

INVISIBLE

THE ROHINGYAS: THE CRISIS, THE PEOPLE AND THEIR HEALTH



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Invisible – The Rohingyas: the crisis, the people and their health

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- This publication is a tribute to the resilience and strength of the Rohingya people.



REUTERS / Danish Siddiqui

ACRONYMS

AFP	acute flaccid paralysis	EOC	emergency operations centre	IMT	incident management team	SAG	Strategic Advisory Group
AJS	acute jaundice syndrome	EPI	Expanded Programme on Immunization	IOAC	Independent Oversight and Advisory Committee for the WHO Health Emergencies Programme	SAM	severe acute malnutrition
ARI	acute respiratory infections	EPR	emergency preparedness and response	IOM	International Organization for Migration	SBP	stand-by partners
AWD	acute watery diarrhoea	EWARS	early warning, alert and response system	IRC	International Rescue Committee	SEARHEF	South-East Asia Regional Health Emergency Fund
BCG	Bacille Calmette Guerin vaccine	FDMN	forcibly displaced Myanmar nationals	ISCG	Inter-Sector Coordination Group	SOP	standard operating procedures
bOPV	bivalent oral polio vaccine	GAVI	Gavi, the Vaccine Alliance	JRP	joint response plan	SGBV	sexual and gender-based violence
BPRM	Bureau of Population, Refugees, and Migration	GBViE	gender-based violence in emergencies	MCK	medical camp kits	SRH	sexual and reproductive health
BRAC	Building Resources Across Communities - a Bangladesh-based international development organization	GOARN	Global Outbreak Alert and Response Network	MDR-TB	multidrug-resistant tuberculosis	SRHWG	Sexual and Reproductive Health Working Group
CHW	community health worker	GoB	Government of Bangladesh	mhGAP	Mental Health Gap Action Programme	Td	tetanus and diphtheria vaccine
CHWG	Community Health Working Group	ICG	International Coordination Group on vaccine provision	MHPSS	mental health and psycho-social support	UN	United Nations
CPP	Cyclone Preparedness Programme	ICT	information, communication and technology	MR	measles and rubella	UNICEF	United Nations Children's Fund
CS	Civil Surgeon	IDP	internally-displaced persons	MoHFW	Ministry of Health and Family Welfare	UNFPA	United Nations Population Fund
CXB	Cox's Bazar	IBS	indicator-based surveillance	MMT	mobile medical team	UNHCR	United Nations High Commissioner for Refugees
DAT	diphtheria antitoxin	IEC	Information, education and communication	MSF	Médecins Sans Frontières	USDOS	United States Department of State
DC	District Commissioner	IEDCR	Institute of Epidemiology, Disease Control and Research	NCD	noncommunicable diseases	VPD	vaccine-preventable diseases
DFID	Department of International Development	IFRC	International Federation of Red Cross and Red Crescent Societies	NGO	non-government organization	WASH	water, sanitation and hygiene
DGHS	Directorate General of Health Services	HMIS	health management information system	OCV	oral cholera vaccine	WASH FIT	Water and Sanitation for Health Facility Improvement Tool
DTC	diphtheria treatment centre	IHEK	interagency health emergency kit	ORS	oral rehydration salts	WHE	WHO Health Emergencies Programme
EBS	event-based surveillance	IMS	incident management system	PCR	polymerase chain reaction	WHO	World Health Organization
EMT	emergency medical team	IMST	incident management support team	PCV	pneumococcal conjugate vaccine		
				RRRC	Refugee Relief and Repatriation Commission		



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PREFACE

“No one left behind” is the central motto of the Sustainable Development Goals. It is a motto that is deceptively simple and hard to achieve in the real world. In plain terms, it means no one can be denied the opportunity or the right to access the fruits of development that the world collectively earns. The fundamental question then is, who is being left behind? Where are they and how are we helping them?

On 25th August 2017, a group of people – initially 300 000 – swelled to nearly 1 million in 4 months. This group, which moved to Cox’s Bazar, Bangladesh, comprised of people that had been “left behind” – uncountable, unheard and invisible.

Invisible is evocative of the plight of the Rohingyas: the crisis, the people and their health. This book outlines briefly the struggle of the Rohingyas as a people, with a focus on the health response in the context of their mass movement to Bangladesh.

Today, when people who have undertaken other land, sea and river crossings are being turned away at borders across the world – Bangladesh’s generosity shines as an example of humanity. The local population of Cox’s Bazar, who met the Rohingyas by the beach or the river as they crossed for survival, freely offered what they had – food, water and blankets. The government promptly matched their open sympathy with decisive action for land, security, medicines and vaccines, and deployed



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response workers across sectors. These actions continue to this day.

Since their arrival, these 1 million people, crowded into a 24 sq.km. area, wrought with problems of basic needs – primarily their health – became the focus of WHO’s work at all levels, in particular, this Regional Office and the Country Office in Bangladesh. *Invisible* highlights various aspects of the response – its successes and challenges – in prose and pictures. The book is an attempt to compile an account of the collective work of WHO with the Government of Bangladesh, over 100 health partners, donors, community organizations and the local population.

In the wake of emergencies, there is often no repository of information that provides a comprehensive account for others to learn from and the knowledge is lost. Publications such as *Invisible* act as a record of events, the health challenges and interventions undertaken, while capturing, as vividly as possible, the human impact. This takes on a special meaning as the Rohingya crisis itself has become invisible – overshadowed by other complex emergencies elsewhere in the world. Moreover, due to the work of the Government of Bangladesh, WHO and partners, there is no major epidemic recently in the Rohingya camps to draw the attention of the international community, media or public. This makes the Rohingyas further invisible.

The future is uncertain. What is clear, however, is that collective, collaborative work needs to continue for the Rohingya people and other populations in similar circumstances across the world. This publication attempts to show that the Rohingyas, their crisis and the work to keep them safe and protect their health are ongoing, real, tangible and far from invisible. And that our work to support them has been – and continues to be – part of our ongoing commitment to leaving no one behind.

Dr Poonam Khetrpal Singh

Regional Director
WHO South-East Asia Region



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Chapter 1

THE ROHINGYA PEOPLE

A snapshot of their early history and movements

WHO ARE THE
Rohingyas?



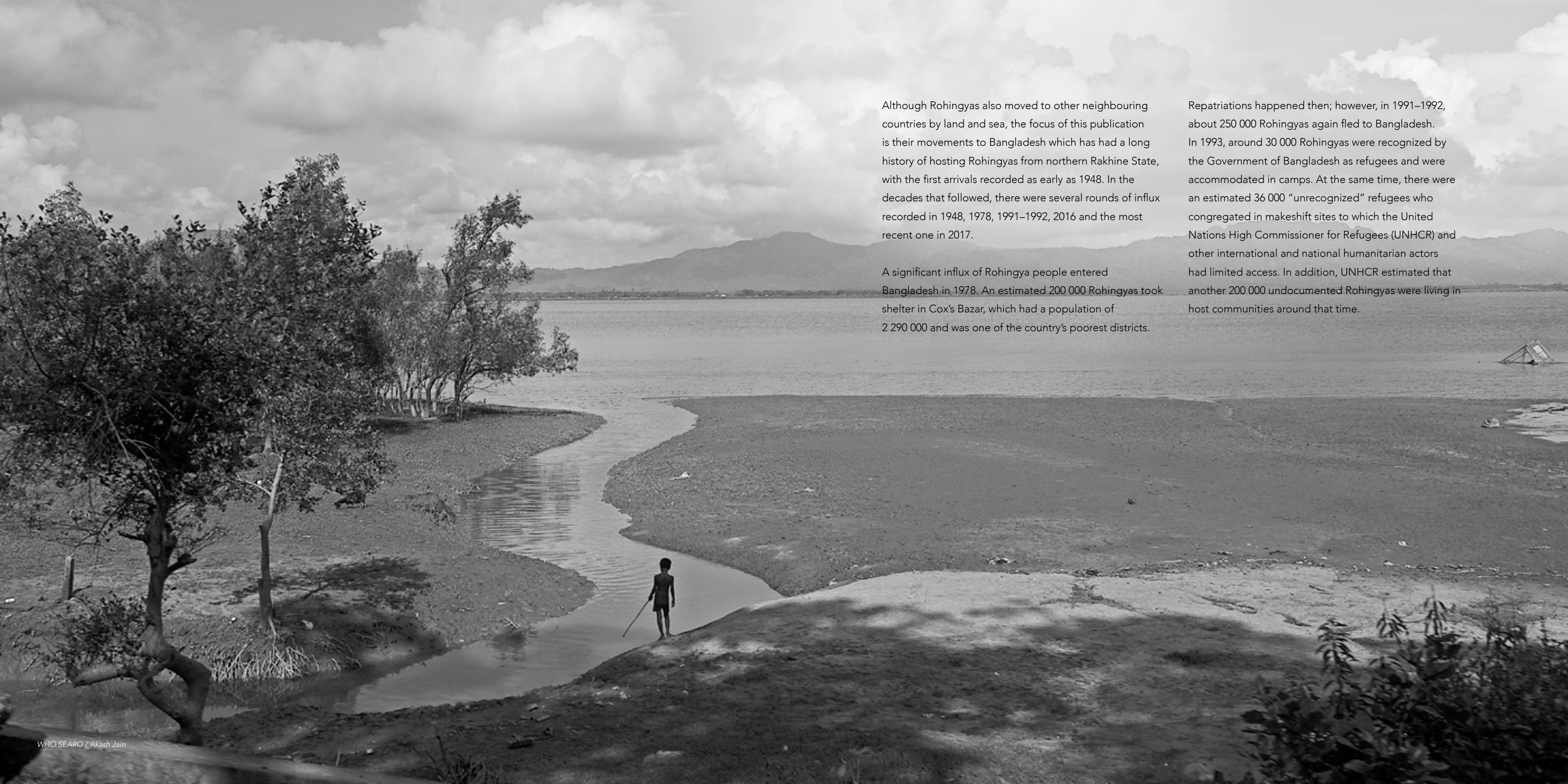
The origin of the Rohingyas in Myanmar is unclear, shrouded in the mists of time. It is presumed that their presence dates back to the seventh century, with the settling of Arab Muslim traders in the area. Many Rohingyas trace their ancestry in Rakhine State back to hundreds of years, when an independent kingdom called Arakan (now Rakhine) existed. Confusion arose probably at the time of British Colonization. A mass population movement was documented from what was then Bengal

to Rakhine State, after the British seized Akyab (now Sittwe) in the 1820s. Thus began the gradual conquest by the British of the entire area of what was then Burma (now Myanmar). Immigration was entirely administered as part of Britain's Indian empire. To this day, the Rohingyas are called "illegal immigrants" by the local Rakhine people, or by the colloquial term "Bengali", emphasizing their supposedly "foreign" origin. Where the Rohingyas came from remains unclear to this day.



REUTERS / Adnan Abidi

MOVEMENT OF
Rohingyas
THROUGH THE YEARS



Although Rohingyas also moved to other neighbouring countries by land and sea, the focus of this publication is their movements to Bangladesh which has had a long history of hosting Rohingyas from northern Rakhine State, with the first arrivals recorded as early as 1948. In the decades that followed, there were several rounds of influx recorded in 1948, 1978, 1991–1992, 2016 and the most recent one in 2017.

