



**Global Task Force on Cholera Control (GT FCC) Working
Group on Oral Cholera Vaccine**

OCV Campaign update 2020

Webinar 01, 19 November 2020

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Acronyms and abbreviations

CTC	cholera treatment centre
CSP	GTFCC Country Support Platform
DRC	Democratic Republic of Congo
EPI	Expanded Programme on Immunization
GTFCC	Global Task Force on Cholera Control
icddr,b	International Centre for Diarrhoeal Disease Research, Bangladesh
ICG	International Coordinating Group on Vaccine Provision
IPC	infection prevention and control
M&E	monitoring and evaluation
NCP	national cholera control plan
NGO	non-governmental organization
OCV	oral cholera vaccine
WASH	water, sanitation and hygiene
WHO	World Health Organization

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(Total : 91)

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Introduction and general update

Kashmira Date, *US Centers for Disease Control and Prevention (US CDC)*

Dr Date began by recapping the outcomes of the oral cholera vaccine (OCV)-related discussions at the 2019 annual meeting of the Global Task Force on Cholera Control (GTFCC)¹.

Key vaccine-related GTFCC achievements since then have included a number of OCV campaigns, both in outbreak responses and following requests for preventive campaigns; a number of OCV coverage surveys that have included water, sanitation and hygiene (WASH) assessments; the drafting of a proposal, currently being finalized, in response to a Gavi call for proposals for assessing

¹ The report of the 2019 meeting can be found at <https://www.fondation-merieux.org/en/events/6th-annual-meeting-global-task-force-on-cholera-control-gtfcc/>

OCV impact; the inclusion of OCV in National Cholera Control plans (NCPs) in Zambia and Tanzania; and the joint development of a cholera research agenda by the GTFCC and the Wellcome Trust.

Notable challenges in this period have of course included the difficulties of continued operation under the stresses caused by the 2019/2020 pandemic of COVID-19, as well as the technical difficulties around prioritizing cholera hotspots for OCV use.

Looking forward, the 2020–2021 priorities set at the GTFCC Annual Meeting in October 2020² include the development of criteria for OCV prioritization in alignment with hotspot mapping efforts; the further integration of OCV use into NCPs; the implementation of more preventive OCV campaigns; continued close engagement with Gavi; collaboration with the new cholera Country Support Platform (CSP) for managing requests, implementing campaigns and monitoring and evaluating them; continued collaboration with other GTFCC working groups, including the surveillance and WASH groups; the creation of adequate monitoring, evaluation and ongoing research plans in accordance with the priorities of the new research agenda; and a bi-monthly series of additional meetings/webinars addressing special discussion topics.

Use of cholera vaccine 2013-2020

Malika Bouhenia, OCV focal point, WHO

Ms Bouhenia started with an overview of OCV use since the creation of the OCV stockpile in 2013. While the ICG (International Coordinating Group on Vaccine Provision) mechanism is used to respond to requests for OCV to be used in outbreak control situations, the GTFCC is responsible for managing OCV requests for preventive campaigns. While 2019 saw a sharp reduction in GTFCC requests, in 2020 19.7 million total doses were approved out of 27.1 million requested, 16.9 million of which were GTFCC requests. In 2020, therefore, 37% of doses were requested via the ICG.

Between 2013 and 2020, a total of 71.8 million doses have been shipped. 23.7 million of those were in 2019 and a further 11.3 million in 2020. These have gone to authorities in 22 countries, 82% of which are in Africa. The Democratic Republic of Congo has received over 15% of all the doses shipped. COVID-19 has of course impacted cholera vaccination campaigns: 51 countries around the world had had at least one vaccine-preventable disease campaign postponed due to COVID-19 as of 16 November 2020.

Ms Bouhenia provided an overview of which countries around the world were reporting cholera at the time of the meeting, then a summary of the vaccine requests received, which were approved, and the related implemented campaigns in 2020. She then presented the most up-to-date plans for vaccination campaigns going into 2021.

