



بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ  
**Federal Ministry of Health**



**Directorate General Primary Health Care**

**Expanded program immunization**

## **Cholera Outbreak Response Campaign Report**



*Federal Minister of Health of Sudan DrAkram AlToum inaugurates the opening of the 1st round of OCV campaign in Sinja Locality of Sinnar State\_11 Oct 2019.*

**Blue Nile and Sennar States**

**12-16/ October 2019**

**17-21/November**

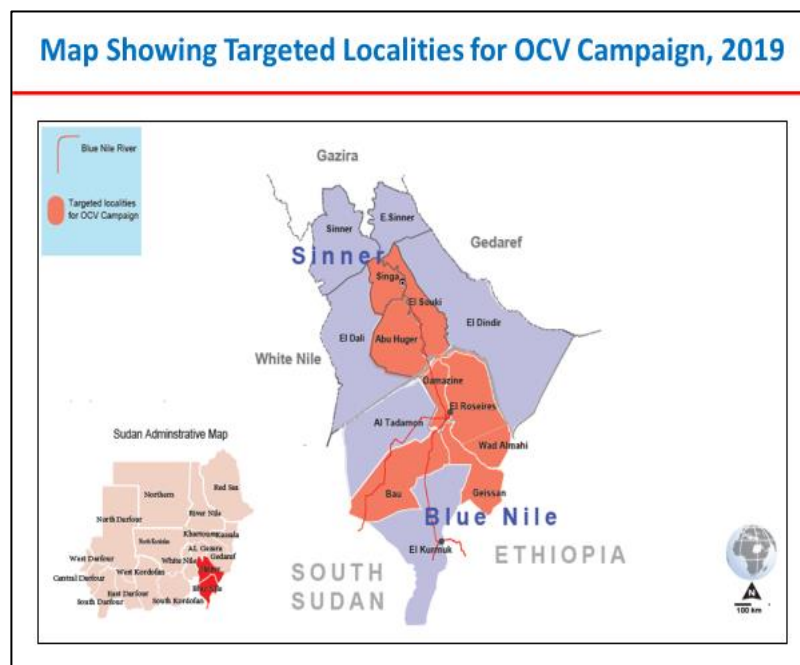
## **Acknowledgements**

Sudan EPI gratefully acknowledges the collaborative efforts of the Ministry of Health and its partners WHO and UNICEF for their commitment to implement OCV outbreak response campaign. We thank the technical advisors and campaign implementers at all levels for their efforts in the campaign preparation, implementation and monitoring. Also, we extend our appreciation to Dr. Malika Bouhenia from International Coordinating Group (ICG) for her technical support and monitoring the campaign in Blue Nile state.

## Introduction:

Sudan has experienced repeated outbreaks of cholera / Acute Watery Diarrhea (AWD) during last five decades. Since 1966, there were 16 documented major cholera/AWD outbreaks. On 2nd of September 2019, Blue Nile State Ministry of Health reported 5 suspected cases of cholera from El Roseries hospital in Blue Nile state and rapidly spread to other localities, and by 17th September, five out of seven localities in Blue Nile state reported total 94 cases of cholera with 6 deaths. The affected localities were El Roseries (67 cases and 5 deaths with CFR 9%), Wad Almahi (3 cases), Damazin (22 cases), Geissan (1 case) and Baw (1 case who died). On 8 September 2019, the Minister of Sudan's Federal Ministry of Health (FMOH) declared the occurrence of a cholera outbreak in Blue Nile State; by second week of the outbreak in Blue Nile, the transmission spread to the neighboring state Sinner which reported their first case on 12th September from Abu Hugar locality, Sinner reported total 25 suspected cases.

All the outbreak response measures started immediately: case management, safe excreta disposal and safe water including water chlorination activities, vector control, health education to raise community awareness and planning for



complementary outbreak mass immunization campaign to control the ongoing outbreak, in addition to provide long-term protection among vulnerable population against cholera infection.

## Previous OCV campaigns in Sudan

Sudan successfully organized two OCV outbreak response campaigns in recent years. In August and September 2016, WHO-FMOH had conducted two rounds of OCV campaigns in White Nile state targeting 67,849 populations in 5 refugee camps and their close communities (9 villages) in two localities namely Al-Salaam and Al-Jabaleen. Also, in June 2017, the Ministry of Health (FMOH) of Sudan had conducted OCV campaign in two localities: Abu Jubaiha and El Liri in South Kordofan, the target population was 76,628, including 51,545 refugees and 25,083 people in the host community older than

12 months. The first round was conducted from 8th to 11th June 2017 and the second round was conducted from 16th to 19th June 2017.