A significant influx of Rohingya people entered Bangladesh in 1978. An estimated 200 000 Rohingyas took shelter in Cox's Bazar, which had a population of 2 290 000 and was one of the country's poorest districts.

Repatriations happened then; however, in 1991–1992, about 250 000 Rohingyas again fled to Bangladesh. In 1993, around 30 000 Rohingyas were recognized by the Government of Bangladesh as refugees and were accommodated in camps. At the same time, there were an estimated 36 000 “unrecognized” refugees who congregated in makeshift sites to which the United Nations High Commissioner for Refugees (UNHCR) and other international and national humanitarian actors had limited access. In addition, UNHCR estimated that another 200 000 undocumented Rohingyas were living in host communities around that time.

EVENTS IN RAKHINE IN 2012



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Rakhine State, one of the least developed parts of Myanmar, is home to several ethnic and religious groups, including the Rohingya community. The unfortunate rape and murder of a Rakhine woman in Ramree, south of the capital of Rakhine State, Sittwe, on the night of 28th May 2012 escalated into a full-blown communal crisis that witnessed killings by unidentified mobs, culminating in the displacement of 74 800 people, 89 deaths and 5 000

destroyed homes. Another estimated 13 000 people were living in makeshift sites around Sittwe and some 2 800 people in Maungdaw.

Within five months, the number of internally displaced persons (IDPs) (both Rohingya and native Rakhine populations) reached 115 000, including 36 400 who were displaced by a new wave of violence in October 2012

that left an additional 90 people dead, 5 300 buildings destroyed and 136 wounded. Meanwhile, the United Nations (UN), including the World Health Organization (WHO) and partners, mounted a massive response to protect and improve the health status of all IDPs.

On 15th June 2012 the Relief and Resettlement Department of the Government of Myanmar called UN agencies, nongovernmental organizations (NGOs) and donors for a briefing, requesting their support in a coordinated manner. The UN Resident and Humanitarian Coordinator and humanitarian partners participated in this briefing. The Union Minister for Border Affairs invited a UN delegation led by the Special Advisor of the UN Secretary-General and UN Resident and Humanitarian Coordinator for Myanmar, who visited and took stock of IDP locations in Maungdaw. An interagency standing committee was formed and several rapid needs assessments were conducted in most IDP locations in Minbya, Mrauk-U, Myebon, Pauktaw, Kyauktaw and Rathedaung townships.

Aligned with this effort to support the IDPs, together with all NGOs and the Ministry of Health, a joint health

sector plan was consolidated. It looked at the most pressing needs, which related to shortage of food supply, limited health mobile clinics, treatment and referral services for those who were ill, especially those with noncommunicable diseases. Despite the international donor community stepping in to provide support, funding, medical supplies and other essential items, the temporary shelters that had been set up to house the displaced had become overstretched. Many of the issues and challenges that emerged during the 2012 crisis were beyond the sole purview of the health sector.

Support for the IDPs in Rakhine continued in the mentioned locations, and since then, only one major movement of the Rohingyas to Bangladesh was seen in late 2016. Support for those Rohingya who moved was provided by the Government of Bangladesh and international partners. In the meantime, there were continuous appeals from the international community to improve their status in Myanmar as well as to neighbouring countries to support any movement to their soil.



A MASSIVE MOVE

It was thus in 25th August 2017, after an incident of armed conflict, that the largest population movement of the Rohingyas began. Due to the scale of the movement and the short period of time in which it occurred, the mass exodus received sustained global attention. Scenes from the emerging situation made international headlines, as

pecially allocated refugee camps in Bangladesh's Cox's Bazar, a small port city on Bangladesh's southeastern coast, made place for the men, women and children who stumbled across the shores of river Naf, perched precariously in boats.

The Government of Bangladesh, despite its own development priorities and challenges, not only allowed them entry but also dedicated multiple sites to provide a space to shelter them in what eventually became the world's largest and most condensed

settlement for displaced communities. Bangladesh's generosity stood out in what was a very trying time of migration, displacement and conflict. Supported by UN agencies and select governments, a massive operation commenced to respond to the needs of the Rohingyas.



MILESTONES OF ROHINGYA MOVEMENT TO BANGLADESH



1970s–1990s

Movements of Rohingyas to Bangladesh from Myanmar were documented.

1993

UNHCR facilitates return of the Rohingyas after signing a memorandum of understanding with the Government of Bangladesh. More than 30 000 refugees in Bangladesh are granted refugee status and allowed to stay in Kutupalong and Nayapara camps in Cox's Bazar.

2000s

Incidents of movement of Rohingyas seeking refuge in Bangladesh.

2012

Rakhine State witnesses communal violence and internal displacement occurs of the Rohingya and local populations.

2017

Rohingyas form new insurgent group and attack border posts in Maungdaw and Rathedaung townships of Rakhine State on 25th August, killing several police officers.



REUTERS / Clodagh Kilcoyne

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Chapter 2

A MASSIVE NEED,
A JOINT
RESPONSIBILITY

The situation and immediate needs



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THE SITUATION AND IMMEDIATE NEEDS

On 25th August 2017, when around eight Rohingya families reached Cox's Bazar, Bangladesh, little did the Bangladeshi authorities suspect the numbers that would follow. Within hours, the stream became a deluge, with thousands of people entering the country daily, adding to a population of over 300 000 Rohingyas who had been displaced by earlier violence in Myanmar's Rakhine state. Between August and December 2017, more than 800 000 Rohingyas fled to Bangladesh. There are currently an estimated 912 485 of them in Cox's Bazar, including 34 172 who had registered before 31st August 2017.

The Rohingyas who reached Cox's Bazar from August to December 2017, were traumatized, exhausted and in poor health. More than two thirds were women and children, including pregnant women. Many had physical injuries, some from gunshot wounds and gender-based violence.

Their sudden arrival placed an enormous strain on the existing infrastructure and services in Cox's Bazar. To prevent a catastrophe, shelter, water, food and health services had to be provided immediately for almost 1 million people who were in poor health. Contemporary history has seen few comparable challenges. But the Government of Bangladesh (GoB), supported by the international community and national civil society, rose to

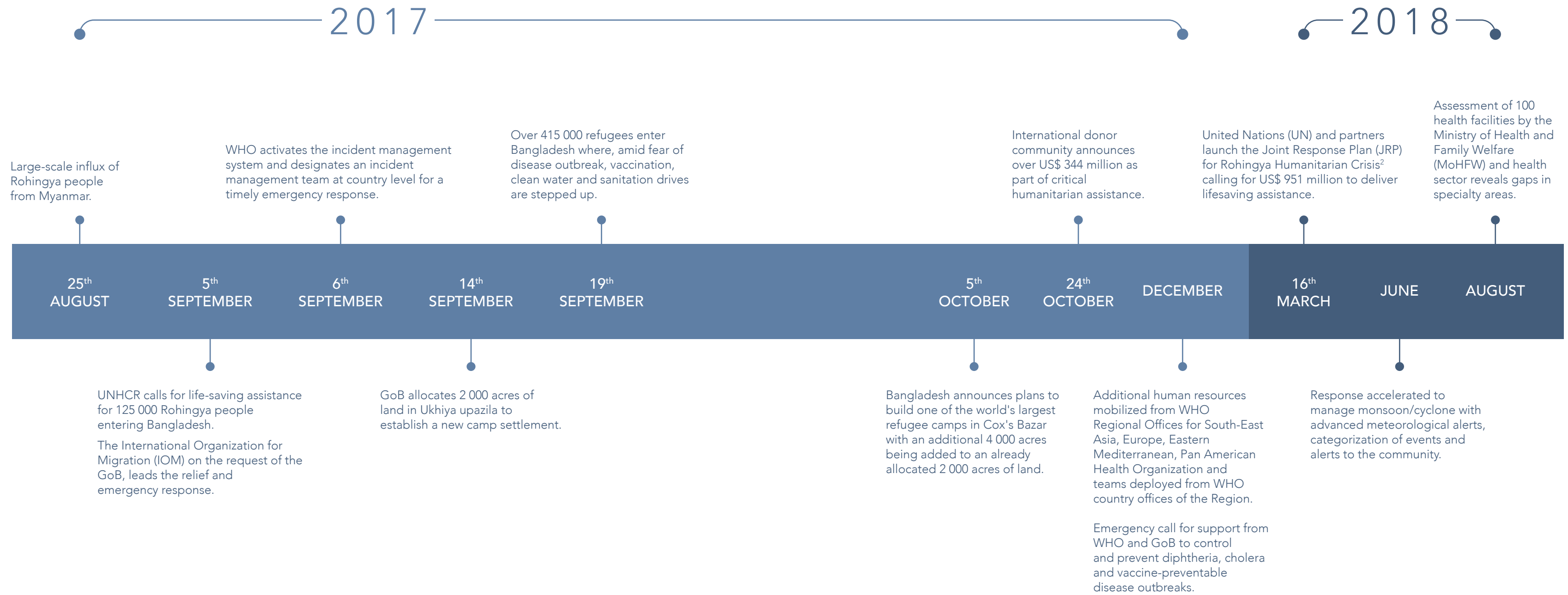
the occasion. According to estimates, currently 1.3 million people are being targeted for humanitarian assistance, including the recently arrived Rohingyas and the host communities who live near these settlements.

The impact of this deluge had its repercussions on the host community. The sudden increase in Rohingyas meant that their facilities were now severely constrained, from roads to water supply and food to health services. In some areas of Ukhiya, one of the most impacted districts, the Rohingya population outnumbered the local population. Despite the pressure, they generously offered hospitality to the suffering Rohingyas. Here, local communities were quick to turn into frontline responders, providing food and basic items for the new arrivals.



Bangladesh's magnanimity brought with it the hope of survival. Through the compassion that it showed by affording Rohingya refugees temporary shelter, essential supplies and health protection, Bangladesh set an example for the rest of the world.

CHRONOLOGY OF IMPORTANT MILESTONES¹



Coordination—a critical life-saving step

The GoB sought the assistance of humanitarian actors, including local and national nongovernmental organizations (NGOs), international NGOs and the UN, all of whom stepped in to offer their support and expertise. Both IOM and UNHCR were requested to lead the coordination of the international agencies and the civil society response to the emergency, in close cooperation with the GoB and other humanitarian actors.

Responding to the fast pace of events on the ground and armed with the mandate of the GoB, IOM began coordinating the initial emergency response interventions to meet the survival needs of the Rohingyas. They set about arranging on urgent basis, food, water and sanitation, shelter, health and other needs. Hundreds of organizations, small and large, national and international, immersed themselves in supporting the emergency. While all had honourable intentions, the sheer number of organizations that had to be managed created some risk of duplication, overlap and confusion. Under the circumstances, it was critical to specify each organization's role. A systematic approach was required to strengthen the GoB's efforts and provide maximum relief to the Rohingya people.

With such a huge challenge, the most pressing task was to find answers to how to decide the most immediate needs? How to prioritize actions? What steps to take to fulfil those needs and actions? A systematic identification was undertaken of who would do what and where and which organization would be involved in the response

work that they would then take up in their respective clusters. WHO's 4W database for emergencies that is designed to provide key information regarding which organizations (Who) are carrying out which activities (What) in which locations (Where) in which period (When) was adapted to the Rohingya crisis. This information was essential for cluster coordinators and partner organizations to get them to coordinate their activities effectively while reaching their targets in a timely manner and ensuring humanitarian needs got met without gaps and/or duplication.

