Global Task Force on Cholera Control (GTFCC) Working Group on Water, Sanitation and Hygiene (WASH)

Tools, strategies and approaches to support WASH implementation in countries

Webinar 1, 25 March 2020

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Acronyms and abbreviations

DRC	Democratic Republic of Congo
EPHI	Ethiopian Public Health Institute
GTFCC	Global Task Force on Cholera Control
IDP	internally displaced populations
NCP	national cholera plan
OCV	oral cholera vaccine
WASH	water, sanitation and hygiene
WHO	World Health Organization

Note to the reader

This report condenses discussions according to the subjects addressed, rather than attempting to provide a chronological summary. The summaries address the themes emerging from wide-ranging discussions among all speakers, and do not necessarily imply consensus.

Summaries of presentations and of points made in discussion are presented as the opinions expressed; no judgement is implied as to their veracity or otherwise.

Participants

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20. Margot Nauleau
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24. Shamin Qazi
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26. Monica Ramos
27. Albert Reichert
28. Gabrielle String
29. Christophe Valingot
30. Claudio Valsangiacomo
31. Erik Van de giessen

This webinar presented tools, approaches and strategies to support the development of the water,

sanitation and hygiene (WASH) component of National Cholera Plans (NCPs). It was moderated by **Monica Ramos,** Coordinator of the WASH Working Group of the Global Task Force on Cholera Control (GTFCC).

Development and implementation of multisectoral national cholera plans

***Margot Nauleau**, GTFCC Secretariat*

The Global Roadmap for cholera control was launched in 2017, with the goal by 2030 of eliminating cholera in 20 countries and reducing cholera mortality by 90%. For this to be achieved it is necessary for countries to be committed at the highest political level to cholera control; to have partners providing technical support to national action plans and activities; and for donors to be appropriately committed. The context for this action, and the background to the success of the global roadmap, is set by National Cholera Plans, or NCPs. These should be country-led, multi-year, multisectoral, targeted, coordinated at the highest level, dynamic and adaptable.

An updated framework for NCPs, with a shorter, more user-friendly format than the previous version, and now with indicators for reporting, has been created (though not yet fully publicized). A draft version is already in circulation among countries, and should be released in the coming weeks. The framework is organized in three sections corresponding to different stages of development of an NCP. In the **inception** phase, countries declare commitment, identify and prioritize cholera hotspots, conduct situational analyses, define leadership and coordination mechanisms, and formulate goals. In the **development** phase, for each pillar of the plan they formulate and prioritize activities, and develop costed operational plans and a monitoring and evaluation (M&E) framework. Finally, in the monitoring and reporting phase, countries monitor indicators across each pillar, report annually to the GTFCC, and prioritize activities for the next period of the plan.

Margot Nauleau presented a global landscape of existing NCPs running in 2020, and explained that the GTFCC is working closely with some countries to develop a number of new NCPs based on the roadmap. Detailing the GTFCC's operational model, she introduced the new Independent Review Panel, an impartial expert team tasked with providing rigorous technical assessments of NCPs. The Panel is currently made up of 11 individuals, of geographically diverse backgrounds, representing different institutions and a range of experience in different areas, with strong technical expertise in cholera[1]. Established in November 2019, the Panel is currently reviewing its first NCP (that of Zimbabwe). The development and review of NCPs is, and should remain, a collaborative process between the GTFCC and countries.

Primary criteria for endorsement of an NCP are the engagement of all actors in the Global Roadmap following a multi-sectoral approach; completion of the situational analysis according to GTFCC guidance; and the production of operational plans with activities and budgets for surveillance, patient care, oral cholera vaccine (OCV), WASH, and community engagement. These are supported by a range of more detailed secondary criteria. The benefits for countries in following this framework include visibility, increased credibility, strengthened coordination and access to technical support and guidance (including human resources, implementation support, and M&E). Access to OCV for preventive campaigns might also require an NCP under the terms of the new process, which

[1] Following a question on this point, a written list of members of the Panel was to be distributed to participants in the meeting.

will be established in 2021.