### **Current OCV outbreak response Campaign**

A proposal was developed by the FMOH and partners (WHO and UNICEF) covering the current epidemiological situation of the cholera outbreak, the affected localities, the targeted age group for vaccination with a plan for OCV outbreak response campaign

### **Vaccination Objectives**

#### **General Objective**

To support in control of cholera outbreak in Blue Nile and Sennar states through vaccination campaign using Oral Cholera Vaccine (OCV)

#### **Specific Objectives**

- To vaccinate 100% of the 1.65 million targeted persons aged one year and above including the pregnant women in Blue Nile and Sennar states
- To ensure immunization safety practices and monitor AEFI during the campaign during
- To accurately monitor and document the campaign coverage at all levels including special population, hard to reach and in accessible populations
- To use the campaign opportunity to strengthen the community awareness regarding cholera (symptoms, transmission, personal hygiene, prevention, importance of care seeking and treatment in addition to home treatment of dehydration)

### **1-Pre Campaign Activities:**

#### **1-1 Planning and preparation: -**

Micro – planning as a corner stone for successful campaign implementation was tackled by TWG. Guidelines for Micro planning was updated and distributed to the targeted states included the main components of campaign micro-plan with detailed guidelines for each section of the plan development.

The State plan should contain the socio-demographical information's and special consideration for Special populations (IDPs, Refugee, and nomads....), determination of available resources and the needs in regard to HR, transportation, cold chain capacity, also the plan covers the immunization safety, communication and social mobilization and M&E plans.

**Target age group:**

The Cholera campaign implemented in 8 localities in 2 States, target age groups were from one-year-old and above **(1,648,659) as distributed in table below;**

State	Locality	Target population
Blue Nile	Roseries	228,053
	Damazin	312,505
	Wad Amahi	145,419
	Geissan	121,679
	Bau	87,825
<b>Total of Blue Nile</b>		<b>895,481</b>
Sinner	Abu Hugar	172,008
	Elsoki	365,875
	Singa	215,295
<b>Total of Sennar</b>		<b>753,178</b>
<b>Total</b>		<b>1,648,659</b>

**Implementation strategies of the campaign:**

Campaign implemented by three strategies; fixed sites, temporary sites and mobile teams to reach special population of the targeted areas. In some cases, the SMOH of BN and Sinner sent vaccination teams in the evening for house-to-house visit to cover the male population who were busy at work during daytime and could not show up at the vaccination sites.

**Vaccine and other supplies:-**

The estimated vaccine was procured through UNICEF Micro-planning guidelines all need printing materials was produced (logbooks, registry books, tally sheets and Supervisory logbooks)

**TOT for states and locality staff and service providers training:-**

A federal team was sent to both states to participate in the TOT and micro planning session to train all supervisors, supply officers, AEFI local committees to enhance the capacity of state and locality staff in training and ensure high quality, followed by training of providers (vaccinators, registers staff, social mobilizes and safe disposal personnel)

-TOT and micro planning session were conducted from 4-5 October 2019

- Providers training workshops according to the standard measures were conducted from 6-7 October 2019

- Refreshing training for the second round were conducted during the period:13-14 November 2019

**Cold chain: -**

The cold storage capacity was already reviewed and most of the cold chain gaps were considered.

**- Vaccine arrival**

The vaccine arrived in two shipments, the first shipment was on 6Oct 2019the second was on 8 Oct 2019, vaccines was Dispatched immediately to targeted states

**Immunization Safety:-**

National AEFI committee enhanced to reviewing the AEFI and immunization safety procedures as well as reactivation of states' AEFI committees with below stated term of reference to :

- (1) Ensure implementation of the national immunization safety plan during Cholera campaign
- (2) Revision of state immunization safety plans for Cholera campaign
- (3)Respond and follow up the reported AEFI cases management in timely manners
- (4) Follow up the implementation of safe disposal plans.

**Social Mobilization:**

Guidelines for communication and social mobilization plans at locality and state levels was developed with relevant social mobilization and advocacy activities: -

- Development of the main messages used to promote and mobilize the targeted groups by local language
- Production of information and advertising material
- Providing Megaphones to communicate different community.
- Training of mobilizes, announcers, community leaders



Awareness raising about the OCV campaign in basic school in Sinjja Locality /Sinnar State\_9 Oct 2019.

**Monitoring and evaluation:**

**Monitoring Activities planned pre, Intra and post campaign**

**Pre-campaign:**

Readiness tools for pre campaign activities designed with all plan components and monitored on daily basis.

Multi-level supervision was planned as below:

Level of Supervision	Distribution
Federal Supervisors	State team leader &1 per locality
State Supervisors	2 per locality
Locality Supervisor	1 per admin Unit
Admin Unit Supervisors	1 per admin Unit
Federal HP	I per locality
WHO NMO	2 per state
WHO independent monitoring	1 per admin unit
UNICEF	2 per state

Effective Daily operation rooms meetings at Federal, state and Locality levels for daily monitoring and timely corrective measures were formulated.

## Campaign Implementation:

### Opening ceremony

H.E. the Minister of Health DrAkram Ali Eltoum successfully launched the first round of the campaign on 11 Oct 2019, in Sennar State, accompanied by WHO representative DrNaeema Al Gasseer and UNICEF head of Health and Nutrition Section DrSajaAbdallah. All the high government officials at state levels led by the Wali participated in the launching. Wali of Blue Nile state and his high government officials accompanied by theFederal MCH director DrSawsan El Tahir and DrAwad Omar the EPI Manager, representative from WHO and UNICEF successfully launched the campaign. Small launching ceremonies conducted at the localities levels. This led to high advocacy and awareness raising among the public and the families.