Using this framework, international and national agencies were organized into nineteen sectors based on their interests and expertise. These included health, shelter, food security, nutrition, protection, water sanitation and hygiene (WASH) and others. This coherent and cohesive humanitarian response translated into concrete support to various partners and sectors at the Cox's Bazar level that was then enabled through the collaboration of all partners, led by the Senior Coordinator and supported by the Inter-Sector Coordination Group (ISCG) Secretariat.

The scale and dynamism of the influx quickly led to scaling up of all sectors, activating surge resources, including for sector coordination and information management. Each partner augmented response capacity, as numbers increased, given the severity and scale of the unfolding situation in Rakhine state and the heightened pace of influx in Cox's Bazar.

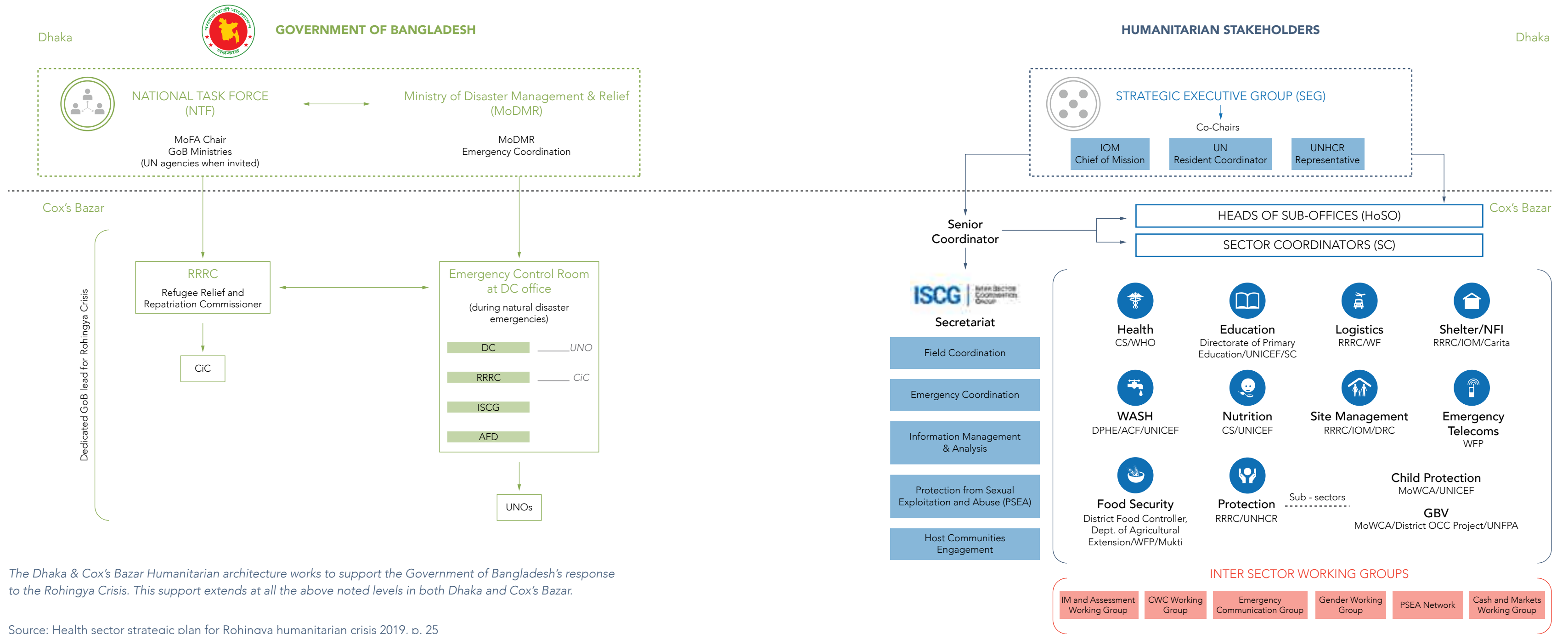


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The humanitarian response is led and coordinated by the GoB, which established a “National Strategy on Myanmar Refugees and Undocumented Myanmar Nationals” in 2013. That strategy established the National Task Force (NTF), chaired by the Ministry of Foreign Affairs, and included 29 ministries and entities. It provides oversight of and strategic guidance to the response. Following the influx, the Refugee Relief and Repatriation Commissioner (RRRC), under the Ministry of Disaster Management and Relief, was mandated to provide operational coordination for all refugees/forcibly displaced Myanmar nationals. The District Commissioner also continues to play a critical role and has the primary responsibility for operational coordination of the response for Bangladeshi

host communities, including Disaster Risk Reduction. For the humanitarian agencies, strategic guidance and national-level government engagement is provided by the Strategic Executive Group (SEG) in Dhaka, co-chaired by the Resident Coordinator, IOM and UNHCR. At the district level, the Senior Coordinator leads the Inter-Sector Coordination Group, composed of thematic sector and working group coordinators who represent the humanitarian community and ensure coordination with the RRRC and the District Commissioner. These include with the upazila nirbah officers (UNOs) at the upazila and subdistrict levels. Regular coordination meetings are held at the upazila level co-chaired by UNOs and the ISCG.² This is represented in Fig.2.1.

Fig. 2.1. Coordination mechanism for responding to the Rohingya refugees



The Dhaka & Cox's Bazar Humanitarian architecture works to support the Government of Bangladesh's response to the Rohingya Crisis. This support extends at all the above noted levels in both Dhaka and Cox's Bazar.

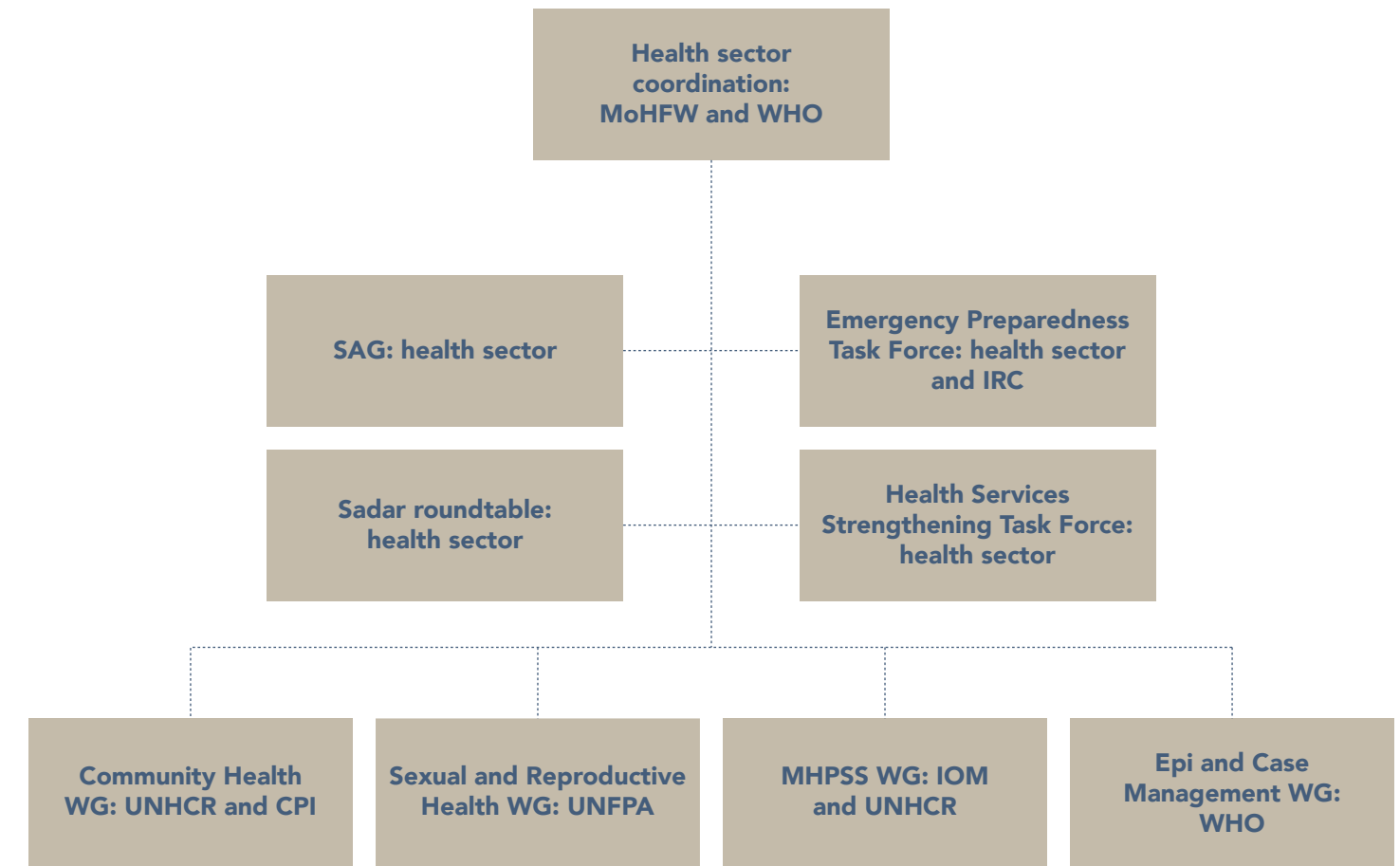
Source: Health sector strategic plan for Rohingya humanitarian crisis 2019, p. 25

The GoB provides overall leadership and coordination for the humanitarian response. With regard to operational coordination, the RRRC co-chairs sector coordinator meetings in Cox’s Bazar on a regular basis. At the sector level, relevant line ministries and departments guide the response, with the sectors supporting the mainstreaming of service delivery, as appropriate, by basing coordination teams in the relevant government offices. At the camp level, coordination is led by the camp-in-charge (CiC) officials under the RRRC’s office, who are mandated by the GoB to assume camp management responsibilities. During 2018, additional camps were formally demarcated, and boundaries drawn, enabling oversight of the vast majority of Rohingya settlements within 34 formally designated camps at the end of the year. Under the auspices of the site management sector, site management support (SMS) agencies have been deployed in all camps to support the CiC in managing the camps. CiCs chair regular camp-level coordination meetings attended by camp-level sector focal points. These focal points are operational staff of agencies delivering services in the camps. They oversee and

coordinate service delivery, often by multiple agencies, in their specific technical areas within the boundaries of the camps. The CiCs liaise closely with all actors and monitor service delivery overall in the camps, ensuring that gaps and duplications are identified and addressed.²

The coordination structure of the health sector at Cox’s Bazar/district level is given in Fig. 2.2. Since the outset of the response, this was the working structure. The health sector was advised by a Strategic Advisory Group (SAG) and it coordinated monthly roundtable meetings to coordinate support to Sadar Hospital and provide overall technical guidance on strategic interventions in the health sector. The sector oversaw an emergency preparedness task force for contingency planning for the monsoon and cyclones. A time-bound task force has been activated as part of preparedness and for response times. The sector also oversaw a health services strengthening task force on an ad-hoc basis to address topical issues related to the health services, which did not fall under the purview of the working groups. It included referrals, field and other hospital support, laboratory, HIV and noncommunicable diseases (NCDs).