A number of challenges affect this work. Requests are most commonly rejected because of a lack of necessary information and a lack of human resources to implement the requests, or because they are submitted through the wrong mechanism, but only one request had been rejected in 2020 by the time of the meeting. Vaccine shipments are affected by a shortage of air transport. Implementation of OCV campaigns (for which the mean time is 73 days for emergency requests) is affected by COVID-19-related costs, which have increased budgets by 10-15% and caused many staff to be repurposed for COVID-19 work.

² Information on the 2020 meeting can be found at <https://www.fondation-merieux.org/en/events/7th-global-task-force-on-cholera-control-gtfcc-annual-meeting/>

In conclusion, OCV implementation—while challenging—is important and must be continued as effectively as possible throughout the pandemic. Reactive campaigns have been maintained so far, and have been shown to have had a positive impact on cholera transmission. More preventive campaigns are required, with the integration of OCV use into NCPs. Collaboration with the new CSP will be crucial in improving efficiency and effectiveness request processing, campaign implementation, and monitoring and evaluation (M&E). The OCV group will continue to work on increased and improved linkages with the WASH working group and, guided by the priorities of the cholera research agenda, will work to build adequate M&E and ongoing research plans.

Use of cholera vaccine in Bangladesh in 2020

Dr. Firdausi Qadri, *icddr,b (International Centre for Diarrhoeal Disease Research, Bangladesh)*

Dr Qadri summarized the background of cholera in Bangladesh, where diarrhoeal diseases are the leading cause of hospitalization at public facilities and the fifth leading cause of death in children under five. In response, Bangladesh launched an NCP in September 2019.

Based on that NCP, a demonstration OCV project was done in early 2020 in six cholera-endemic areas of Dhaka City. For this project Bangladesh requested 2.5 million OCV doses from GTFCC to vaccinate 1.2 million people in high-risk urban slum neighbourhoods. For the first round of the project, 1.2 million OCV doses of Euvichol were received on 18-19 February 2020. The vaccines were delivered at EPI (Expanded Programme on Immunization) fixed facilities and through outreach teams, and delivery was followed by house-to-house mop-up activities the next day. In this manner, around one million doses were given in total. Vaccination was done from 19 to 25 February, during which campaign 1 199 136 doses were delivered. The demonstration campaign included education on basic WASH, and infographic documents about the control of diarrhoeal diseases were distributed throughout the campaign target area. To support this WASH component, an advocacy meeting was held with relevant stakeholders prior to the campaign. A number of government and other partners, including UNICEF and icddr,b, were involved in the campaign

A further reactive OCV campaign was done among the host and displaced Rohingya population in Cox's Bazar between December 2019 and February 2020.

All of this work has been impacted by COVID-19. Second dose of OCV could not be done for 1.2 million people in the Dhaka campaign, and reactive vaccination was rendered impossible for host communities in four areas in Cox's Bazar. Both campaigns had gaps of over six months between rounds. These campaigns will be re-initiated in 2021.

In future Bangladesh will follow the NCP in order to contribute to the GTFCC Roadmap goal of ending cholera by 2030. Vaccination will be restarted in Dhaka city with two doses, and the NCP will guide efforts from there. There is also a longer term plan to use locally-licensed OCV, Cholvax, to meet the needs of a very large population, providing around 180 million doses in five years.

Use of cholera vaccine in Democratic Republic of Congo in 2020

Placide Welo, *Director, National Programme for Cholera Control (PNECHOL-MD)*

The Democratic Republic of Congo (DRC) is currently undergoing its seventh cholera epidemic. In response, the country has a multisectoral strategic plan to eliminate cholera in DRC, PMSEC 2018-2022. The plan has seven strategic axes:

- strengthening global surveillance activities;
- case management;
- implementation of sustainable interventions related to improving access to WASH in cholera hotspots;
- Implementation of interventions related to improving access to WASH in areas affected by cholera outbreaks;
- implementation of preventive vaccination activities in hotspots and reactive vaccination in eligible epidemic areas; and
- operational research and coordination and communication for advocacy and behaviour change.

