recently, Zambia became one of the 35 member countries to the Global Task Force on Cholera Control (GTFCC) with the mandate of eliminating cholera by the year 2030 (1). To this effect, the Zambian government has developed a multi-sectoral plan with an ambitious legacy goal towards cholera elimination by 2025. This plan mandates stakeholders to develop a behaviour change communication strategy by the year 2019, implement the strategy by 2022 and reinforce the strategy up to 2025.

The Centre for Infectious Disease Research in Zambia (CIDRZ) and the London School of Hygiene and Tropical Medicine (LSHTM) in collaboration with the Zambia National Public Health Institute (ZNPHI) embarked on preliminary formative research to develop an intervention that targets the most relevant behaviours in the Zambian context. Stakeholder consultations and a literature review identified **handwashing with soap** after contact with faeces and before eating, **household water treatment** with liquid chlorine after collection and **re-heating** of stored cooked foods before consumption as critical for cholera prevention. Currently, these behaviours are poorly practiced in Zambian communities with about a third

washing their hands with soap and treating their water before drinking it [2]. No evidence was found on food re-heating in Zambia.

Insights from the Formative Research

We conducted formative research, employing non-traditional qualitative methods including behaviour trials, motive mapping, [3] and up to 24hrs participant observations in Kanyama compound (urban), Lukanga swamps (fishing community) and two villages in Chiengi district (rural). These methods provided the following insights:

- In all three communities, the three behaviours were rarely and inconsistently practiced (lack of an established routine) among observed households.
    - The lack of a conveniently located and provision for water and soap deters handwashing with soap after toilet use.
    - Handwashing with soap before eating main meals (*nshima*) is avoided due to smell that interferes with taste.
    - Due to lack of facilities, fishermen use the Lukanga swamps to meet their water and sanitation needs, including defecation.
- While people know that drinking water should be treated, they depend on chlorine distribution by the local clinic rather than purchase the product; and boiling is too cumbersome.
- While storing drinking water in a narrow-mouthed container lessens contamination through use, people prefer wide-mouthed containers for easy cleaning and use.
- Left-over food is well stored but is re-heated to improve taste and avoid stomach aches and nausea and not to avoid disease.
- Fear of cholera motivates handwashing with soap and household water treatment, evidenced by the reported increase in these practices during cholera season, however, this motive is short lived once the risk of cholera is reduced.
- While, mothers feel responsible for ensuring that all household members practice the three desired behaviours, they reported easily forgetting to practice and promote these behaviours as they are busy with so many household chores.

Policy Recommendations

The below recommendations are proposed for the behaviour communication strategy of the Zambia Multi-Sectoral Cholera Elimination Plan.

1. Targeting the 'mother' for a cholera prevention behavioural intervention may have minimal effect due to her household and caregiving responsibilities. We recommend targeting adolescents aged between 15 and 19years old to be the behaviour change agents. Youth make up a significant portion of the Zambian population [4] and are the most affected during a cholera epidemic [5].

2. The main intervention must be theory- and evidence-based and must translate into a well-thought out engagement strategy with activities that strongly motivate adolescents to improve hand washing with soap, household water treatment and food re-heating behaviours within their current setting.

3. The intervention should not be associated with the prevention of cholera or any other diarrhoeal disease, as such messaging does not sustain behaviour. Rather, the intervention should appeal to a higher motive such as status, affiliation or play.

4. The designed intervention should be implemented before the cholera season and should continue during and after a cholera outbreak to promote sustainability.

5. The private sector should be engaged to build in social marketing strategies to ensure a constant supply of liquid chlorine, soap and other products like food storage containers.

6. Transient populations such as those living in the Lukanga swamps urgently require further research to understand their cholera transmission pathways better. Furthermore, WASH infrastructure including toilet facilities and clean water sources are required for a behaviour change communication strategy to be successful in promoting hygiene behaviours.

Proposed Behavioural Intervention

Based on the insights gained from the formative research, we developed a behavioural intervention under pinned by the Behaviour Centred Design Framework and theory and targeted towards adolescents. The full details of the intervention are in the Appendix. Below is a summary:

Intervention Name:	My Clean Piece of Zed
Call to Action:	Where's Your Piece?
Target Audience:	Adolescent boys and girls aged between 15 and 19years
Target areas (for pilot):	1 urban and 1 rural hot spot
Duration of pilot:	18 months
Desired Behaviours:	1. Wash hands with soap after faecal contact and before contact with food 2. Treat drinking water with chlorine 3. Re-heat cooked food before consumption
Motives:	Status (pride), Play, Affiliation
Recruitment Strategy:	Source and train potential adolescent *Community Champions* based on their propensity to be community-centric. They will be empowered with information and motivated using success stories, emotional demonstrations and games to practice and encourage the three behaviours in their homes. The expected behavioural outcome is that the three behaviours are practiced at the required occasions by all members of the household.
Engagement Activities:	Debate, social media movement, poetry, broadcasted interviews, talking walls and photo mosaics.
Evaluation:	Randomised Control Trial Design

References

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Appendix