The campaign launched one day before the campaign, which implemented on 12-16 of October 2019. Second round was implemented during the period: 17-21November 2019

### Adverse events following immunization reported during cholera campaign October 2019 – First Round

State	Vomiting	Nausea	Rash	Fever	Hypotension	Swelling of the face	Abdominal pain
Blue Nile	8	1	4	1	1	1	1
Sennar	1	5	0	0	0	0	0
<b>Total</b>	<b>9</b>	<b>6</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

### Adverse events following immunization reported during cholera campaign October 2019 – Second Round

State	vomiting	diarrhea	nausea	fainting	fever	Abdominal pain	Skin rash	total
Blue Nile	1	4	2	1	1	1	1	11
Sennar	6	0	3	0	0	2	3	14
<b>Total</b>	<b>7</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>4</b>	<b>25</b>



## Vaccine Management

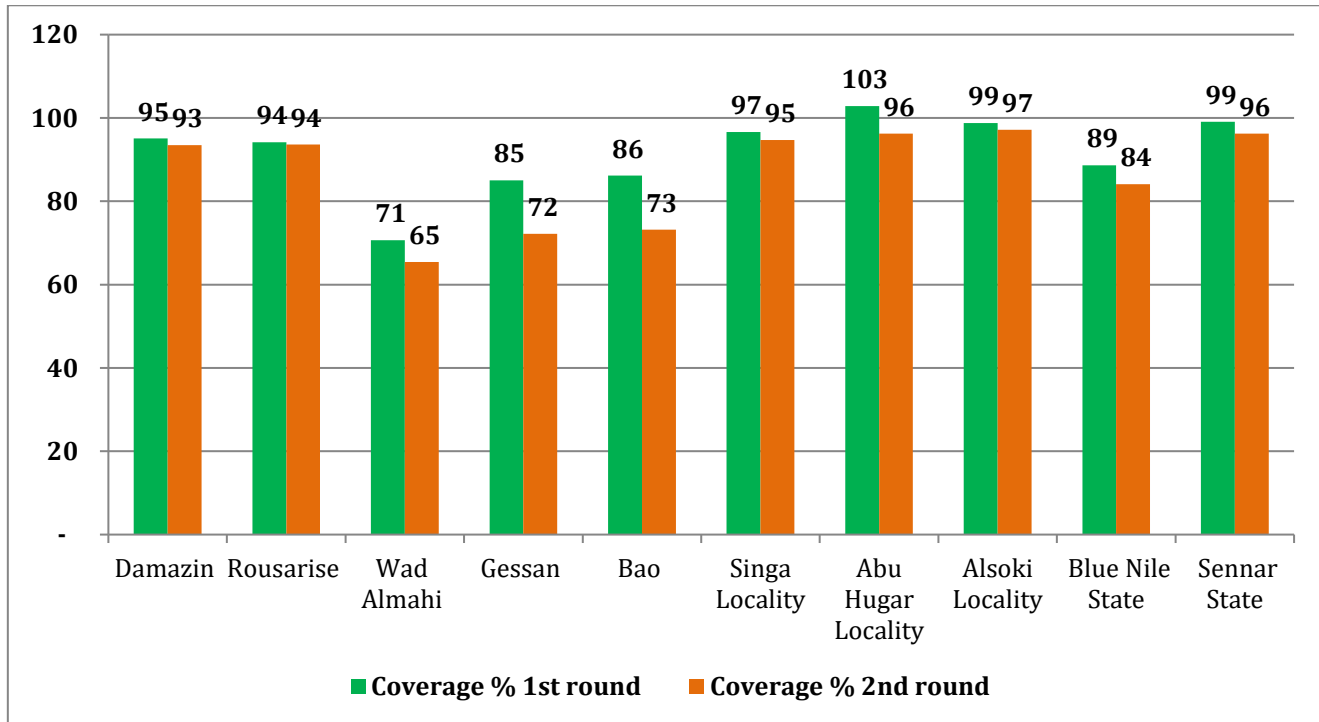
Round	Vaccine Management - Blue Nile State						
	Target	Received	Consumed	Coverage	Remaining	Wastage	Wastage %
First Round	895,481	895,481	794,502	793,802	94,481	700	1
Second Round	895,481	895,481	796,280	794,920	95,901	1,360	2
<b>Total</b>	<b>1,790,962</b>	<b>1,790,963</b>	<b>1,590,782</b>	<b>1,588,722</b>	<b>190,382</b>	<b>2,060</b>	<b>0</b>

Round	Vaccine Management - Sennar State						
	Target	Received	Consumed	Coverage	Remaining	Wastage	Wastage %
First Round	753,219	753,219	746,303	746,272	6,916	31	0
Second Round	753,219	760,094	734,364	734,335	25,073	657	0
<b>Total</b>	<b>1,506,438</b>	<b>1,513,313</b>	<b>1,480,667</b>	<b>1,480,607</b>	<b>31,989</b>	<b>688</b>	<b>0</b>