The 2020 operational response has focused on strengthening multisectoral coordination, case management with free access to cholera treatment centres, strengthening epidemiological and biological surveillance, strengthening communication and social mobilization, and reactive and preventive vaccination. Community grid field WASH activities have been carried out in some regions.

The Democratic Republic of Congo is now in its fifth OCV campaign, with previous campaigns in Tanganyika (2014), Kinshasa (2016), Kasai (2018), South Kivu (2020) and North Kivu (2020). Dr Welo outlined some details about the North and South Kivu campaigns.

In North Kivu, a cholera outbreak was declared on 15 February 2019. A first OCV request was made to GTFCC on March 12 to vaccinate 1,059,539 people with 2 119 078 doses in cholera hotspots in eight districts. A second request was made on October 5 2019 for 961 656 doses to vaccinate 480 828 people across four new districts. In 2020, a first round of vaccinations was done from January 15-19, during which 492 960 doses were administered for 102.5% coverage. The second round took place from June 2 to June 7, administering 502 572 doses for 104.5% coverage. 92.1% of these were second doses. Challenges were mostly related to carrying out the vaccination campaign in the context of COVID-19 and applying infection prevention and control (IPC) measures, such as providing masks, gloves and hydroalcoholic solution for each vaccinator. The impact of the campaign was a 56.5% reduction in cases.

In North Kivu the long delay between the two rounds was due to COVID-19 and the need to get government authorization to vaccinate during the pandemic. This was compounded by the more basic need to figure out *how* to do a campaign in the pandemic context. The first DRC cases of COVID-19 were in March 2020, after which all flights closed and lockdowns were imposed. The feasibility of conducting campaigns was also affected by the possibility of Ebola, security issues, floods and other complicating factors. OCV is, however, a pillar of the fight against cholera in DRC, to which government remains committed; so despite these issues the govt eventually gave the go-ahead for the vaccination programme. Floods are commonplace in DRC, especially in cholera-endemic areas, an in fact increase the urgency of implementing the vaccine—a fact of which both national and provincial governments are aware.

The South Kivu campaign was carried out in the context of a GTFCC/ICG request to vaccinate 3 929 280 people with 7 577 720 doses in cholera hotspots in 37 districts of four endemic eastern provinces: South Kivu, Tanganyika, Haut Katanga and Haut Lomami. South Kivu was affected by flooding in mid-April 2020. A request for vaccine was made on May 21, and 2 103 576 doses were delivered on June 5 for use in five flood-affected districts. The first round of vaccination was done from August 28 to September 2, during which 978 626 doses were administered for 93.04% coverage. The second round took place from September 29 to October 4 and saw 58 352 doses administered for 100.6% coverage, with 91.6% of people receiving their second dose. A coverage survey will be done in December 2020.

The campaign was affected by several rumours associating it with the transmission of COVID-19. A number of strategies were implemented to overcome this, including meetings with local authorities, organizing the official launch ceremony near the homes of flood victims and within one of the most vaccine-resistant neighbourhoods, and vaccinating prominent public figures first (including the provincial minister for health, provincial deputies and city mayors).

WASH components were not systematically implemented as part of these campaigns due to a lack of financial resources, but vaccination was accompanied by the distribution of water purifiers in some districts, the installation of hand-washing facilities in public places (schools, churches, etc.), and hygiene awareness campaigns.

COVID-19 has had a negative impact on OCV campaigns in DRC. Confinements and travel restrictions have slowed implementation of planned activities, and the pandemic has provided a fertile environment for rumours associating vaccine campaigns with transmission of COVID-19 and causing resistance from communities. Other challenges have included additional costs related to COVID-19 IPC measures, and difficulties obtaining government authorization to travel and implement vaccination during lockdowns. Campaign-associated travel had to be organized exclusively using humanitarian flights. There were also difficulties mobilizing financial resources and implementing systemic WASH activities before, during and after vaccination.

