GLOBAL TASK FORCE ON CHOLERA CONTROL

Use of Cholera Vaccine, NIGERIA, 2019

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HISTORY OF CHOLERA

- Cholera was first notified in Nigeria on December 26, 1970, which led to an epidemic of 22 931 cases and 2 945 deaths (CFR of 12.8%). Between 1972 and 1990, Nigeria reported very few cases
- In 1991, 59 478 cases and 7 654 deaths had been reported. The CFR was 12.9% which remains the highest reported in the country to date
- Starting in November 2001, a total of 2 050 cases including 80 deaths were reported by 18 LGAs. In November 2002, Kano State reported 176 cases and 12 deaths
- In 2008, Nigeria reported 5 140 cases including 247 deaths and in year 2009, a total of 13 691 cases with 431 deaths mainly from the eastern States
- From 1991 to 2018, the outbreaks became regular, more than 20,000 cases were reported in each of the following years (1991, 1999, 2010, 2011,2014, 2018)
- For these 6 years, cases reported in Nigeria disproportionately represented more than 10% of the global burden of cholera. In 2014 for instance

Nigeria: January to October, 2019: Epi Week 1 – 43: States/LGAs affected by cholera with attack rate per



October 31, 2019, a total of 1583 suspected cases. 339 confirmed cases and 22 deaths among suspected cases (CFR = 1.38%) have been reported from 7 States since the beginning of 2019 Of the suspected cases, 33.3% were aged 1 -4 years Among all

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suspected cases, 56.3% female and 43, 7% male

Nigeria: Total number of cholera cases: 1991 – 2018



OCV USE

- •Nigeria is endemic for cholera with cases being reported throughout the year. Poor WaSH conditions, particularly open defaecation and shallow/ uncovered wells have been known to be the main driving force for spread of the disease in Nigeria
- •Also widespread devastation of normal health care infrastructure due to prolonged armed conflicts especially in the North East region has created massive humanitarian emergencies and exposed large swaths of populations in communities including internally displaced persons (IDPs) to infectious diseases, one of which is cholera
- In Nigeria the mainstay of cholera control and prevention has been WaSH interventions, surveillance, risk communication and case management strengthened by coordination among stakeholders
- •However, in September 2017, in addition to the aforementioned, Oral Cholera Vaccination was conducted in Borno State in response to cholera outbreak in Maiduguri Borno State, NE Nigeria, among internally displaced populations. This intervention quickly led to the containment of the outbreak in the State and subsequently in all other States where OCV campaign was done following outbreaks

Timeline of OCV Use in Nigeria

| S/N | LGA | STATE | IMPLEMENTATION DATES | ROUND | COVERAGE (%) |
|-----|-----------------|---------|-----------------------------------|-------|-----------------|
| 1 | Maiduguri (MMC) | Borno | Sept 18 - 22, 2017 | l st | 100 |
| 2 | Jere | Borno | Sept 18 - 22, 2017 | 1 st | 103 |
| 3 | Konduga | Borno | Sept 18 - 22, 2017 | 1 st | 101 |
| 4 | Monguno | Borno | Sept 18 - 22, 2017 | 1 st | 121 |
| 5 | Dikwa | Borno | Sept 18 - 22, 2017 | 1 st | 108 |
| 6 | Mafa | Borno | Sept 29 - Oct 1 & Oct 3 - 4, 2017 | 1 st | 104 |
| 7 | Maiduguri (MMC) | Borno | Dec 8 - 12, 2017 | 2nd | 93 |
| 8 | Jere | Borno | Dec 8 - 12, 2017 | 2nd | 107 |
| 9 | Konduga | Borno | Dec 8 - 12, 2017 | 2nd | 93 |
| 10 | Monguno | Borno | Dec 14 - 18, 2017 | 2nd | 111 |
| 11 | Dikwa | Borno | Dec 8 - 12, 2017 | 2nd | 100 |
| 12 | Mafa | Borno | Dec 14 - 18, 2017 | 2nd | 102 |
| 13 | Bade | Yobe | May 9 - 13, 2018 | 1 st | 100.3 |
| 14 | Bade | Yobe | July 2 – 6, 2018 | 2nd | 100.6 |
| 15 | Bauchi | Bauchi | May 9 - 13, 2018 | 1 st | 97.1 |
| 16 | Bauchi | Bauchi | June 20 - 24, 2018 | 2nd | 96.6 |
| 17 | Gulani | Yobe | Nov 26 - Dec 1, 2018 | 1 st | 88.0 |
| 18 | Gulani | Yobe | Jan 27 - 31, 2019 | 2nd | 91.4 |
| 19 | Mubi North | Adamawa | July 11 – 15, 2018 | 1 st | 98 |
| 20 | Mubi South | Adamawa | July 11 – 15, 2018 | 1 st | 103 |
| 21 | Maiha | Adamawa | July 11 – 15, 2018 | 1 st | 99 |
| 22 | Mubi North | Adamawa | Aug 11 - 15, 2018 | 2nd | 99 |
| 23 | Mubi South | Adamawa | Aug 11 - 15, 2018 | 2nd | 99 |
| 21 | Maiha | Adamawa | July 11 – 15, 2018 | 2nd | 98 |
| 24 | Ngala | Borno | Nov 28 - Dec 2, 2018 | 1 st | 97.0 |
| 25 | Jere | Borno | Nov 28 - Dec 2, 2018 | 1 st | 93.8 |
| 26 | Maiduguri (MMC) | Borno | Nov 28 - Dec 2, 2018 | 1 st | 114.1 |
| 27 | Kal-Balge | Borno | Nov 28 – Dec, 2018 | 1 st | 100.0 |
| 28 | Gummi | Zamfara | Dec 3 - 7, 2018 | 1 st | 92.8 |
| 29 | Gummi | Zamfara | Feb 9 - 13, 2019 | 2nd | 115 |
| 30 | Fufore | Adamawa | Feb 20 - 22 & Feb 25-26, 2019 | 1 st | 100.0 |
| 31 | Ngala | Borno | March 1 – 6, 2019 | 2nd | 100.0 |
| 32 | Jere | Borno | March 1 - 6, 2019 | 2nd | 105.3 |
| 33 | Maiduguri (MMC) | Borno | March 1 - 6, 2019 | 2nd | 102.8 |
| 34 | Bama | Borno | March 1 - 6, 2019 | l st | 101.9 |
| 35 | Damaturu | Yobe | March 2 - 6, 2019 | 1 st | 100.3 |
| 36 | Michika | Adamawa | March 30 - April 3, 2019 | l st | 91.5 |
| 37 | Argungu | Kebbi | April 1 - 5, 2019 | 1 st | 111.3 |
| 38 | Damaturu | Yobe | Sept 1 - 5, 2019 | 2nd | 100.6 |
| 39 | Bama | Borno | Sept 7 – 11, 2019 | 2nd | 103.0 |
| 40 | Michika | Adamawa | Sept 10 - 14, 2019 | 2nd | 99.4 |
| 41 | Fufore | Adamawa | Sept 10 - 14, 2019 | 2nd | 111.0 |
| 42 | Argungu | Adamawa | Sept 12 - 16, 2019 | 2nd | 98.4 |