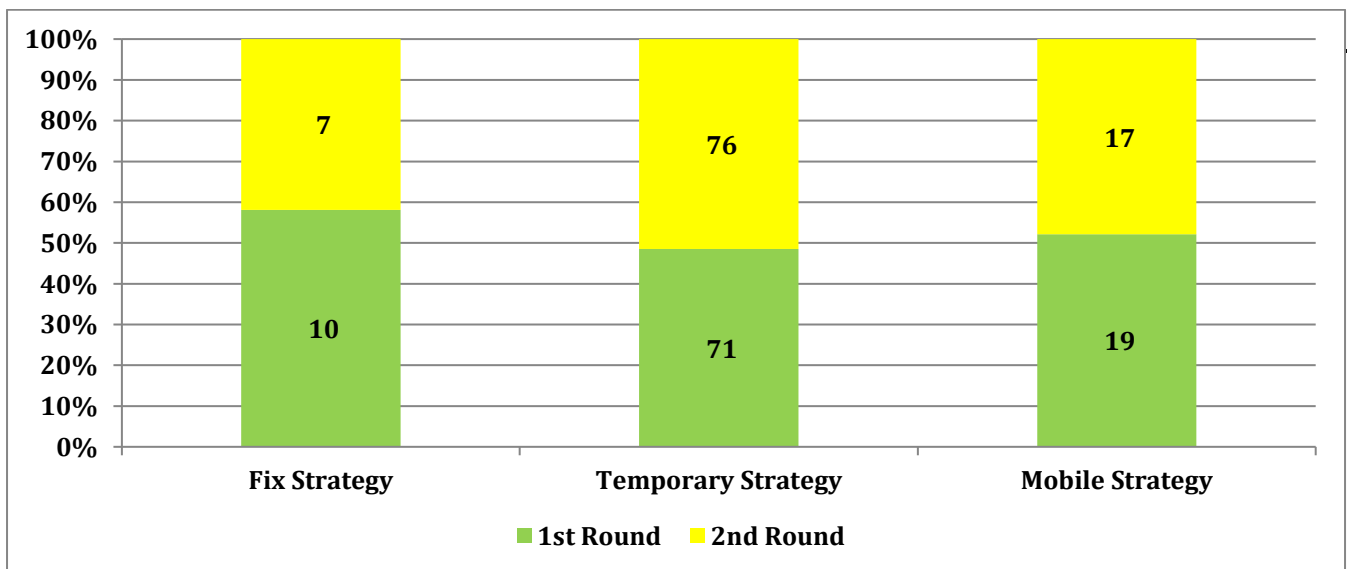
## Results:

### Reported Coverage Analysis

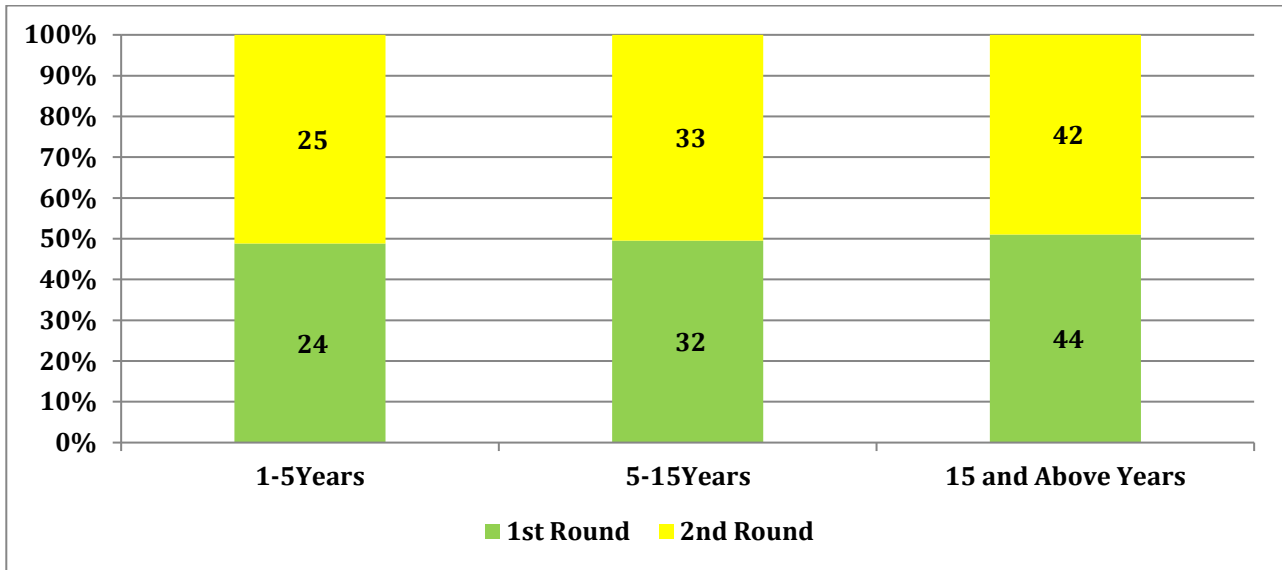
#### Reported Coverage first and Second round



