Cholera Case Investigation – Ad Dalî’, Yemen

Key Findings Presentation
May 2024
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Introduction
Cholera Situation in Yemen

Current Cholera Outbreak*

- From October - December 2023, Yemen experienced a cholera outbreak, with nearly 1018 cases of AWD recorded.*
- The outbreak has started among migrant communities in Ataq district of Shabwah governorate.*
- The total number of cases recorded between 1 January and 29 April 2024 across all 22 governorates is now estimated to be around 30,000.**
- At Ad Dali governorate level, the number of reported cases from the beginning of 2024 until May 17, 2024, was 1,427.***

WASH Response

- As part of the response to the cholera outbreak, REACH, in collaboration with the Yemen WASH Cluster, updated the CIF tool with a specific focus on cholera. This tool is designed to collect data that helps understand potential sources, risk factors, and vulnerabilities associated with a cholera outbreak.
- Following the recent outbreak, the Yemen WASH Cluster has requested partners to use the CIF tool to conduct interviews with patients, especially in the affected areas. The tool is available to all YWC partners for use, and below you can find examples of both the paper and Kobo versions.

Cholera Investigation Form (CIF)

* Yemen Humanitarian Update: Issue 11, December 2023 [EN/AR] | OCHA (unocha.org)
** Yemen - Situation Update: Cholera | Digital Situation Reports (unocha.org)
*** Epidemiological Situation of diseases in free areas in Yemen

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CIF, 08 FEB, 2024

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<tr>
<td>Yes, stools were positive</td>
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<td>No, stools were negative</td>
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</tbody>
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Re: Interviewee's information: | re: Interviewee's information: |

- No
- Yes

Health: | health: |

- No
- Yes

- Phone number of healthcare worker (if known): 1076 as one case
- Date of interview: 2024-02-08
- Date of last date of symptoms: 2024-02-08
- Motivation for interview: 2024-02-08

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KOBO version

Paper version
Methodology Overview

CIF tool – the basics

- **In-person patient-level surveys** with an adult member (18 years or older) who is waiting for the results or tested positive for cholera.
- The CIF includes a section to collect data on each household member who might be sick, as well as details on potential exposure to cholera within the household and community.
- The CIF examines the patients’ recent travels to identify potential routes of cholera transmission.
- Patient Access to WASH services and behaviors were assessed to monitor associated risk factors.
- Data collection with the patient ideally within two weeks of health facility discharge of the patient.

DATA COLLECTION

- With the support of the Health Cluster, Data collection was carried out in Health facilities that provide contact information for positive and potential cholera patients.
- Following coordination with the Yemen WASH Cluster, WASH partners volunteer to collect CIF data to inquire about positive and potential cases.

POPULATION OF INTEREST

- All households (HH) members, people from host communities, displaced populations, refugees, and migrants who are suspected of having cholera and have visited a medical centre due to illness.
- Ideally, and if there are enough resources available, the form should be used for all people who seek treatment for Acute Watery Diarrhea (AWD) at the health center / Diarrhea Treatment Center (DTC) when a cholera outbreak is suspected in the area.
02

Demographics
The following key findings were derived from 22 patient-level interviews conducted through the CIF tool in April 2024, collected by CARE International and Medair.

- All the patients have tested positive for cholera.
- Locations of the 22 cases are in 14 rural, 6 in urban, and 2 in peri-urban areas in Qa'atabah, Al Azariq, and Ad Dali' districts in Ad Dali' governorate.

<table>
<thead>
<tr>
<th>Male cases:</th>
<th>Female cases:</th>
</tr>
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<tbody>
<tr>
<td>9 cases</td>
<td>13 cases</td>
</tr>
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</table>

- All positive cases reported having between 3-22 HH members living in their households.
- 11 cases reported being unaware of other confirmed/suspected cases in the same neighborhood.
- 3 positive cases stated that a one-year-old child in the household, either male or female, displayed symptoms of cholera.
- All 22 positive cases reported that they did not travel to different locations while experiencing symptoms.
03

Main Findings
03.1 Risk Factors
WASH Practices

Main source of drinking water reported by patients. (n=22)

- 12 Patients reported using **Improved water sources** as their main source of drinking water.
- 4 Patients also reported using **secondary water** sources for drinking such as: Bottled water, rainwater collection, borehole, protected spring, and surface water (river, dam, lake, pond, stream, canal, irrigation channel).