The framework's annual reporting requirement comprises a number of indicators that countries report to the GTFCC secretariat annually, allowing the GTFCC to publish an overview of progress in cholera control across the world. This is also presented yearly at the GTFCC annual meeting.

All this will in future be backed up by a country support platform that should be operational by the end of 2020, and which will supplement existing efforts by mobilizing and coordinating technical expertise; training experts in GTFCC partner organizations; supporting advocacy and fundraising; and supporting M&E.

Ethiopia national cholera plan: WASH component

***Paul Cottavoz**, Consultant*

Paul Cottavoz outlined the work done to develop the WASH pillar of Ethiopia's NCP for 2020-2024, a project led by the Ethiopian Public Health Institute (EPHI) and supported by WHO/GTFCC. In July 2019, a high level meeting took place to initiate the NCP development process and in January 2020 EPHI—working together with John Hopkins University and WHO—identified cholera hotspots and ranked them by district. In February, a multi-sectoral, multi-partner workshop was held to define an intervention strategy and draft a plan of action and a budget.

In February and March, the WASH component of the NCP was further refined with a literature review, a series of meetings with key informants, and field visits to hotspot districts. The findings were shared in a series of debriefings in March, to validate a common vision and revise the initial draft.

Mr Cottavoz presented a map of districts in Ethiopia, in which each district was classified according to cholera hotspot priority levels. This ranking was based on five years of data combining incidence and persistence (i.e. duration of the outbreak in cumulated weeks). Under this method Ethiopia has 104 high priority districts spread across six regions; but crucially, just three regions—Somali, Oromia and Tigray—contain 70% of high priority districts.

The methodology for investigating WASH situations in the hotspots districts is as follows:

- Step 1: categorize hotspot districts by socio-economic and geographic context
- Step 2: define a methodology to identify the most affected communes within each district
- Step 3: identify strategic "diffusion sites" during a cholera outbreak
- Step 4: assess the WASH conditions in healthcare facilities and evaluate the quality monitoring system for water, food and drink
- Step 5: cross-check gaps and complementarities between ongoing WASH projects and cholera hotspots.

Mr Cottavoz then presented a slide categorizing hotspots according to socio-economic and geographic criteria. This approach showed that 25 hotspot districts are urban, with ten in or around Addis Ababa and others in regional and zonal capitals or district towns, with populations ranging from 50 000 to 400 000. The other 79 are rural, both agrarian and pastoral, highland and lowland, and with an average population per district of 100 000-150 000 people across around 20 communes and 200 villages. 55% of these hotspots host internally displaced populations (IDPs), with a total of more than 600 000 IDP in the country due to conflict, drought and/or floods. Using the available data (patient line-lists), an analysis down to commune level was done, showing that a only few communes concentrate most of the cases. This is true in most districts. Whole districts should not

therefore be considered at the same level.

Key observations regarding WASH conditions in urban contexts in Ethiopia are as follows. Fast-growing urbanization is causing difficulty in meeting needs, and WASH coverage is estimated at 54%, with erratic supply. Data on water quality is not strong, but recent surveys suggest low levels of free residual chlorine at tap level, insufficient considering the fact that most households must transport water and store it at home. In some cases, WASH works are in progress, but in others they are not, due to informal land ownership and tension. Access to latrines is estimated at 80% for unimproved toilets and only 20% for improved ones. In identified hotspots, open defecation and flying toilets are frequently reported.

Key observations regarding WASH conditions in rural contexts are as follows. Water supply coverage is estimated at >45% in all regions, except Somali, where it is 23%. Identified communes have high levels of need, and achieving water supply requires a great deal of effort, time and money from all households. Assessed communes also face competition for water with irrigation and/or livestock. Latrine coverage is less than 50% for unimproved toilets and less than 6% for improved ones. There are, however, some positive examples of sanitation social marketing projects (e.g. UNICEF's work in Gursum District/Oromia region, where microbusinesses have sold >10 000 slabs to households).