Fig. 2.2. Health sector coordination at the central level



Note: WHO CPI: Child Protection Index; IOM: International Organization for Migration; IRC: International Rescue Committee; MoHFW: Ministry of Health and Family Welfare; MHPSS: Mental Health and Psychosocial Support; SAG: Strategic Advisory Group; UNFPA: United Nations Population Fund; UNHCR: United Nations High Commissioner for Refugees; WG: Working Group; WHO: World Health Organization

Source: Health sector strategic plan for Rohingya humanitarian crisis 2019, p. 25





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Since the start of the response, the health sector coordination structure has included field coordinators at the upazila level (under the health sector), and camp health focal points at the camp level (supported by IOM and UNHCR). Monthly health sector meetings are held regularly in Ukhiya and Teknaf in addition to monthly meetings for all camp health focal points. In each of the camps, special camp health focal points have been assigned who are expected to meet with all health (and, if possible, nutrition) actors on a regular basis. They are supposed to brief the CiC on important health updates and issues pertaining to each camp (Fig.2.3).

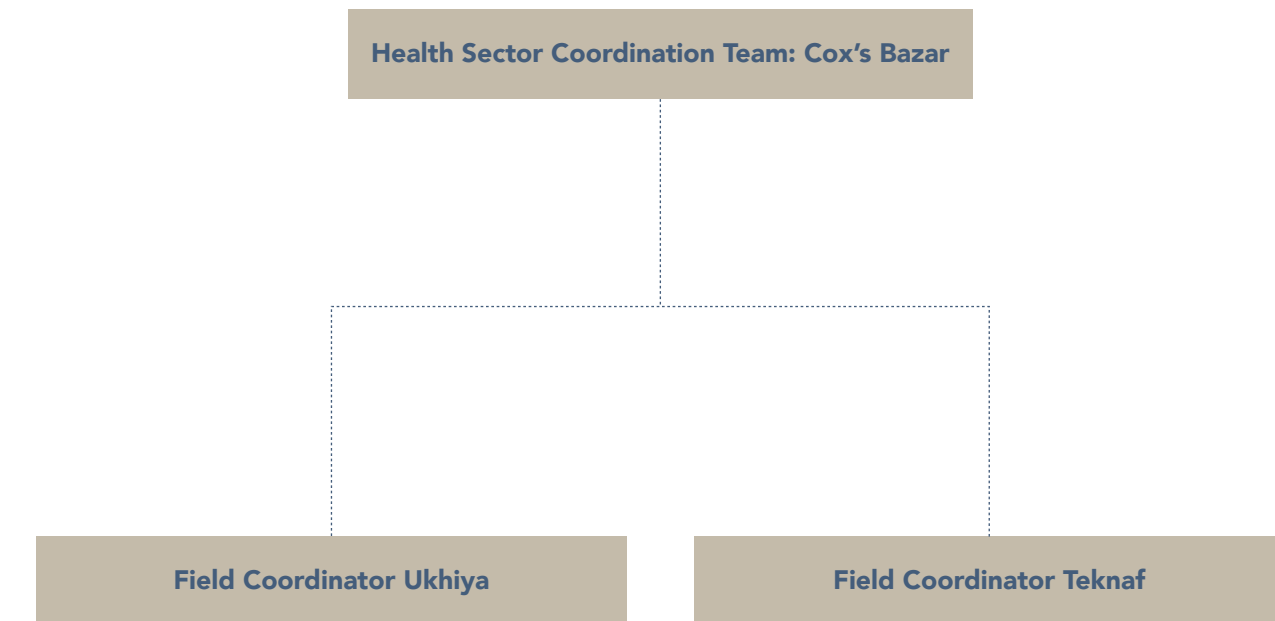


Fig. 2.3. Health sector coordination at the local level

Source: Health sector strategic plan for Rohingya humanitarian crisis, 2019, p.26

Ensuring shelter: assigning and developing specially allocated sites

The most immediate challenge facing the GoB was to house the refugees. Initially, 2 000 acres were provided for camps to accommodate the Rohingyas, but this was found to be inadequate, given the unprecedented numbers that were pouring in during the initial weeks following 25th August 2017. Thirty-four camps in Ukhiya and Teknaf upazilas were formally designated by the GoB in May 2018. To these 34 camps the government took the decision to generously allocate another 3 700 acres of undeveloped forest land where the Kutupalong–Balukhali extension camp came up. A staggering 626 500 refugees were housed, making it possibly the largest refugee camp in the world.

This new site was built by the Bangladesh Army in less than five months. It included the construction of 12.9 km of main access roads, 10.8 km of auxiliary access roads, 375 bridges, 121 km of pedestrian accessways, 143.9 km of drainage and 23 km of canals cleaned. Much of the site work involved major earth work and was undertaken by thousands of Rohingya volunteers who worked to make approximately 60 additional acres usable. This eventually facilitated the relocation of some 68 000 people.

Site planning and land allocation were coordinated by the lead agencies IOM and UNHCR. Different zones

were assigned, and technical support provided by WHO in consultation with the Directorate General of Health Services (DGHS) Coordination Cell, District Civil Surgeon and office of the RRRRC. The primary focus was on ensuring equitable distribution of health services across camp sites. This approach was adopted so that no Rohingyas, even those remotely settled, would be devoid of the basic minimal health services package endorsed and committed to by the MoHFW, GoB.

It was an uphill task to rapidly construct settlements that could offer essential health services, especially since the existing government health facilities at Cox's Bazar Sadar District Hospital, Ukhiya and Teknaf upazila health complexes were becoming overloaded and overstretched. The need for space, infrastructure, human resources, health experts, medicines and finances put Sadar District Hospital under immense pressure to provide services to the new entrants while continuing to cater to their own local population.





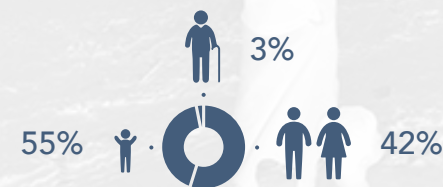
911 359

As of end-January 2019, the total number of Rohingya people residing in Cox's Bazar was 911 359 (ISCG situation report, April 2019).³



1.24 MILLION

The overall population in need of health sector support, including host communities, was 1.24 million (Joint response plan 2019), including 33 590 from the host community.



The refugee population comprised 55% children, 42% adults (majority females) and 3% elderly. (UNHCR Population factsheet, as of 30th April 2019).⁴

Crisis evolution and its impact on public health

In the initial months of the crisis, the need for emergency life-saving aid was critical. Other essentials were daily need items such as blankets, plastic sheets, sleeping mats, family tents, plastic rolls, kitchen sets, jerry cans, buckets and solar lamps. UNHCR airlifted more than 1 500 metric tonnes of such emergency life-saving aid and essentials to Bangladesh. Multiple agencies including local NGOs added to that effort by helping replenish supplies.

The camps provided refugees with much-needed shelter, but this was certainly not enough. With so many people living in crowded conditions and limited facilities, the health risks were extremely high. Some of the biggest areas of worry related to poor sanitation, water shortage, overcrowding and poor hygiene. In fact, in a few of the settlements that emerged spontaneously, there was virtually no access to water. With few latrines, water points and bathing places, people were even resorting to taking water from the paddy fields for drinking in desperation. The struggle to get safe drinking water persisted, contributing to a high level of contamination, both at the source of water supply and at the household level. The risk of waterborne diseases was especially high, with the likelihood that the water quality would deteriorate further in the monsoon season due to contamination of the water table. What further added to the anxiety of public health experts was the fact that the region was exposed to landslides and floods. Moreover, the effort to create new settlements denuded large forest areas and



Since March 2018, the focus of the response was on addressing priority gaps in services, ensuring sustainable support, including protection services, emergency preparedness and risk mitigation for the 2018 cyclone and monsoon seasons, and improving the overall quality of assistance.

stripped hillsides of their trees, thereby posing long-term ecological consequences and the risk of landslides. Health workers feared that, as the areas became inaccessible, it would be difficult for them and the relief agencies deputed in the area to carry on with their work.

Government health facilities were overwhelmed with patients and faced massive resource constraints, including chronic staffing shortages. With existing facilities already attending to the needs of the local population at full capacity, managing a referral mechanism was complicated and stretched. This was not just due to a huge case load at the facility but also on account of costs on transport, follow-up care and other incidentals that added up to an insurmountable challenge for the affected individual and family. Most of the Rohingya people who were coming in, had new health needs such as injuries and other infectious diseases, as well as chronic diseases and NCDs.

In addition, sexual and reproductive health problems and mental health issues needed to be correctly identified before they could receive medical action.

A large percentage of the Rohingya people opted for home deliveries, which further jeopardized their health

and safety. To add to the misery of the people, post the influx, many temporary structures serving as health facilities had come up, but these were at risk of being damaged or destroyed by the monsoon and cyclones, adding to the woes of those living in the settlements.



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Assessing needs and identifying areas for urgent interventions

WHO's public health response was guided by robust evidence generated through two public health situation analyses that were undertaken – a mapping exercise that was done to assess health-care facilities in need in the settlement and a state-of-the-art electronic surveillance system that was established early in the crisis. These were further supported by several surveys and assessments targeted to understand specific public health issues such as mental health and sexual and reproductive health.

Planning a response to the health crisis was complicated due to limited baseline information about the demographics and health profile of the displaced population. A public health situation analysis was carried out in the aftermath of the crisis in September 2017. The systematic analysis of vulnerabilities and risks revealed

endemicy for various communicable diseases in both Bangladesh and Myanmar and the affected regions of Cox's Bazar and Rakhine. Against this backdrop of endemicity of communicable diseases and worsening health, nutrition and environmental conditions due to the current crisis, affected populations were found to be at high risk of local outbreaks of waterborne (cholera, hepatitis E, dysentery), foodborne (cholera, dysentery) and vector-borne diseases (dengue, chikungunya, Japanese encephalitis [JE], malaria, scrub typhus) as well as skin diseases (scabies).

Important risk drivers of common communicable diseases identified in the two countries were inadequate vaccination coverage, especially among new arrivals from Rakhine state, suboptimal water and sanitation conditions and limited vector control capacity.





A risk factor profile: Rohingyas in Cox's Bazar

High background rates of endemic infectious diseases

Measles

Measles is the fifth-leading cause of death among children under 5 years of age in Bangladesh; measles outbreaks have been reported in Cox's Bazar in 2016 and 2017.

In spite of the immunization efforts against measles in Myanmar, outbreaks continued to occur almost once every three to four years due to accumulation of a susceptible population.

Dengue and chikungunya

Both Bangladesh and Myanmar (and their respective refugee areas) are endemic for dengue and chikungunya; Specifically, in Chittagong, a high prevalence of dengue-positive cases (45%) has been reported among suspected patients; limited availability of diagnostics at health facilities and limited vector surveillance for the *Aedes* mosquito.

In Myanmar, dengue fever (DF)/dengue haemorrhagic fever (DHF) is one of the leading causes of morbidity and mortality among children under the age of 10 years, with approximately 85% of cases occurring in this age group.