The **top three water storage methods** used in households were underground water tanks, jerry cans, and roof water tanks, reported by 11, 9, and 7 patients respectively. Note: This question allowed for selecting multiple answers.

WASH Practices

- Patients who reported washing their hands reported doing so usually before eating (n=21), after defecation (n=11), and before cooking (n=8) using a fixed facility tap in their dwelling (n=3), mobile bowl (n=13), or no handwashing facility is available (n=2).

- Only 12 patients reported having soap in their HHs. For the rest of the patients, the reasons for not having soap in their HHs were:
  - 7 Patients reported that soap is expensive
  - 6 Patients reported that they ran out of soap
  - 2 Patients reported that soap is not necessary.

*Multiple answers could be selected
WASH Practices

Type of sanitation facility reported being used by the patients. (n=22)

10 patients reported using Improved sanitation facilities for their HH while the rest relied on unimproved sanitation facilities. Closed pit (n=17) was the most commonly used sewage system connected to the house as reported by the patients.

In the past 30 days, solid waste/trash was frequently (n=6) and sometimes (n=9) observed by the patients, while human faeces were frequently (n=7) and sometimes (n=6) visible. Additionally, stagnant water was frequently (n=12) and sometimes (n=3) observed in the vicinity of their accommodation.

Key Findings

13/22 Patients reported that there is occasional/frequently overflowing sewage in the vicinity of the accommodation in the last 30 days, most reported a sewer pit as the source of the overflowing sewage.

Social Behaviors

1/22 patients reported visiting a sick person in a health facility the week before experiencing symptoms.

3/22 patients reportedly attended a funeral ceremony in the week before experiencing symptoms. One of the three patients reported that the deceased has died from cholera.
None of the patients reported buying food from a restaurant in the week before the first symptoms.

None of the patients reported buying food from a street kiosk in the week before first experiencing symptoms.

Hygiene Practices:
18/19
Patients reported washing fruits and vegetables before consumption, using untreated water.
03.2

Health Education
Health Education

Patients perceived source of illness (n=22)*

11 out of 22 patients reported having received education about cholera in the past 12 months. The sources of information reported were social media, health facility, television, or from a community volunteer.

Patients perceived methods of cholera prevention (n=22)*

20 patients reported that eating healthy food would help to prevent cholera. While 13 patients reported washing vegetables and fruits with safe water regularly were methods of cholera prevention. Other ways to prevent cholera or acute water diarrhea were reported by the patients as shown in the chart below.
Limitations

• Data collection partners raised some concerns regarding difficulties in accessing patient lists from health facilities to facilitate interviews. This challenge, coupled with reliance on health center data, poses obstacles to effectively conducting interviews.

• In December 2023, a joint report on cholera by the WASH and Health Cluster revealed that approximately 36% (1,262) of suspected cholera cases involved children under the age of five. However, the CIF tool restricts partners to interviewing only individuals aged 18 and older. Consequently, cases involving individuals under 18 may be overlooked, potentially impacting coverage and comprehension of the total suspected cases within the assessed areas.

• Patients might encounter challenges in recalling specific details about locations visited or individuals encountered.

• Respondents might be reluctant to disclose personal information or details regarding their illness or sick family members due to privacy concerns, cultural or traditional sensitivities.

• There might be constraints on following up with patients for clarifications or additional information (especially migrants/refugees), which could result in having incomplete data.

• The timeframe between sharing the patient's name to the WASH partner and actually reaching the patient could be substantial, potentially resulting in the patient being in a different location upon arrival of the partner/enumarators. Additionally, since the WASH partner should conduct the interview within two weeks of the patient's discharge from the health facility, any delays could impact the accuracy and reliability of the information collected.

• Given the constraints of limited resources and funding allocation, coupled with the unexpected nature of the cholera outbreak outside partners' response planning strategy, we encounter challenges in expanding the coverage and assessing additional locations.
Thank you for your attention

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