A risk factor analysis also identified strategic diffusion sites that play an important role in diffusing cholera during outbreaks. These include religious sites; investment sites (economic sites oriented towards a range of activities including farming, mining and factories, supported by private investors, with thousands of seasonal migrant workers per site); markets; bus-stations; and schools.

Healthcare facilities are also crucial sites with regard to WASH conditions: they have the ability and materiel to manage cholera cases, but have in the past seen internal cholera transmission to health staff, patients and relatives. This is probably because most facilities have inadequate water supply, with only 30% coverage, and only 55% latrine coverage. Quality monitoring for water (and for food and drink in urban contexts) is weak, with no regular control and no compilation of data for analysis and action. There was a question regarding focus on WASH in healthcare facilities versus other community institutions such as schools; but healthcare facilities are prioritized because they will be used for treatment. "If a hotspot district has to deal with a future outbreak, it will be better to have the healthcare facilities ready to cope, so improving WASH there is crucial as a starting point. Then, according to available resources, coverage can be deployed to other institutions and communities."

Paul Cottavoz presented gaps and complementarities with ongoing WASH interventions in cholera hotspot districts: Ethiopia has a range of projects, each targeting 70 to 300 districts, but the level of complementarity is weak, and together they only cover 36 of 104 hotspot districts. There is a high presence of humanitarian actors in 76 cholera hotspot districts, but these focus mainly on assistance to IDPs, with short term and limited action for residents.

All of this information allows Ethiopia to define a WASH plan for cholera control along three axes:

- Axis 1: WASH for OCV preventive campaigns.
- Axis 2: WASH provision in healthcare facilities, WASH provision in communities, and WASH provision in specific strategic sites (a minimum WASH package will be defined).
- Axis 3: A comprehensive plan that selects the most affected strategic sites at commune level and the more important ones at district level; a lobbying campaign for better complementarity of districts selected for action by WASH stakeholders; development of expertise to provide guidance and support for strategic sites; and quality control training and resources for (at minimum) urban hotspots.

The level of need is high and consequently the estimated budget for the WASH component of the NCP is around USD 220 million over five years; but some resources are already available (50% of the required budget for EPRP is already funded by existing mechanisms, for example). It is also possible to reinforce the complementarity and mobilization of WASH stakeholders to target hotspots more efficiently and thereby reduce the additional budget needed to implement WASH activities.

Developing a methodology for costed WASH action plans in cholera hotspots

***Gregory Bulit**, UNICEF*

There is no clear, harmonized methodology for costing the WASH component of NCPs. With a wide variety of methods, formats and results in play, a replicable standard method for producing WASH costed plans in cholera hotspots is required.

This methodology sets out to create something simple, ethically unproblematic, targeted on key actions, and developed using open source software, requiring only access to anonymized and geolocated (or addressed) line-listing for mapping analysis; access to (or development of) a WASH baseline of the hotspot; and access to or availability of an agreed unit cost database.

Gregory Bulit presented a costing tool designed to these specifications that uses WASH baseline and risk factor results as inputs to size and prioritize activities. A spreadsheet-based interface allows technical and financial analysis for three outcomes—water, sanitation and hygiene—resulting in a costed plan for each, with potential funding sources indicated. It allows for prioritization of actions after inclusion of factors, and takes account of ongoing and planned projects. Outputs from the tool include a summary sheet with an overview of the hotspot, describing the context, baseline, map, risk factors and costed plans per outcome; sheets for each outcome with further information on outputs (describing the actions), maps, Joint Monitoring Programme baselines, detailed budgets and financial plans; and template action plans and reporting sheets.

The recommended methodology to feed the costing tool and produce the plan is a three-step process using simple and known tools: (1) a literature review; (2) field data collection; and (3) prioritization and costing of actions. Each step contains a number of prescribed sub-steps.