Acute respiratory infections

In Bangladesh, acute respiratory infection (ARI)/ pneumonia is a leading cause of under-five morbidity and mortality. Most of the pneumonia deaths occur in children below 2 years of age and account for 77.5% of deaths in the first year of life.

In Myanmar, morbidity and mortality among children due to severe respiratory infections, particularly pneumonia, continues to be high at 21% of under-five deaths and 27.6% of deaths among children aged between 1 month and 5 years.

Cholera

Cholera is endemic in Bangladesh with an estimated 110 000 cases and 4 500 deaths each year; an estimated 20% of patients admitted with diarrhoeal disease are infected with *Vibrio cholerae*.

In general, Myanmar is considered to be endemic for cholera, although with limited reporting. IDP camps of Rohingyas in northern Rakhine state have regularly reported cases of severe acute watery diarrhoea for the past 5 years.

Tuberculosis

Tuberculosis (TB) is high in both countries with a prevalence of 365 per 100 000 individuals in Myanmar



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(19th highest TB prevalence) and 225 per 100 000 individuals in Bangladesh (35th highest TB prevalence).

Multidrug-resistant TB (MDR-TB) is estimated at 1.5% to 5% among new cases (Bangladesh and Myanmar, respectively) and 25% to 29% among previously treated cases (Myanmar and Bangladesh).

Malaria

Cox's Bazar, Chittagong and three Chittagong Hill Tract (CHT) districts together account for more than 90% of all malaria cases in Bangladesh annually.

Reported rates of malaria in the Cox's Bazar and Chittagong districts vary from 0.1 to 50 per 1 000

population for *P. falciparum* and 0.1 to 10 for *P. vivax*, with the higher rates found in the Chittagong district.

Hepatitis E

Both, Bangladesh and Myanmar, are endemic for HEV although no recent outbreaks have been reported.

Low background immunization coverage

Vaccination levels in Myanmar's Northern Rakhine State are very low, and people are at risk of measles and other diseases.

High childhood malnutrition rates

In Rakhine state, 13.9% of children surveyed in the 2015

Demographic and Health Survey had moderate acute malnutrition, while 3.7% were below -3z scores of the median WHO growth standards of weight for height. Among the state/regions, children in Rakhine are more likely to be stunted (38 percent), wasted (14 percent) and underweight (34 percent).

Rates of SAM and MAM were found to be above emergency threshold levels and both clinical and community-based nutrition interventions were inadequate.

Reproductive, maternal, neonatal and child health

In Rakhine State, access to antenatal care by a skilled provider (71%), delivery at birth by a skilled provider (30%), and delivery at birth in a health facility (19%) remains one of the weakest in Myanmar.

Mortality in children younger than 5 years in the Rohingya-predominant northern region of Rakhine State is 224 per 1 000 livebirths in Butheetaung township and 135 per 1 000 livebirths in Maungdaw township,

compared with 77 per 1 000 livebirths in the non-Rohingya-predominant Sittwe region of Rakhine state.

Health care access and delivery gaps

Bangladesh & Cox's Bazar

Bangladesh's health system is characterized by shortage of skilled resources, inappropriate skill-sets and inequitable distribution of trained manpower; there are gaps in service delivery readiness at block and district levels. Only 7% facilities at district and upazila (sub-district) level have the capacity to provide normal delivery services; 42% can deliver antenatal care and 23% child curative care.

Public sector is unable to meet the growing demand for medicine by those visiting the public facilities; common to see, stock-out of medicines in public facilities which are linked to leakage and wastage.

In rural areas, only one rural dispensary and 174 community health clinics; virtually no ambulances, jeeps, buses, minibuses or pick-ups attached to these facilities potentially limiting mobility and outreach.

Rakhine state

Rakhine state fares poorly on health care access and delivery is characterized by poor access to clean water and sanitation.

Poor socioeconomic indicators

Cox's Bazar is one of Bangladesh's poorest and most vulnerable districts; poverty is well above the national average.

Rakhine state is one of the least developed areas of Myanmar and is second only to Chin State in terms of the proportion of the population living below the poverty line.

Vulnerability to natural hazards

Bangladesh is ranked 13th in the world in risk for natural disasters with flooding and cyclones ranking the highest; Cox's Bazar is one of the districts prone to natural hazards, Rakhine state is prone to natural hazards such as storms and floods.

Environmental threats due to conditions in camps

Insufficient WASH facilities across existing camp sites and near absence in new settlements that were further aggravated due to rains and water logging creating high risk for diarrhoeal and other disease outbreaks.



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The emerging health needs of the vulnerable population were identified. They included immunization against vaccine-preventable diseases (VPDs), reproductive health services, referrals to health facilities, prevention of cholera/acute watery diarrhoea and malaria, and services for people subjected to sexual and gender-based violence (SGBV). Establishment of EWARS was identified as one of the immediate preparedness and response measures to mitigate the risk of a communicable disease outbreak.

A follow-up public health situation analysis was undertaken in March 2018. This once again revealed continuing vulnerabilities following the initial influx of refugees as well as new and emerging trends of public health risks. The following findings highlighted the need for more comprehensive and longer-term strategies that needed to be put in place:

- risk of high levels of excess mortality, morbidity and/or mental health problems due to the risk of outbreaks of communicable diseases;

- worsening of reproductive, maternal, neonatal and child health (RMNCH) outcomes due to disruptions in reproductive health care and prenatal care/supervised delivery and malnutrition; worsening of mental health issues;
- risk of excess mortality, morbidity, and/or mental health problems due to increased burden of endemic infectious diseases (ARIs, cholera, measles, diarrhoeal diseases, malaria) and crisis-attributable injuries;
- risk of excess mortality, morbidity and mental health problems due to cases of HIV, TB and NCDs arising from disruptions in short- and long-term care is limited.

The health response with partners was planned based on these assessed risks.



Assessing health facilities in the settlements

In November 2017, WHO coordinated the mapping and assessment of over 222 health facilities serving the health needs of the nearly 1 million vulnerable population in Cox's Bazar (new arrivals as well as host community) to better understand how to deliver services. The assessment was much needed as the population in the camps and settlements was constantly on the move, and partners and health facilities had to repeatedly adapt to the changing field conditions. This kind of analysis and provision of

health information to partners was an essential aspect of WHO's mandate to enhance the quality and efficiency of the current health response.

The mapping exercise covered several nutrition sites and facilities providing specialized services such as labour wards, in addition to gauging the skills and expertise that existed in all areas of public health and which could be called upon to serve the health needs of the Rohingyas.



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Table 1. Types and number of facilities in Cox's Bazar

FACILITY TYPE	NUMBER
Diarrhoea treatment centre	1 functional plus 9 on standby in case of outbreaks
Health post	140
Labour room or specialized SRH facility	8
Other specialized	22
Primary health centre	34
Secondary health facility	8

The health assessments provided critical insight into the health needs, which was essential for deciding the Joint Response Plans (JRPs), requesting US\$ 434 million under the Humanitarian Response Plan 2017 (September 2017– February 2018), US\$ 950.8 million in the 2018 JRP (March–December 2018), followed by the Joint Response Plan 2019 (January–December 2019) requesting US\$ 920.5 million to provide life-saving assistance to 1.2 million people, including Rohingya refugees who fled Myanmar to Bangladesh and local host communities. The priority needs in the Plan, which covered the January–December 2019 time frame, included food, water and sanitation, shelter and medical care.



The assessment and mapping of health services was part of the commitment of national and international partners to address the health issues of the Rohingya population and their host community.

“WHO and UNICEF complemented one another's work from the time the influx began. Together we mounted immunization campaigns and handled logistics and operational functions. Even on the technical side we were quick to assess, take stock and initiate action. Our immunization specialist in Dhaka worked closely with the immunization team of WHO. Both worked closely with GoB. Our partnership worked well in all aspects of procuring supplies, devices, vaccines, creating sound technical approaches and handling media together. It has been a meaningful and rich partnership.”

Maya Vandenant, Chief of Health, United Nations Children's Fund (UNICEF) Bangladesh

COORDINATED RESPONSE BY THE GOVERNMENT OF BANGLADESH, WHO AND PARTNERS

WHO was mandated on 1st October 2017 to be the agency to undertake the task of overall health coordination. From the very beginning of the emergency, WHO worked closely with the government to ensure that the health needs of the Rohingyas were identified and met, relying on their past experience at the global level.

Separate timelines for the WHO response to the crisis have been created and categorized in this and following chapter 3 under the four themes of “Health sector coordination and partnerships”, “Major health interventions”, “Health operations and technical guidance” and “Health innovations with the potential for scaling up”.



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Health sector coordination and partnerships: overview of WHO's response initiatives

WHO leads the health sector response

1st October 2017: WHO organizes, coordinates and leads more than 100 partners to streamline essential health services for Rohingyas.

Mobilizing funds to strengthen health infrastructure, equipment and supplies

16th September 2017: First tranche of US\$ 175 000 released on request of the WHO Representative to Bangladesh from the South-East Asia Regional Health Emergency Fund (SEARHEF).

6th October 2017: WHO appeals for US\$ 10.2 million to support critical health interventions in Cox's Bazar.

28th February 2018: US\$ 2 million aid received from King Salman Humanitarian Aid & Relief Centre (KS Relief) to upgrade facilities at Sadar District Hospital.

Providing strong technical support with assessments, surveillance and immunization

25th July 2018: WHO mobilizes and deploys experts from the Global Outbreak Alert and Response Network (GOARN), emergency medical teams (EMTs), stand-by partners and WHO offices to strengthen health sector coordination in the event of an emergency health response or for disease surveillance; do periodic risk assessments; support immunization.

16th March 2018: UN and partners launch a JRP calling for US\$ 951 million to continue delivering lifesaving assistance.





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To respond effectively to the various health challenges of nearly 1 million people, with hundreds of actors involved, establishing a coordination mechanism was essential. Health sector partners planned and coordinated their emergency reforms under the leadership of the Civil Surgeon's Office in Cox's Bazar, the Directorate General Health Services Coordination Centre and WHO. The health sector adopted a three-tiered coordination structure at the district, subdistrict (upazila) and union levels to ensure that decisions were taken and implemented. At the district level, a SAG, comprising the main health sector partners, played an advisory role to the health sector coordinator based on priority needs. For 2019, it was decided to coordinate the health function through the following working groups, which met on a regular basis:

- Mental Health and Psychosocial Support (chaired by IOM and UNHCR)
- Sexual and Reproductive Health (chaired by the United Nations Population Fund [UNFPA])

- Community Health chaired by UNHCR and co-chaired by Community Partners International (CPI)
- Epidemiology and Case Management (chaired by WHO)

All other issues not directly related to the above were addressed through several ad-hoc groups that were formed. In addition, coordination of support to the District Hospital (Sadar) continued through the Sadar roundtable meetings and upazila-level health sector coordination.

Meanwhile, WHO led the health sector coordination from 1st October 2017, after the task was handed over to the Organization officially by IOM. A SAG was constituted to guide, support and oversee the progress and needs across different subhealth groups. The health sector undertook regular weekly meetings and established subhealth working groups, significant being those related to acute watery diarrhoeas, vector-borne diseases, NCDs, sexual and reproductive health, and psychosocial support.