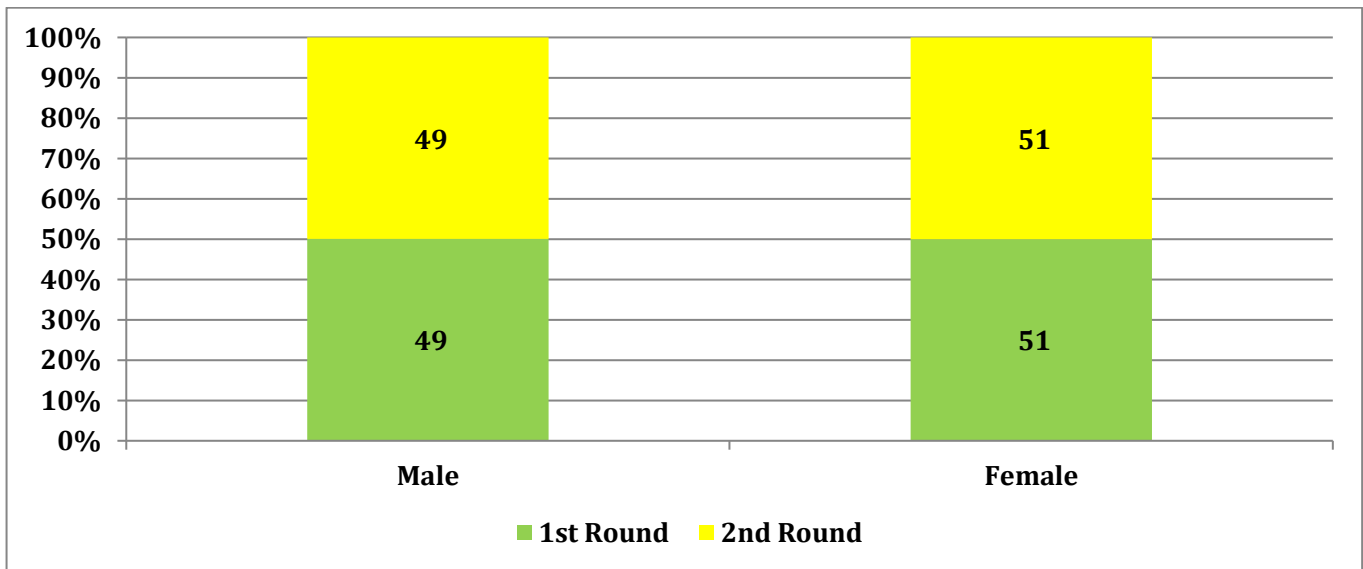
#### Reported Coverage by Strategies



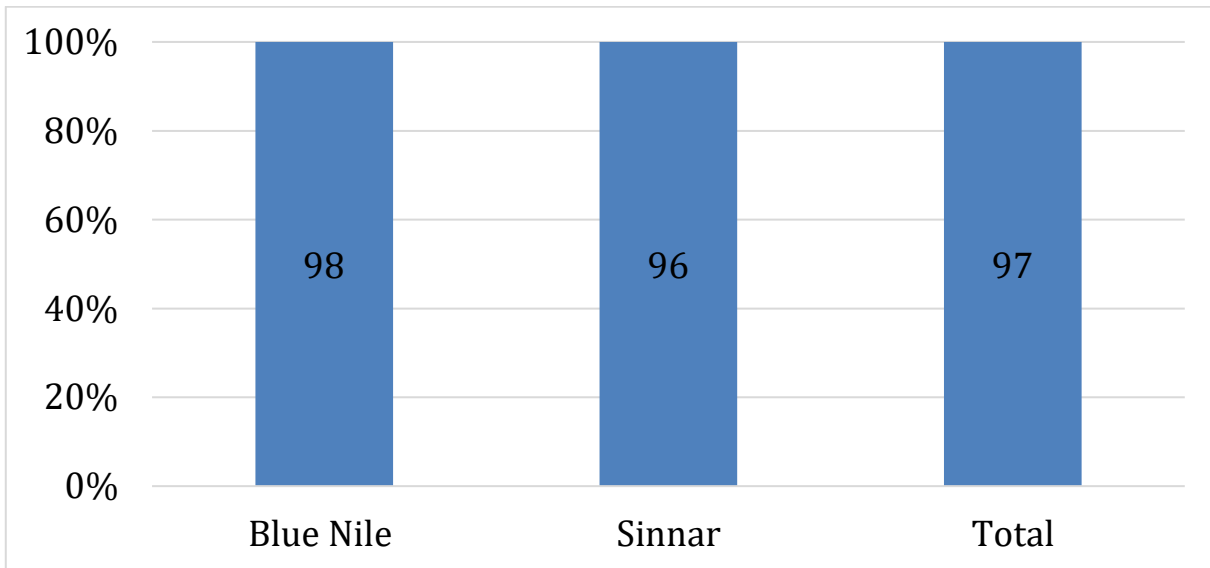
