



Controlling Cholera in Bangladesh: role of NCCCP, OCV and Wash

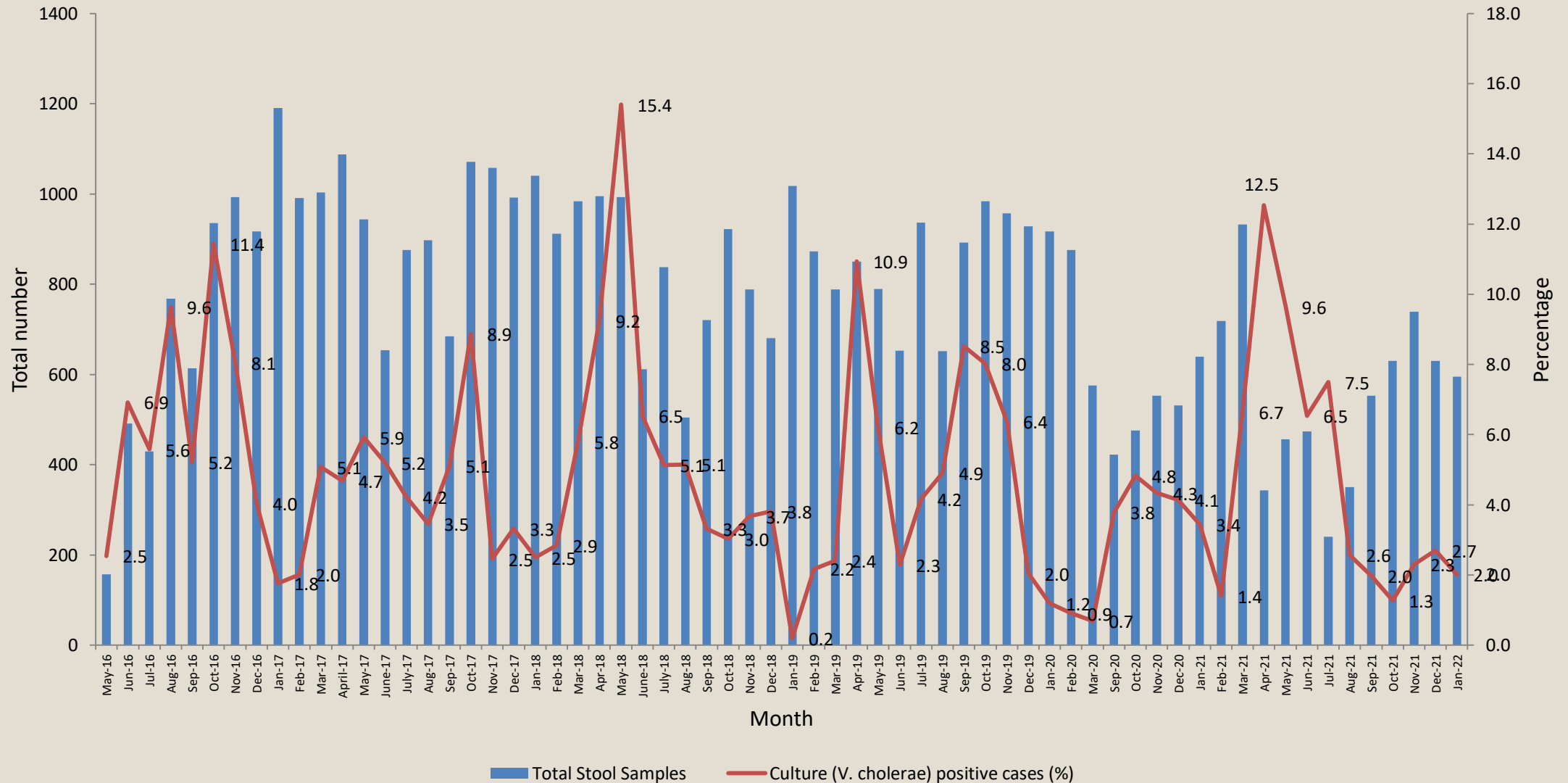
**Prof Dr. Md. Nazmul Islam,
Director, Disease Control and Line Director, CDC,
Directorate General of Health Services, Bangladesh**