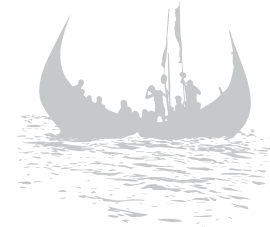


Partnerships for greater reach and results

The health sector benefited from the support of over 100 partners who continued to respond to the needs of the affected populations. This included 66 international NGOs, 39 national NGOs, eight UN agencies, and one observer. Over 100 partners supported WHO and the GoB to reach health services to Ukhiya and Teknaf. Prominent among these were UNICEF, UNFPA, UNHCR, IOM.

Together they were responsible for the following:

- establishing expansive community health worker networks
- developing risk communication materials
- supporting government health facilities with human resources, renovation and medical supplies
- ensuring availability of essential medicines and supplies through logistics support
- maintaining a strong disease surveillance system
- delivering vaccination campaigns and strengthening routine immunizations
- improving morbidity/mortality reporting from health facilities and from the community
- strengthening laboratory diagnostic capacity



WHO led and coordinated the efforts of over 100 partners managing more than 222 health facilities in Rohingya camps, while also providing medicines and medical equipment, diagnostics, guidelines and building capacities of the health workforce.

- monitoring and improving water quality in health facilities
- capacity-building of medical personnel
- preparing for disease outbreaks

To deal with the crisis, additional human resources were needed. Responding to this ground reality, IOM, UNHCR, MSF, International Federation of Red Cross and Red Crescent Societies (IFRC), BRAC and other humanitarian agencies increased their presence by deploying emergency teams and relief specialists in different sectors. They positioned 300 staff in Bangladesh, including 208 national colleagues, and boosted their presence and operations to match the scale and complexity of what was a very fluid

and evolving refugee crisis. The DGHS Coordination Cell mobilized government health staff from other provinces,

volunteers and interns to support the mass vaccination rounds, mobilize the community and communicate risks.



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Contingency planning for the monsoon

Considering the risk and vulnerabilities of the population living in the camps to monsoon, flash floods and landslides, a time-bound emergency preparedness task force was set up in early March 2017 to look at monsoon and cyclone preparedness. It was co-chaired by the International Rescue Committee (IRC) and its purpose was to deal with any threat to the population in crisis, including the host population.

Several other plans were developed to address issues related to health within the refugee population. These included the Humanitarian Response Plan, Joint Response Plan, Joint Health Sector Plan for Forcibly

Displaced Myanmar Nationals (FDMN) and Host Community and WHO Operational Plan. The WHO Operational Plan and JRP formed the guiding pillars of the WHO response. The objectives of these plans were broadly formulated to accommodate evolving health sector response requirements. The priority was to continue investing in and strengthening these relationships, as well as streamlining and clarifying the coordination structure to provide coherent and unified support to the GoB in its response to the crisis. They also looked at improving structured engagement with national civil society to build a clear roadmap to localization over the coming period.

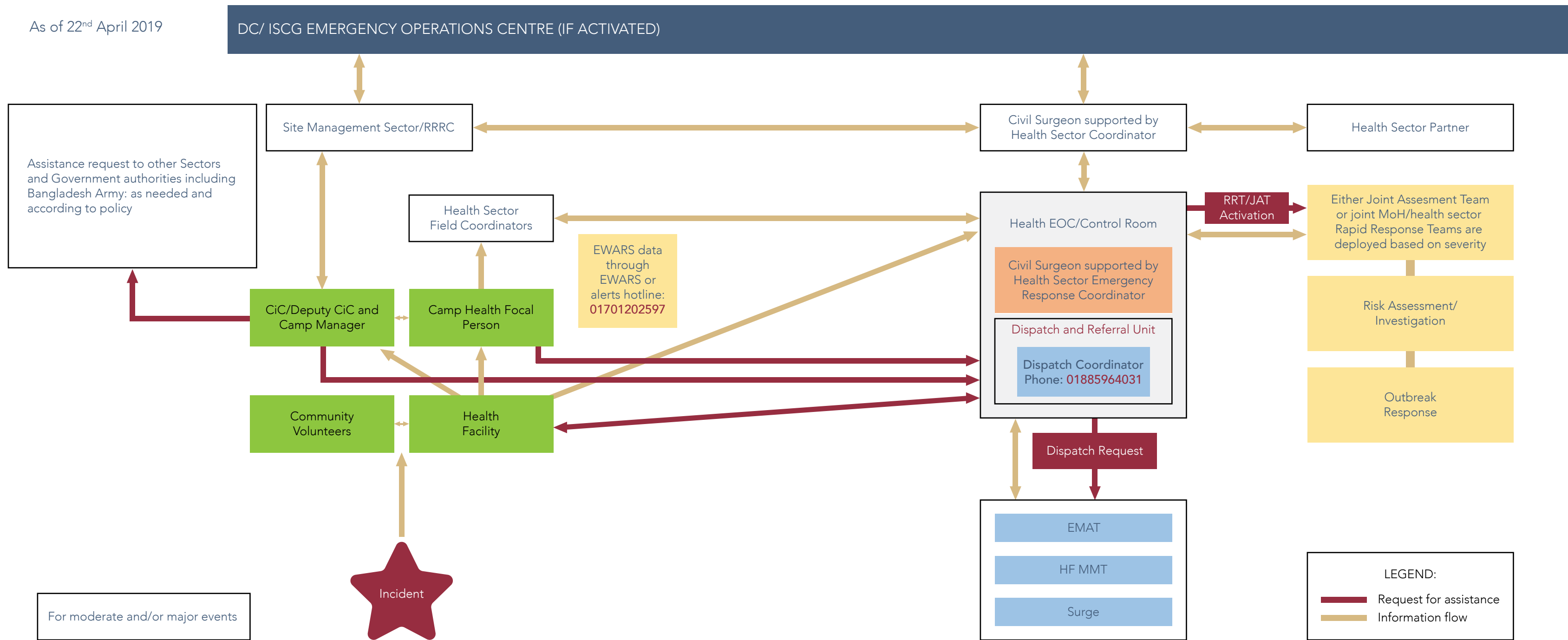


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Fig. 2.4. Coordination structure for moderate and major incidents



Source: 2019 Health sector cyclone and monsoon season contingency plan for Cox's Bazar (Rohingya refugees and host community); coordination structure presented in stakeholder's workshop in Cox's Bazar, July 2019.⁵

Fig. 2.4 depicts the coordination structure since 2018 for moderate and/or major incidents (not extreme) that require a health sector response, and how mobile teams and other teams will be dispatched.

WHO's Incident Management System

Through implementation of the incident management system (IMS), WHO succeeded in providing key public health interventions and organizing the health sector to respond to the Rohingya crisis. WHO's engagement in Cox's Bazar was geared towards systems strengthening and localization of the response.

The main functions of the IMS are as follows:

1. **Leadership.** The leadership function is responsible for overall management of the WHO response, including supervision of team leads for all other IMS functions. The main sub functions are incident management; staff health, well-being and security; communications; external relations; and management of the emergency operations centre (EOC).
2. **Health sector coordination.** Coordination of health partners ensures that collective action results in appropriate coverage and quality of essential health services for the affected population, especially the most vulnerable.
3. **Information management and epidemiology.** This function collects, analyses and disseminates information on health risks, needs, service coverage and gaps, and progress-review of emergency response interventions as per performance-indicators specified in the WHO Emergency Response

Framework. It uses information to develop and continually refine the response.

4. **Health operations and technical expertise.** WHO works with the MoHFW and partners to ensure optimal coverage and quality of health services in response to emergencies. It does this by promoting implementation of the most effective, context-specific public health interventions and clinical services by operational partners. This function provides up-to-date evidence-based field operations, policies and guidance, and technical expertise.
5. **Operations support and logistics.** This function ensures that WHO staff – and, where agreed, operational partners through the health sector have a reliable operational platform to deliver effectively on the WHO action plan and joint operational plan. It may also support the logistics capacities of the MoHFW. WHO's logisticians proved to be the backbone of the emergency response in Bangladesh.
6. **Finance and administration.** This sub function develops WHO work plans and budgets based on WHO action plans as determined by the Leadership function; manages funding allocations and awards; tracks and reports on financing against the budget; supports, and monitors and reports on financial implementation.



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Since September 2017, they managed and supplied of more than 220 metric tons of essential medical supplies: from antibiotics, life-saving antitoxins, to tents, hospital beds and water tanks. WHO's response to health emergencies through the IMS follows performance standards in accordance with its Emergency Response

Framework. In the Rohingya humanitarian emergency, the IMS was activated early on 6th September 2017 to enable it to support the constitution of an incident management team (IMT) at the country level and an incident management support team (IMST) at the WHO Regional Office level.



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The three levels of WHO (Headquarters, the Regional Office and WHO Country Office Bangladesh) coordinated and communicated regularly for close monitoring, timely decision-making and sending support to the field. Health sector meetings were consistently well attended and appreciated by partners. They enabled information-sharing and collective planning, with most meetings organized in Ukhiya and Teknaf in 2018. WHO continued to work closely with the MoHFW to meet the health needs of Rohingya refugees and the host community. It provided tactical support for the following:

- launching and implementing immunization campaigns to prevent the occurrence of measles, mumps, rubella, polio and cholera in camps, in coordination with UNICEF and the Communicating with Communities Working Group;
- mounting a timely outbreak response to diphtheria;
- undertaking various capacity-building exercises for partners, including on diphtheria case management, mental health and psychosocial support (MHPSS), TB, vector-borne diseases, HIV, laboratory testing,

waste management, risk communication and mental health;

- implementing EWARS to strengthen the surveillance function;
- finalizing an acute watery diarrhoea preparedness plan, monsoon preparedness plan and joint response plan based on the assessments and recommendations of expert groups;
- strengthening field diagnostics, especially those related to improving facilities and human resources at Sadar District Hospital in Cox's Bazar and

establishing a fully equipped laboratory in the local medical college in Cox's Bazar that became functional on 21st April 2018;

- operationalizing joint assessment teams to investigate WASH-related events and conduct WASH/drinking water quality surveys and innovations to provide safe water at the household level in the settlements;
- co-chairing the Health Risk Communication Task Force, with UNICEF leading risk communication and community engagement campaigns for cholera, diphtheria and measles mass vaccination.

"WHO is an integral part of the interagency coordination mechanism of the Rohingya refugees response in Cox's Bazar. The Organization provided solid and reliable health care along with technical support, prevention and response. Credit goes to them for coordinating the overall health response both in the emergency phase immediately after 25th August and later through various strategic and focused approaches, depending on emerging priorities from the different refugee settlements. Their support to the Government of Bangladesh has been timely and valuable. It helped us integrate our response and align our actions more systematically."

Sumbul Rizvi, Former Senior Coordinator of the Inter Sector Coordination Group, on WHO's role as part of the emergency response in Cox's Bazar, Bangladesh



Mobilizing funds to manage the crisis

The scale of the influx into Cox's Bazar, combined with a scarcity of resources, resulted in a humanitarian emergency that exceeded the coping capacity of local communities and the health system. Planning the response was complicated by the limited baseline information about the demographics and health profile of the displaced population. As the crisis evolved, the health needs of the displaced population emerged and became a public health challenge.