### Reported Coverage by Age Group



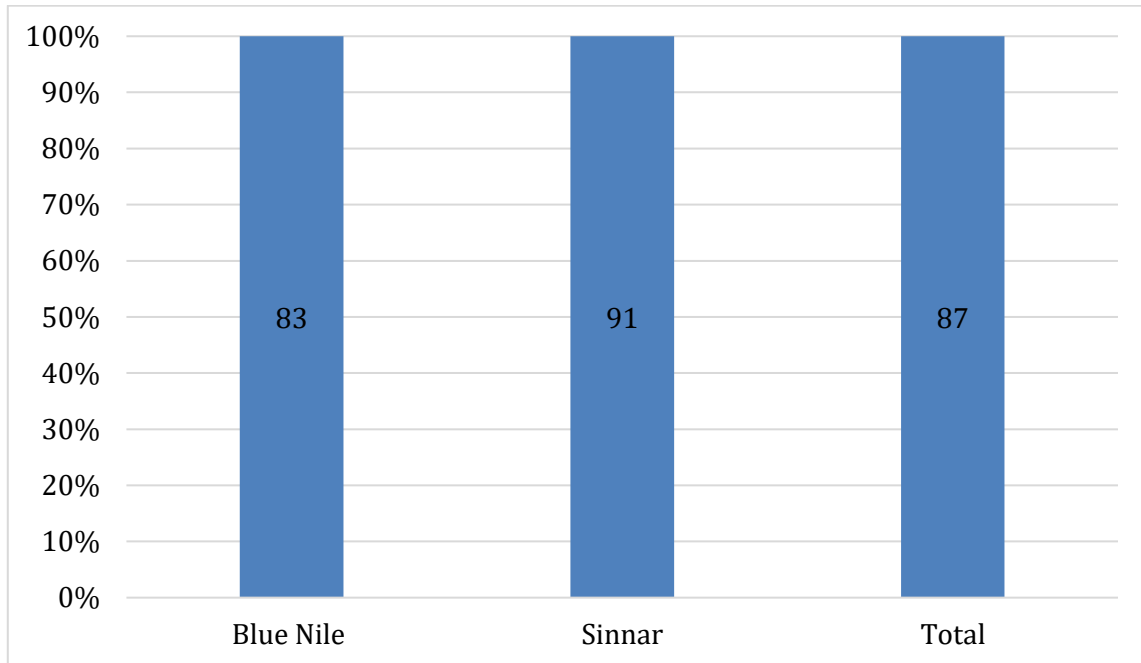
### Reported Coverage by Gender Blue Nile State