Ways forward will include systematic provision of support for COVID-19 IPC measures during OCV campaigns; carrying out impact studies in provinces already vaccinated; further strengthening epidemiological and—especially—biological surveillance after vaccinations; and strengthening advocacy for WASH activities before, during and after vaccination.

A preventive campaign in Haut Katanga is planned for December 2020

Implementation of reactive and preventive campaigns in Uganda

Godfrey Bwire, Head Division of Public Health Emergencies, Ministry of Health

Dr Bwire began with a short history of cholera in Uganda, the first country in Africa to use OCV (Dukoral). In the last three years, over 3 million doses have been administered in both reactive and preventive campaigns in 13 districts. Priority is given to cholera hotspots that are home to vulnerable communities, and these priority districts were determined through hotspot analysis and formalized in national workshop in January 2018.

Three reactive campaigns have been conducted, in Hoima (2018), Bududa (2019) and Moroto (2020); of the three, the Bududa campaign had the most impact on the outbreak. The OCV used during this campaign was available within Uganda, and at the end of the outbreak—which followed massive landslides—67 cases and one death were recorded. Administrative OCV coverage for both rounds was above 95%. The Hoima campaign followed influx of refugees from DRC, and by the end of the outbreak 2 122 cases and 44 deaths had been reported. Coverage was high, at 80% for the first round and 91% for the second. The Moroto campaign occurred during the COVID-19 pandemic, though this had a limited effect on the cholera outbreak; by the end of the campaign, 460 cases and two deaths had been recorded. Coverage was 70% for the first round and 67% for the second.

Preventive OCV campaigns in Uganda have followed a 2018 stakeholder meeting to scale up the implementation of the activities in the NCP. The meeting agreed on a three-phase introduction of OCV covering 11 cholera hotspot districts. All have been covered with one or two doses of OCV, and the last phase of districts will receive a second dose in February 2021. Vaccine coverage has been high and no cholera outbreaks have been reported in vaccinated areas after the campaigns, helping Uganda progress towards meeting WHO targets for cholera elimination.

Several districts in Uganda have reported COVID-19 cases, and OCV campaigns in 2020 have observed COVID-19 guidelines. The Ministry of Health and other stakeholders have delayed planned campaigns to prepare guidelines and logistics as recommended by WHO and the National COVID-19 Task Force, and so far both preparations and campaigns have proceeded well, with no observed negative effect from COVID-19 infections or related IPC measures.

The pandemic has had both positive and negative impacts on cholera. Positive impacts have included the increased promotion of personal and domestic hygiene through hand washing with soap, which is key in cholera prevention and control; reduction of cross-border movement, a factor responsible for cholera spread; and some increased demand for OCV campaigns in cholera hotspot districts for fear of double epidemics of cholera and COVID-19. Negative impacts have included delayed implementation of the campaign while waiting for WHO/COVID-19 Task Force guidance, and inadequate resources for cholera prevention as focus has shifted to COVID-19 preparedness and control.

In all reactive campaigns, use of OCV has been complemented by WASH interventions. WASH experts are part of national and district planning and supervisory teams, and WASH assessment and promotion has been a key activity in preventive campaigns, with district planners using campaign data to mobilise additional resources and scale up WASH services.

Challenges include new cholera outbreaks with influxes of refugees: there is an urgent need for a protocol to target arriving refugees. Cross-border outbreaks also remain important, and must be prevented through targeted interventions along border areas.

The NCP will expire in 2022, and a review and update of the plan with the intent of scaling up cholera interventions should be supported. Monitoring and evaluation surveys are also required in order to gather feedback on how to make OCV campaigns more efficient and guide future activities.