Since August 2017, WHO has mobilized over US\$ 26 million towards the response to the Rohingya crisis, including both internal and external funds. WHO gratefully recognizes the support from those donors who provided funding to the Contingency Fund for Emergencies and those who made direct contributions to WHO's Rohingya response, including but not limited to Australia, Canada, Central Emergency Response Fund (CERF), China, European Commission (ECHO), Estonia, France, Gavi, the Vaccine Alliance, Germany, India, Japan, King Salman Humanitarian Aid and Relief Centre, Netherlands, Norway, Republic of Korea, Russian Federation, Sweden, United Kingdom (Department for International Development [DFID]), United States Department of State (USDOS), Bureau of Population, Refugees, and Migration (BPRM) and the World Bank.

The range of actors and funding streams in the response diversified since March 2018, with a grant being approved by the GoB. This was to the tune of US\$ 480 million

spread over three years under the World Bank's IDA18 regional sub-window for refugees and host communities. This marked a notable advance, in addition to the Asian Development Bank's planned initial US\$ 100 million grant. These funds served as a critical contribution over the coming years, even though they did not quite cover all the needs for sustaining the response across sectors. On the one hand, the Independent Oversight Advisory Committee (IOAC) commended the commitment and generosity of the GoB, host communities, and the ongoing efforts of responders to the devastating humanitarian crisis. On the other hand, it expressed concerns regarding financial sustainability as the displacement became protracted.

Going forward, WHO is focusing on improving the response and building resilience to fortify the public health system in Cox's Bazar District. Beyond the acute response phase, to address the longstanding vulnerabilities that would continue to exist, WHO's strategy will ensure interoperability with the existing national- and district-level health system. Given the complexity and protracted nature of the Rohingya crisis, there is a fundamental need for development-oriented solutions that build resilience to a broad range of risk at all layers of the community, in line with the priorities set in the Rio+20 outcome document⁶, the Sendai Framework on Disaster Risk Reduction⁷ and the Humanitarian Grand Bargain.⁸

While the Rohingyas are a highly resilient people, they remain vulnerable and exposed. The work to respond and protect their health continues. Together with this, the international community needs to come out in full

force to work with the GoB to sustain the response and, at the same time, keep support agile and flexible in the coming months and years.



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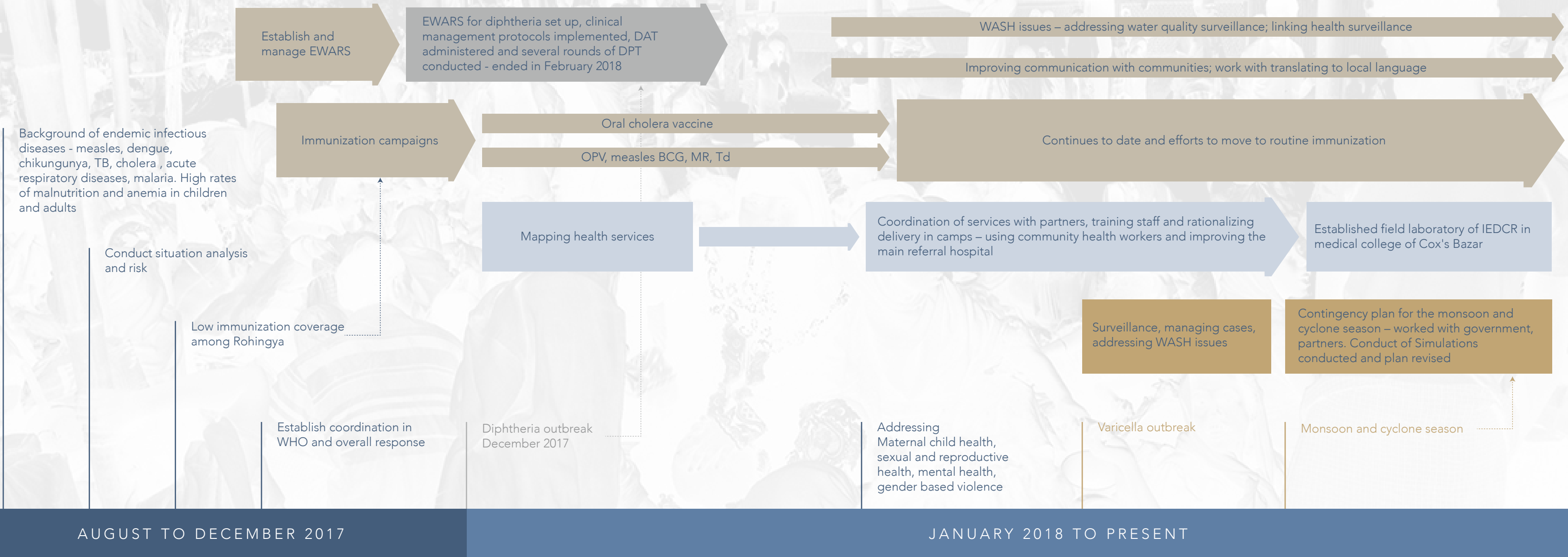
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HEALTH RISKS AND RESPONSE INTERVENTIONS

INFLUX OF THE ROHINGYA PEOPLE





Chapter 3

OVERCOMING
CHALLENGES,
SAVING LIVES

By October 2017, the Rohingya situation in Cox's Bazar was unique in its size and complexity, even by the standards of international humanitarian emergencies. Cognizant of the enormous challenge and being aware of the fact that even a small lapse in health response carried the risk of enormous consequences with people

who were in such a vulnerable state, the health sector led by WHO galvanized national and international expertise and experience to rapidly launch health interventions. These interventions were based on comprehensive risk assessments conducted to identify priorities.



REUTERS / Danish Siddiqui

Major health interventions: Initial Phase Of Emergency

Implement emergency immunization

- 16th September 2017
WHO planned and supported vaccination campaign against measles, rubella and polio. Over 136 000 children received measles and rubella vaccines and 73 000 polio vaccines.
- 10th October 2017
Massive cholera immunization campaign begins in Cox's Bazar to immunize 700 000 Rohingyas and host communities; second campaign conducted in 2018.

Timely conduct of the diphtheria vaccination campaign

- 6th December 2017
110 suspected diphtheria cases and 6 deaths reported.¹ WHO planned and supported vaccination campaign against measles, rubella and polio. Over 136 000 children received measles and rubella vaccines and 73 000 polio vaccines.
- 10th December 2017
Diphtheria vaccination campaign begins.

WHO's role in addressing urgent issues related to water, sanitation and hygiene

- September 2017
Water quality testing laboratory set up. Eleven rounds of water quality surveillance and Water and Sanitation for Health Facility Improvement Tool (WASH FIT) surveys undertaken in over 100 facilities.

WHO and partners focused on getting a stronger foothold on the health situation in the Cox's Bazar district. The biggest challenge for the teams was related to issues that emanated from the overcrowded settlements and high levels of influx. Low literacy rate, especially among women, and subsequent lack of awareness further contributed to this situation. In some of the sites that emerged spontaneously, there was virtually no access to water and sanitation facilities, raising the risk of disease outbreaks. Reports during the initial weeks pointed towards a sanitation crisis in the absence of latrines, water and proper living spaces.

The cyclone and monsoon season, usually in May–June, had most health teams worried since it could wreak havoc on the semi-permanent structures, mostly made of bamboo and plastic sheeting, which made up most of the buildings in the refugee settlements. Emergency measures, such as cyclone shelters, were not available for refugees and were inadequate for the host community.

Poor health and nutritional status and incomplete or unknown immunization amongst the new entrants to Cox's Bazar and the host communities had to be factored in while planning health interventions. The prevalence of vaccine-preventable diseases (VPDs) among the population highlighted their poor levels of vaccination,

while a large number of incidents of acute watery diarrhoea indicated poor quality of water and limited access to sanitation facilities. Vaccination coverage was generally low among the Rohingyas.

Limited access to specialized and emergency care for refugee and host communities in Cox's Bazar remained a serious concern. With only one district hospital (Sadar), there was inadequate provision of secondary health care, including good-quality 24-hour surgical capacity. As reported in a UNFPA assessment in December 2017, around 78% of deliveries were home-based and 22% health facility-based. Patients requiring surgery were frequently referred to facilities either in Cox's Bazar, where human resources were already stretched beyond limits or to the city of Chittagong, a journey that took several hours by road. These delays resulted in many stable cases deteriorating into life-threatening cases.

Based on the situation analysis and its findings, WHO in collaboration with the GoB and partners began work on immediate health needs of pressing concern. These included provision of medical care, repositioning supplies and improving WASH facilities while preparing communities for impending threats such as disease outbreaks and taking stock of their immunization status and conducting special campaigns from time to time.



Health service delivery

The health-care delivery system at the beginning of the crisis was inadequate to deal with the complex situation, whether it was disease surveillance and health information management or providing services for immunization, infectious and noncommunicable diseases.

As the weeks rolled by, the emergency response to the crisis began to show results. This was the outcome of a systematic build-up of health services along with strengthening of human resource capacities and provision of essential medical supplies. Health service delivery improved with as many as 13 functional health posts in the camps and 32 primary health centres, of which 29 provided services round the clock.

The health service delivery network got a tremendous boost by the contribution of health sector partners. They dedicated themselves to running field hospitals,



More than 2 million outpatient consultations were reported by more than 30 implementing partners between 1st January 2019 and 30th April 2019.

WHO provided over 220 metric tonnes of essential medicines, supplies and equipment, and donated 100 tonnes of in-kind medical supplies and 109 interagency emergency health kit (IEHK) for the treatment of 120 000 people, among other things.²

diarrhoea treatment centres, specialized sexual and reproductive health (SRH) and/or delivery facilities, and other specialized health facilities such as eye-care facilities, rehabilitation facilities, age-friendly centres, and a diphtheria treatment centre.



REUTERS / Tyrone Siu



WHO SEARO / Akash Jain

Emergency immunization campaigns to prevent and pre-empt infectious disease outbreaks

Initial findings had shown that very few Rohingya children had been vaccinated under the routine immunization programme in Myanmar. When they came to Cox's Bazar, they were further at risk for diseases. There was an urgent need to protect them rapidly.

Mass vaccination campaigns were conducted as priority public health interventions early in the crisis to pre-empt different VPDs. Four large immunization campaigns were launched, starting October 2017 followed by routine immunization campaigns starting February 2018.³ Early detection and curtailment of outbreaks was done through a robust surveillance system. The campaigns were instrumental in preventing the expected excess mortality among the Rohingyas. But tracking all children in need and convincing their parents to bring them for vaccination across makeshift and spontaneous settlements in Cox's Bazar were not easy tasks.

A responsive immunization plan was developed and subsequently implemented in several well-coordinated rounds. Timely planning for measles and rubella

campaigns and oral cholera vaccine (OCV) and other campaigns averted major morbidity and mortality. One of the first steps that WHO took in consultation with the GoB, UN agencies and partners was to launch mass vaccination campaigns for critical outbreak-prone diseases such as mumps, rubella, cholera and diphtheria. Between 16th September and 4th October, the MoHFW with support of WHO, UNICEF and local partners, was quick to roll out a measles and rubella (MR) vaccination campaign.