National cholera situation

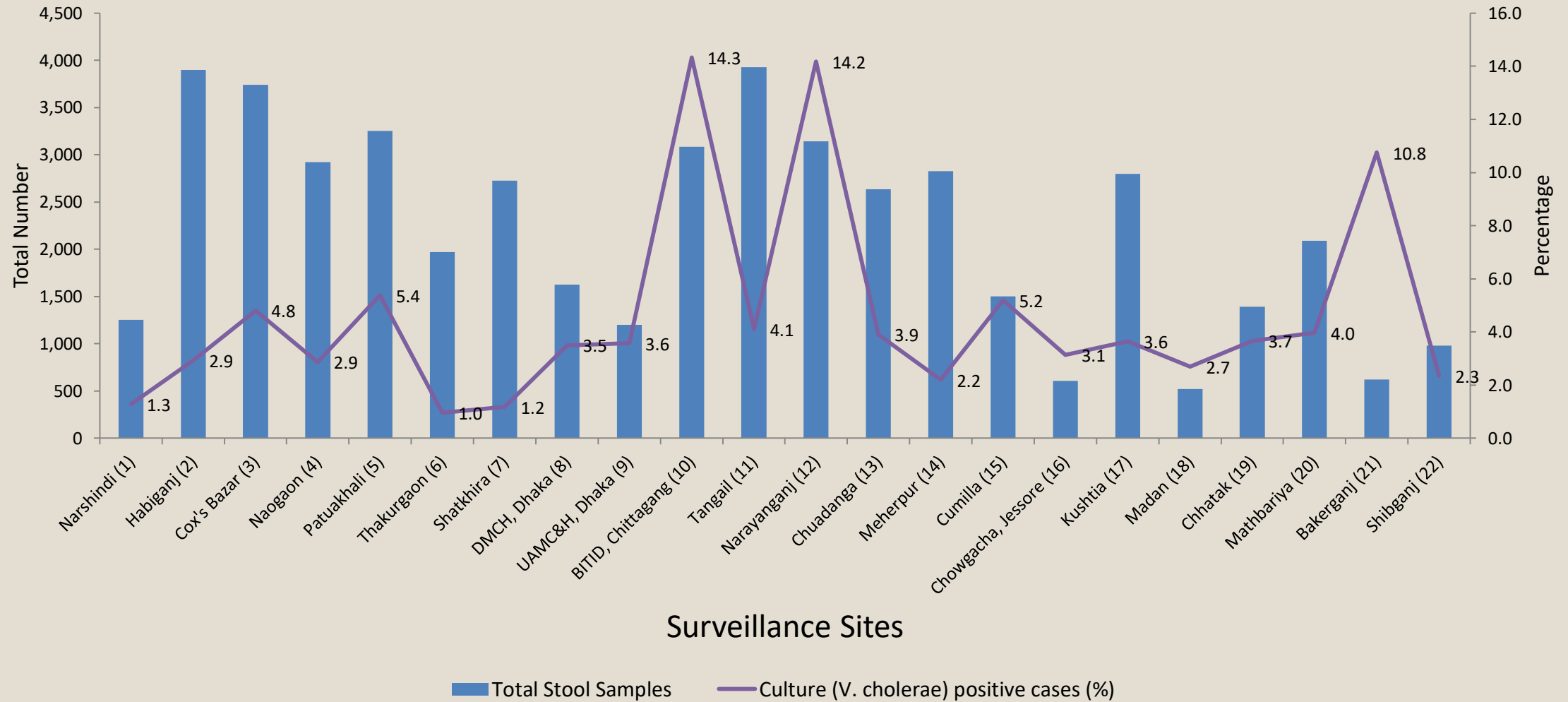
- Bangladesh is a cholera endemic country with high burden of the disease with bi-annual seasonal peaks
- Diarrheal disease reporting system available
 - Cholera is not reported from subnational levels due to unavailability of diagnostic facility;
- Cholera Surveillance system available (16 sentinel sites now)
- Bangladesh is pioneer of ORS and improved a lot in terms of WASH;
- Awareness is enormous (both for OCV, WASH and basic treatment i.e. oral saline);



Month wise distribution of culture confirmed cholera (*V. cholerae*) cases in Bangladesh (May'16- Jan '22)



Site wise distribution of Stool Samples and % of culture confirmed cholera cases in Bangladesh (May'16- Jan'22)





We plan for two solutions: OCV & WaSH

- **Interim OCV with concurrent WaSH, because**
 - Cholera exists in Bangladesh;
 - Patient load assumed to be high;
 - Persistent vulnerability of climate change, urbanization, population growth, migration, etc.;
 - Contamination of drinking water sources & sanitation system during monsoon & by floods, landslides, cyclones, etc.;
 - Compromise of water quality due to environmental pollution, viz., industrial effluents, obstruction due to irrigation system; salt-water intrusion; contamination of piped water supply, etc.