An initial field test of the process was carried out in Goma, Democratic Republic of Congo (DRC) in January 2020, and a second will be carried out as soon as the travel restrictions related to the COVID-19 pandemic have been loosened sufficiently. The data collection phase covered six health areas over three weeks, with a team of 12 enumerators and facilitators, assisted by three international experts, carrying out 581 household surveys across 19 neighbourhoods; 18 focus group discussions; 18 key informant interviews; five commented site visits; and collection of GPS and mapping data, a pictures database, and 80 water samples for analysis. All this was done following an easily replicable methodology using basic tools, and cost about USD 10 000, working with one project assistant, 10 enumerators and two drivers.

Though these costs may seem high, this was a pilot, and it was carried out in Goma, a huge and complex situation compared to most others. Costs may come down as the methodology is developed and refined, and an understanding is reached of how secondary data analysis can be developed along with other baseline elements to reduce costs and make the tool simple and accessible to local colleagues so they can use it for their own planning. These developments will be targeted in the next steps. It is also possible to argue that the cost is relatively low when considered

in relation to the amount to be funded to support NCPs, and they can be further reduced by in kind support from partners on the ground. Issues around rollout can be discussed and refined once the methodology is finalized: this approach should not have to be "a big investment." It can also be done in steps (for example, through prioritizing hotspots, as has been done in a number of hotspot mapping studies).

As well as the WASH baseline provided by the household survey, the fieldwork resulted in key findings to inform the NCP process. These included limited hygiene and sanitation practices due to shared and unhygienic latrines; shallow toilet pits requiring recurrent emptying in the absence of safe emptying services; inadequate faecal sludge elimination processes; no evidence of handwashing after defecation; hygiene practices further limited by insufficient water quantity; and significant risks of contamination both at water resources and in homes.

The lessons of this trial are as follows: a WASH baseline is required to do a proper costed plan, and the use of both quantitative and qualitative methods allows the identification of risk factors that secondary data analysis alone cannot detect.

The next steps for this project will be to incorporate any feedback from the GTFCC WASH Working Group; finalize the Goma report and costed plan; initiate a second field test using lessons from the Goma experience; complete the methodological guide; and share it for further feedback.

Q&A

A short period of discussion raised the following themes:

- Risk factor analysis raises questions around comparing neighbourhoods with and without cases and looking at factors of difference/commonality: it may be a reach to say these are the factors for cholera transmission. As we go forward, it will be necessary to obtain clear descriptions of methodologies in use, share them with the WASH and Surveillance working groups, and ensure a wide range of high-quality review from people with different points of view, in order to ensure the best approaches. With regard to risk factors, caution will be necessary. The approaches highlighted in presentations are, however, intended more to highlight main areas of risk than to detail precisely the exact factors. When impressions on the ground in cholera-affected areas are overwhelmingly related to the type of toilets seen, and when these areas are compared with those without cases and clear correlations observed, some useful ideas can be formed.
- Keeping an open link with the surveillance working group is crucial, to ensure that strategies are aligned and duplication and confusion are avoided. Action points are required to share the methodologies and follow this up to ensure the tool is as well integrated as possible, and "make everything go in the same direction."
- The Goma exercise was a first pilot, and the idea was to define the methodology of the costing plan itself. Adding up the amount required for each hotspot plan to be developed then multiplying by the number of hotspots and the number of countries affected by cholera can result in rather big numbers.
- Promotion for this tool is another issue: who will use it? The intended users are national or local governments that make WASH investments, and donors. It will provide them with a tool to point funds towards cholera-fighting priorities and orient money towards priority hotspots—and, within those hotspots, to the main things identified in risk factor analyses.
- There is a complementarity between the approaches presented in this session: i.e. a macro overview of the situation in regions, their health systems, and the identification of "low-hanging fruits," versus a tailored, detailed approach to particular hotspots. This synergy will

perhaps be most pronounced at national level, where hotspots can be mapped and prioritized in terms of the role they play in transmission of disease, then the priority hotspots subjected to the more tailored approach.