OCV USE – 2

National Cholera Hotspot Prioritization: PHASE O [Nov 2018 – Sept 2019]

Phase O Hotspot OCV Campaign Implementation in Nigeria: Nov 2018 – Sept 2019:

- Following the National Cholera Hotspot Prioritization Survey and Risk Assessment done in 2018, a total of 105 Cholera Hotspot LGAs were identified using 3 criteria. These include; active case transmission, high case fatality ratio and vulnerability index. The LGAs were grouped as High Risk, Moderate Risk and Low Risk and targeted for interventions in the medium term-as part of a multi-sectoral cholera control plan, with a vaccination plan in 9 phases.
- This proposal is still under consideration by the Global Task Force on Cholera Control (GTFCC) and was due for review in November 2019. However, the urgent situation presented by the then ongoing outbreak in 4th Quarter of 2018 had necessitated the selection of 10 LGAs for urgent intervention by GTFCC, including the use of OCV (Phase 0).
- The campaigns were conducted between Nov 2018 and Sept 2019 and witnessed massive turn-out in each case. There is high acceptability level of Cholera vaccine in Nigeria. In most of the LGAs vaccinated, part of the logistics challenges observed was the influx of community members from non-targeted and nearby LGAs to targeted LGAs.
- Total number of OCV doses received for the 2 Rounds: 5,329,752
- Total population targeted: 5,189,692
- Total number of doses administered: 5,244,305
- National coverage: 101%
- Coverage survey: The aggregated weighted coverage for the 2 LGAs included in the survey in Borno State was 87%
- AEFI was of negligible significance in all the campaigns
- At present, impact evaluation is yet to be conducted. However, so far, there has not been any reported cases of suspected cholera outbreak in any of the LGAs that have been vaccinated since 2017 except in Maiduguri Municipal Council where there is a high influx of unvaccinated IDPs from other parts of Borno State affected by crises