We plan for two solutions:
OCV & WaSH

- **WaSH as a long term solution, because**
 - Cholera burden will be reduced through OCV; economic growth; infrastructure development; access to better quality of life, etc. & so
 - We would need better WASH infrastructure & practice for keeping people free from all kind of water & food-borne diseases.



National Cholera Control Plan (NCCP) 2019-2030



Budget		US\$ billion
OCV		0.43
WaSH		
Water:	\$0.68 bn	3.13
Sanitation:	\$1.35 bn	
Hygiene promotion:	\$1.1 bn	
Surveillance		0.02
Total		3.58

Goal

Reduction of cholera morbidity & mortality by 90% within 2030

Targets for cholera reduction

Short Term: 25% reduction by 2021

Mid Term: 50% reduction by 2025

Long Term: 90% reduction by 2030

Key Interventions

1. Strengthening surveillance & reporting system;
2. Treatment of cholera cases;
3. OCV campaigns;
4. WaSH promotion;
5. Coordination & leadership; &
6. Social mobilization.



NCCP 2019-2030 : OCV & WaSH Plan

- Hotspots will be identified through ongoing sentinel surveillance in 22 districts + more sites to be added;
- Phase-wise OCV campaigns in identified hotspots.

OCV Plan

Year >>>	2019	2020	2021	2022	2023	2024	Total
Place >>	Demo (DCC)	Part of DCC	DCC & 4 districts	6 districts (Y1)	6 districts (Y2)	5 districts (Y3)	
Pop. (mill)	1.20	5.45	13.30	21.15	25.40	19.95	86.45
OCV (mill doses)	2.4	10.9	26.6	41.3	50.8	39.9	172.9

WaSH Plan

WASH Intervention	Target		
	2017	2025	2030
Safely managed drinking water	56%	>85%	100%
Accessibility to improved sanitation	47%	>70%	100%
Increased hygiene practice	40%	>80%	100%

WASH situation of Bangladesh

- We take pride on our achievement in WASH sector
- However, a lot yet to be done to achieve SDG
- Coverage of access to
 - basic water facilities at the household level was **99.5%**
 - sanitation **60.7%**
 - and hygiene **56.3%**
- combined access to all three components was **40.2%**

Recent progress on cholera control

- OCV vaccination in selected areas of Dhaka (1.2 Million People were given first dose OCV, then covid happened)
- OCV vaccination among Rohingya refugees (4 round of full OCV vaccination completed)
- Water purifying tablets distributed (around 10 million water purifying table distributed in last few years)
- Public Awareness during outbreaks and high risk seasons



Recent progress on cholera control

- Collaborating meetings with local administration, water sanitation authority, city corporations to improve WASH
- National WASH strategy updated (2021) – by ministry of local government
- Wash strategy for healthcare facilities developed
- National WASH cell for healthcare facilities formed in DGHS
- IPC in healthcare facilities strengthened



Recent progress on cholera control

- Training of healthcare staffs to strengthen case management
- Training module developed by experts to harmonize treatment
- Emergency intravenous saline supplied to periphery hospitals
- Research grant will be given for cholera based research (from government budget- first time in many years)
- Higher authority is aware of cholera situation

Challenges

- Inadequate manpower in national program
- Loss of focus due to COVID-19 (right after we endorsed NCCCP)
- Sustainable financing not available
- Multisectoral involvement: coordination is difficult
- Climate change and natural disasters hampers sustainable WASH
- Case reporting and surveillance system need to be strengthened
- Lack of data on the impact of interventions- difficult to persuade authority for higher government funding

Expectation from GTFCC



1. long term technical support through CSP
2. Strengthening surveillance system
 - Establishment of central cholera ref. lab;
 - Establishment of RDT-based diagnostic facilities at peripheral health facilities
(There is local production of Cholkit);
 - Establishment of culture/PCR-based diagnostic facility at medical college hospitals.
3. Plan implementation
 - Capacity development; trainer development
 - Supply of OCV from stockpile/Gavi;
 - Support for WASH.
 - Support for implementation research

Last few thoughts

- It is perfect time in Bangladesh to expedite the cholera control activities
 - The 5th national health sector program for 2024-2028 (financed by government) is going to be formulated soon
 - Consensus on the importance of WASH and diarrheal diseases control activities among policy makers
- **We want to prioritize WASH not only for cholera but also for other food and water borne diseases**

Thank You