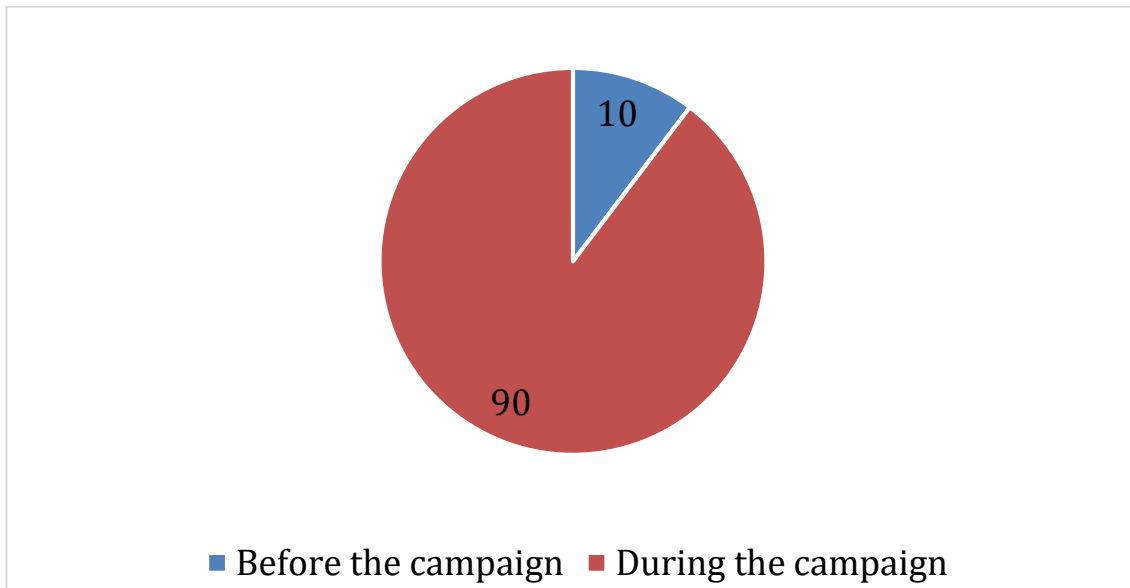
### Geographical coverage



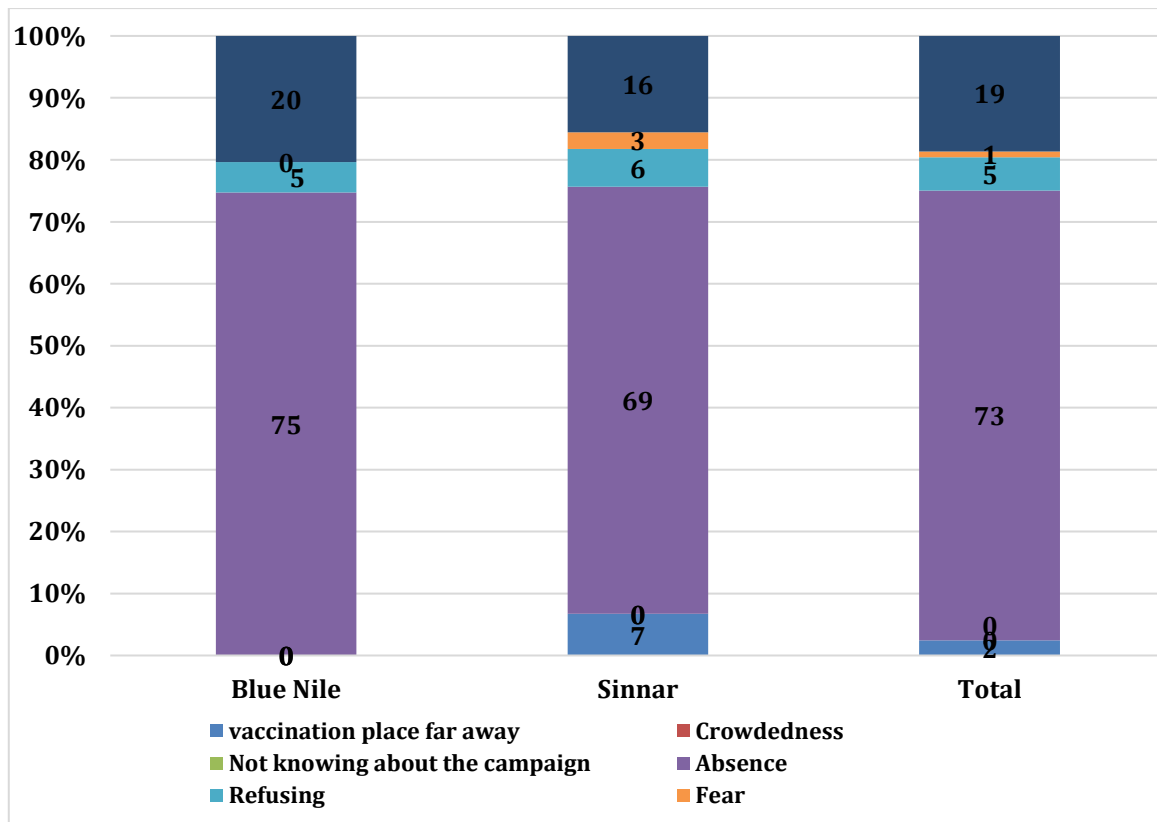
### Percentage of awareness



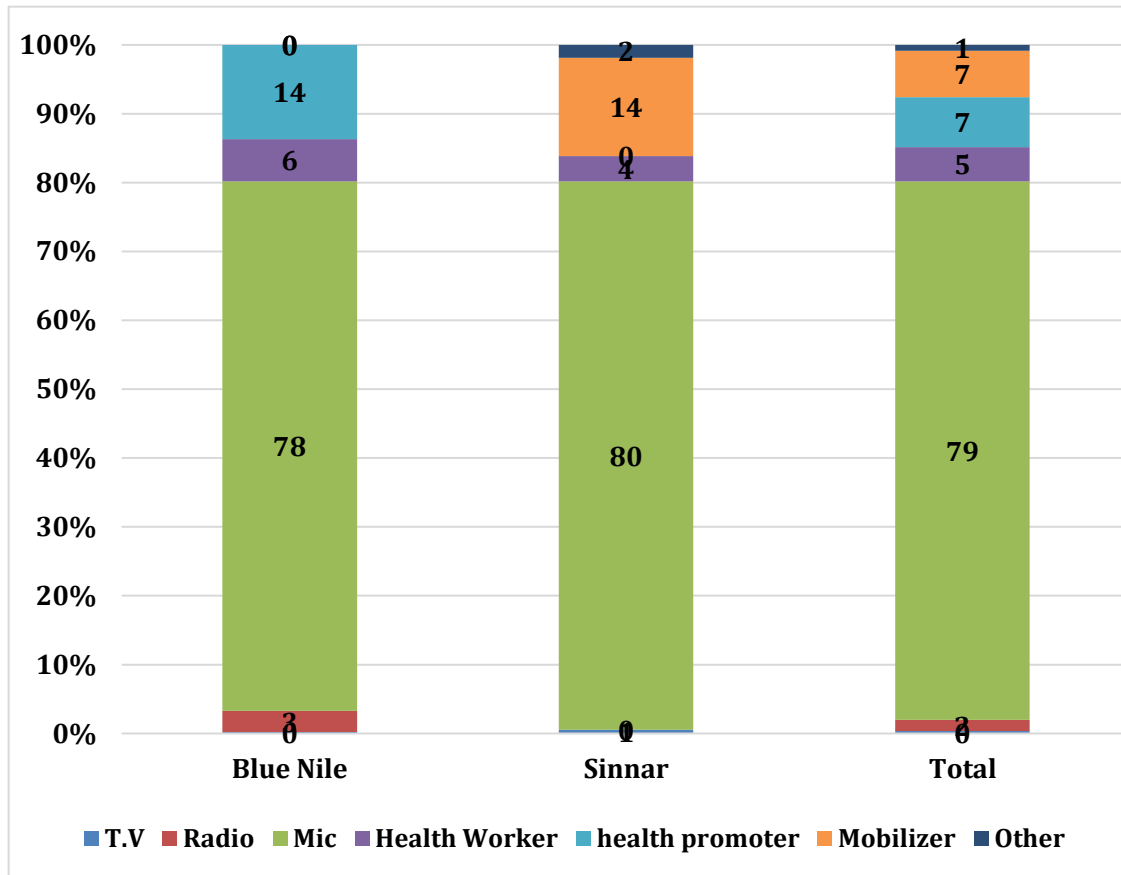
### Time of Awareness



### Reasons for not receiving OCV vaccination



## Sources of Awareness as reported by (F.S)



### Positive Aspects

- ✓ High political commitments of Federal and State Governments
- ✓ Strong support from in country partners in outbreak response in general and campaign
- ✓ planning and monitoring at national and state levels
- ✓ Acceptance of the proposal by the ICG within very short time
- ✓ Swift response of the international UN organization and national and international NGOs in supporting the campaign technically and financially.
- ✓ Support of Ministry of Defense in availing Helicopters to the inaccessible areas due to the heavy rain
- ✓ Effective Daily operation room meetings at all levels (Federal, states and localities)
- ✓ Effective monitoring by supervisors (Federal, WHO, UNICEF, MSF and States)
- ✓ Strong participation of resistance committees in the implementation of the campaign as vaccinators, monitors and community mobilizers.
- ✓ High community acceptance to the OCV
- ✓ Good access to most of the targeted areas despite the rainy season

- ✓ Proper follow up of AEFI and no severe cases reported
- ✓ Proper waste management
- ✓ Independent monitoring by WHO at locality and administrative Unit levels which was very effective in awareness raising, geographical coverage and campaign quality

### **Lessons learnt**

- Transparency and high commitment of the Minister of Health led to immediate technical and financial support of the international community
- The team spirit of all stake holders (government and partners) enabled the country to prepare properly for campaign implementation in a very short time
- The support of military forces facilitates reaching the difficult and hard to reach areas