| State | LGA | Name | Target | Date Round 1 | No of Doses Administere d | Coverag e % | Target | Date Round 2 | No of Doses Administered | Coverag e % |
|---------|--------|---------------------------------------|---------------|----------------------------------|---------------------------------|----------------|---------------|-----------------------|-----------------------------|----------------|
| Borno | LGA 1a | Maidugur i Municipal Council | 323,875 | Nov 28 – Dec 2, 2018 | 369,418 | 114.1 | 359,640 | March 1 – 6, 2019 | 369,841 | 102.8 |
| Borno | LGA 1b | Kal-Balge | 51,680 | Nov 28 - Dec 2, 2018 | 51,680 | 100.0 | | | | |
| Borno | LGA 2 | Jere | 399,367 | Nov 28 - Dec 2, 2018 | 374,782 | 93.8 | 374,782 | March 1 - 6, 2019 | 394,533 | 105.3 |
| Borno | LGA 3 | Ngala | 142,640 | Nov 28 – Dec 2, 2018 | 138,382 | 97.0 | 152,640 | March 1 - 6, 2019 | 152,640 | 100.0 |
| Zamfara | LGA 4 | Gummi | 286,552 | Dec 3 – 7, 2018 | 265,860 | 92.8 | 286,552 | Feb 9 - 13, 2019 | 293,984 | 102.6 |
| Yobe | LGA 5 | Gulani | 162,550 | Nov 26 - Dec 1, 2018 | 143,000 | 88.0 | 164,005 | Jan 27 - 31, 2019 | 149,980 | 91.4 |
| Adamawa | LGA 6 | Fufore | 280,432 | Feb 20 - 22 & Feb 25-26, 2019 | 280,331 | 100.0 | 280,283 | Sept 10 – 14, 2019 | 311,228 | 111.0 |
| Adamawa | LGA 7 | Michika | 216,197 | March 30 - April 3, 2019 | 197,788 | 91.5 | 197,788 | Sept 10 – 14, 2019 | 196,631 | 99.4 |
| Kebbi | LGA 8 | Argungu | 247,402 | April 1 - 5, 2019 | 275,297 | 111.3 | 270,700 | Sept 12 – 16, 2019 | 266,343 | 98.4 |
| Yobe | LGA 9 | Damatur u | 88,014 | March 2 - 6, 2019 | 88,251 | 100.3 | 127,675 | Sept 1 – 5. 2019 | 128,455 | 100.6 |
| Borno | LGA 10 | Bama | 394,503 | March 1 - 6, 2019 | 401,817 | 101.9 | 382,415 | Sept 7 – 11, 2019 | 394,064 | 103.0 |
| | TOTALS | | 2,593,21 2 | | 2,586,606 | | 2,596,48 0 | | 2,657,699 | |

WASH COMPONENTS

- The water, sanitation and hygiene (WaSH) intervention, led by the Federal Ministry of Water Resources (FMWR), has been providing motorized solar-powered boreholes, sanitation units with hand washing facilities, as well as blocks of toilet compartments in affected States. Nigeria is also working with other Lake Chad basin countries to strengthen cross-border collaboration for cholera control
- House-to-house hygiene promotion activities are ongoing in affected communities of Adamawa State with water purifiers being distributed to households. Adamawa State has accounted for 51% of the cases of suspected cholera outbreak in 2019
- 170 water points have been mapped for treatment within the affected LGAs in Adamawa State
- At least 510,663 litres of water have been chlorinated in 39 of the mapped water points and this is carried out daily
- Distribution of water purification tablets carried out in some affected communities of Adamawa and Katsina States
- A broad-based long term plan is to massively upgrade water infrastructure by relevant National and Subnational government ministries/agencies. This is also part of the brief of North East Development Commission and similar bodies in other parts of the country established by the Federal Government to reconstruct and rehabilitate social infrastructure devastated by many years of armed conflicts in affected regions

CHALLENGE SAND WAY In case of outbreaks, i is not indon van thres of a teran outbreak before request is initiated for a reactive campaign. Decision to request is still based on the prevailing

epidemiological situation from affected areas

If preventive, what time of the year is better? Obviously, it has to align with the seasonal outbreaks if the season is well known. It is expected that the 1st and 2nd doses should be concluded in the targeted communities before the onset of the season. Conversely, due to the limited global OCV stockpile, achievement of this outcome has been a major challenge

Other identified challenges include; security concerns, funding and logistics issues, crowded programme calendar, personnel and staffing inadequacies especially at subnational levels, short protection interval as well as other sundry issues that may be associated with vaccination and mass campaigns generally

In addition to the hotspot prioritization and in response to a call for a multi-sectoral, long-term plan for the cholera control in Nigeria, a 5-year National Strategic Plan of Action for Cholera Control has been developed to drive a coordinated approach to cholera control in Nigeria. This plan currently forms the basis for all cholera control interventions in the country.

Altogether, 7 strategic areas of interventions have been identified as complementary tools for achieving the medium-term goal. These are; Leadership and coordination, Epidemiologic surveillance, Laboratory surveillance, Case management, Social mobilization /Risk communication, improvement in the supply of Safe Water, Sanitation and Hygiene and the use of Oral Cholera Vaccine.

A critical part of the plan is the goal to reduce the incidence and mortality due to cholera by 67% by the year 2023. This medium-term goal forms part of a larger framework of eliminating cholera in Nigeria by 2030 as part of global target

Measurable indicators and annual targets have been set for the monitoring and evaluation of each sphere of activity contained in the plan

Lastly, we are also open to any collaboration towards conducting studies on our control mechanisms so far





Together we can #endcholera