Discussion

A brief period of open discussion covered a number of themes.

In Bangladesh, COVID-19 stopped a great deal of work, including plans for impact evaluations, further vaccinations and GTFCC requests. Since then, talk has recommenced both with GTFCC and with domestic stakeholders, leading to a degree of controversy about how long it is possible to wait between the first and second doses of a campaign. In Bangladesh, once six months had elapsed since the first round and the immunity level in the target population was unknown, the decision was taken to start afresh and administer two more doses starting in January 2021—making relevant changes for COVID-19 such as having more people vaccinated, practicing social distancing, and implementing other safety precautions including the use of personal protective equipment (PPE) and sanitizers. This plan enjoys a high level of government support, and a further GTFCC request will be made in January 2021.

Ensuring that people are not re-vaccinated is an important challenge, particularly in difficult humanitarian situations such as Cox's Bazar. There are a range of ways to deal with it—for example, one measure in Bangladesh was to use vaccination cards to keep track of doses. A study in Bangladesh also showed one dose of OCV to be as protective as two. It was requested that the GTFCC hold further discussion on the length of time that can elapse between rounds of vaccination

as “many countries are not familiar with this... they look at the literature on the vaccine, and there is information about vaccination [after] longer periods of time, but we need consensus on this.” A clearer picture is required of the possibilities around intervals between doses.

There is some discussion about the need to simplify or minimize the use of cold chain in the context of COVID-19. In Bangladesh, it was maintained for Euvichol, but not used for Shanchol in the Cox’s Bazar campaigns. In Dhaka it was kept in coolboxes. It would be useful to have clarity about how long the vaccine can be kept outside the cold chain.

The unique characteristics of cholera mean that OCV implementation issues in a pandemic context can be less difficult than those affecting some other vaccines; but nonetheless, it is not easy, and congratulations are due to all the countries that managed to conduct campaigns while the pandemic was ongoing. The GTFCC is interested in documenting the experience of conducting campaigns in the time of COVID-19, and requests that any relevant information be sent to [Ms Bouhenia](#).

Where campaigns in DRC achieved lower coverage, this was because of the presence of nomadic populations; the movement of people out of districts due to COVID-19; the early return home of health workers when the pandemic hit. In future, better ways will be required to address nomadic communities.

There was some discussion of how best to involve EPI human resources in OCV campaigns. In Uganda, they were involved from the start, from planning up to national implementation. At district level, EPI focal points maintain the cold chain and ensure that after vaccination is done, ice packs are collected and kept. Any leftover doses are kept by the EPI workforce.

Closing comments

Philippe Barboza, GTFCC

It is interesting to see the range of different experiences and challenges experienced in OCV campaigns. COVID-19 impacts many countries’ abilities because of the lack of human resources caused by the repurposing of staff to pandemic-related activities. In many countries the development of NCPs has been held back as a consequence, causing significant delays and sometimes cancellation of planned campaigns.

Encouragingly, despite this, both reactive and preventive campaigns have been implemented successfully in the past year without any reported contribution to COVID-19 transmission, and increasing numbers of requests are coming in. Though the pandemic is not over, and will probably last several more months at minimum, it is still encouraging to see the efforts that a number of countries have made to increase uptake for reimplementing OCV. Many doses are still going out, and further requests are still pending. Inroads are being made, and countries should be congratulated for their work in implementing the vaccination. The DRC example is a particularly useful illustration: in the east of the country, having two reactive campaigns and one preventive one in a context of security issues, floods and COVID-19 is a notable achievement.

It is important to note that the timeliness of requests to the GTFCC is very important. From the presentations seen in this meeting, it seems like the main recurring issue is not a delay in delivering

vaccines, but rather a delay in requesting them. It is important to emphasize that issuing requests as soon as possible is crucial in order for the vaccine to be most effective.

There is much work still to do in coming months. Thanks to all for their efforts so far.