### **Conclusion**

The transparency and high commitment of the Minister of health was the corner stone of the campaign success. The technical and financial support of partners and international community were behind the high coverage achieved. The campaign implementation as outbreak response was done in optimal time. Participation of all related sectors in the ministry of health and close and intensive Monitoring and supervision (government and partners) played an important role in minimizing the problems during the campaign and facilitated proper and smooth implementation of both rounds. The overall campaign quality indicators were above or near the bench mark in both states during both rounds.

### **Recommendations**

- Advocating for more supplies (OCV) for prevention of outbreaks rather than outbreak containment response
- Enhance surveillance to improve detection and surveillance at country level (hotspot level) to guide all cholera interventions including OCV campaign



*Federal Minister of Health of Sudan DrAkram AlToum inaugurates the opening of the 1st round of OCV campaign in Sinja Locality of Sinnar State\_11 Oct 2019*



*Blue Nile Wali inaugurates the opening of the 1st round of OCV campaign in Elrosiaris Locality of BNI State\_11 Oct 2019*





*The National EPI Manger inaugurates the opening of the 1st round of OCV campaign in Elrosiaris Locality of BNI State\_11 Oct 2019*



*Dr.SawsanEltahir MCH Director, DRSehamAbdJaber Federal HP Mangerand DR Awad Omer the Federal EPI manager Participating in BNI state campaign operation room*



*The MCH Director DrSawsanEltahir addressing the opening ceremony of the 1st round of OCV campaign in Elrosiaris Locality of BNI State\_11 Oct 2019*



*UNICEF Head of Health Section (CO) Dr SajjaAbdellah inaugurates the opening of the 1st round of OCV campaign in Sinja Locality of Sinnar State\_11 Oct 2019*



*ICG Rep representative DrMilieka Bouhenia inaugurates the opening of the 1st round of OCV campaign in Elrosiaris Locality of BNI State\_11 Oct 2019  
\_11 Oct 2019*



*Distribution of the campaign supplies using Tractors for hard to reach areas because of rainy season WadAbouk Admin unit / Baw locality /BNI state*



*Mobile Team vaccinating remote areas in Blue Nile State 13/10/2019*



*The Federal supervisor checking mobile team covering nomadic population in Abu shainaina /Geisan locality /BNI state*