In addition to vaccination campaigns, increasing immunization coverage among the host and refugee population against VPDs has been a priority for the health sector through strengthening the routine Expanded Programme on Immunization (EPI). Accordingly, from February 2018, the focus shifted to routine targeting with EPI of children 0–23 months of age. This was implemented through 780 outreach session sites monthly, run by 65 mobile teams (12 sessions in a month) consisting of two vaccinators from the MoHFW. In addition, EPI was also provided at 59 fixed sites inbuilt in health facilities run by different agencies by their own vaccinators across the camps.



Table 3.1. Immunization dose delivered to Rohingya children through vaccination campaigns, October 2017–December 2018

Antigens	Campaign Dates	Doses Delivered
Four rounds of bOV	Oct, Nov, Dec 2017 & Jan 2018	630 374
Three rounds of Pentavalent	Dec 2017, Jan 2018 & Mar 2018	493 776
Three rounds of Td	Dec 2017, Jan 2018 & Mar 2018	650 936
Two rounds of OCV	Oct/Nov, 2017 & Nov/Dec 2018	1 243 959

bOV: bivalent oral polio vaccine; OCV: oral cholera vaccine; Td: tetanus and diphtheria vaccine

Since the beginning of February 2018 to date, through routine immunization, children were administered Bacillus Calmette–Guérin (BCG), and 259 doses of pentavalent

vaccine, OPV, pneumococcal conjugate vaccine (PCV) and MR. Special care was taken for pregnant women who were immunized with tetanus and diphtheria vaccine (Td).

Table 3.2. Immunization doses delivered through routine immunization sites in 2018

Antigen	Doses delivered through routine immunization (February–December 2018)
Bacille Calmette–Guérin (BCG)	40 965
Pentavalent vaccine	56 512
Oral polio vaccine (OPV)	58 234
Pneumococcal conjugate vaccine (PCV)	55 086
Measles/rubella (MR)	29 039
Tetanus diphtheria (Td) for pregnant women	19 906

A massive cholera vaccination campaign was conducted in November–December 2017 targeting 900 000 people. This was followed by another campaign in May 2018 covering 1 million people. As an additional measure, resources to treat measles cases were reinforced with

distribution of vitamin A supplements, antibiotics for pneumonia and oral rehydration solution (ORS) for diarrhoea. These efforts were instrumental in protecting and preventing the spread of measles among the vulnerable population.



WHO SEARO / Mehak Sethi

Timely administration of 900 000 doses of OCV prevented a major cholera outbreak in Cox's Bazar

The water and sanitation conditions in the overcrowded camps would take a few months to improve. WHO and partners anticipated a potential threat in the form of disease outbreaks in the upcoming monsoon season and outlined a series of interventions to prevent water- and vector-borne diseases.

When the GoB made a request on 27th September 2017 to the International Coordinating Group (ICG) on Vaccine Provision to provide OCV, swift action was taken. Approval was granted in 24 hours by the coordinating mechanism that brought together WHO, UNICEF, MSF and the IFRC to conduct the campaign and Gavi to deliver the vaccine free of charge within two weeks for the campaign that was scheduled for October.

The ICG released 900 000 doses of OCV from the global stockpile to prevent the spread of cholera among the recently arrived vulnerable populations and host communities in areas around Cox's Bazar.

WHO provided support by prepositioning supplies, implementing disease surveillance and monitoring water quality as well as logistics support to conduct vaccination campaigns. According to Dr Abul Kalam Azad, Director-General of Health Services at Bangladesh's MoHFW: "This was a precautionary step to avoid a preventable cholera outbreak and we appreciate the support and speed of partners in delivering on this urgent request."

As part of ongoing efforts of the government and health sector partners, a second cholera vaccination campaign was organized to cover nearly 1 million Rohingyas and their host communities living in and around the refugee camps with a view to preventing any potential outbreak during the monsoon season. This included 135 000 Bangladeshis affected by the influx in 2017–2018. Subsequently, two additional cholera vaccination campaigns were conducted.



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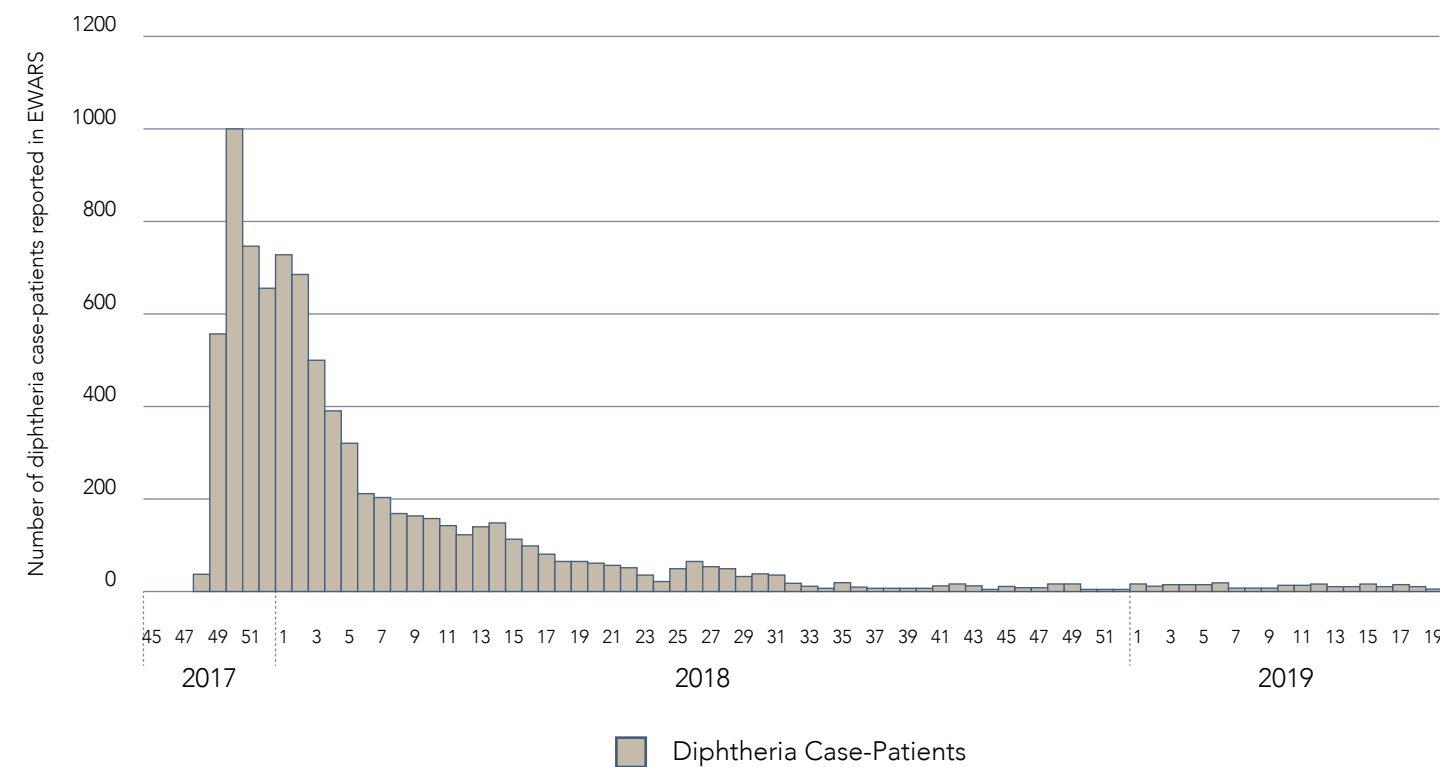
Lovely Barua is one of 35 women who were part of the 100-strong team of vaccinators working in the Rohingya camps in Cox's Bazar. As a woman vaccinator, she had easy access to the families in the camps, especially for vaccinating young adolescent girls. On an average, she vaccinated 200 children on a vaccination day. She was instrumental in bringing 12 to 15-year-old girls to the vaccination sites by meeting them and convincing them. She is part of the GoB's health workforce who received training from WHO and was closely monitored to achieve the highest possible coverage in immunization campaigns.

Tackling the diphtheria outbreak in Cox's Bazar

The first case of the highly infectious diphtheria was reported in Balukhali camp of Cox's Bazar in November 2017. The disease quickly spiraled to 150 suspected cases a day across multiple facilities spread over 5 000 acres of undeveloped forest land. Controlling the outbreak took the combined efforts of government agencies, international organizations and NGOs.

The health sector mounted an effective and coordinated response to the diphtheria outbreak and averted several potential outbreaks with five mass immunization campaigns. Accelerated immunization aimed to cover nearly 255 000 children in Ukhiya and Teknaf subdistricts in Cox's Bazar, while the GoB and health partners continued to increase support for diphtheria treatment and prevention.

Fig. 3.1. Diphtheria cases from 2017 to 2019



Source: Health Sector Bulletin No. 9; 20th May 2019¹

WHO manages the diphtheria outbreak swiftly

Between 8th November 2017 and 31st December 2018, as many as 8 346 case-patients (292 confirmed, 2 709 probable and 5 345 suspected) were reported (including polymerase chain reaction [PCR]-negative cases) and 44 deaths. WHO led the overall health response, managing the diphtheria outbreak and ensuring that partners had adequate diphtheria antitoxins, antibiotics, personal protective equipment and guidance on the clinical management of diphtheria. A vaccination campaign against diphtheria and other preventable diseases was launched in December 2017 by the GoB with support from UNICEF,

WHO and Gavi, the vaccine Alliance. It targeted all Rohingya children aged 6 weeks to 6 years living in 12 camps and temporary settlements near the Myanmar border. A multipronged response strategy was implemented comprising enhanced surveillance, early detection and treatment, contact tracing, risk communication and mass vaccination campaigns. A vaccination campaign among the Rohingya population <15 years of age was undertaken during December 2017 to March 2018 and from January to February 2018 among the host community of the same age. About 80–90% of the <15-year-old age group were vaccinated



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at least twice against diphtheria. Both Rohingya and host population groups were given three doses of the vaccine. This led to a rapid decline in the number of diphtheria cases. However, cases continue to be reported among both refugee and host population at a level of 30–50 suspected cases per week.

For management, the health sector responded with a combination of early detection and case management, including with efficient and prudent use of diphtheria antitoxin (DAT) and antibiotics; contact tracing and chemoprophylaxis. Cases were managed through a network of diphtheria treatment centres (DTCs). Another control strategy employed was of directly observed treatment with a three-day course of antibiotics for contacts of diphtheria cases. The strategy was introduced in July 2018 and remained a mainstay of the public health response with an average compliance of 79%. One community health worker per sub-block was deputed to visit each case

patient's house to provide chemoprophylaxis to close contacts and refer them for diphtheria vaccination.

Father of 2-year-old Mohamed from Balukhali refugee camp in Ukhiya, Cox's Bazar, Bangladesh shared his story: "My son was sick and people around me said it could be diphtheria. When I took him to the doctor, he confirmed diphtheria. I was devastated. But when Dr Andrew Doyle, Medical Director, Samaritan's Purse Diphtheria Treatment Centre in Balukhali (health sector partner supported by WHO) said he would do his best, we were reassured. In fact, he came promptly to the hospital the moment he got a call about the case in the early hours of the morning. He and his team worked hard to keep Mohamed's airway open. Six hours later, my son was smiling and eating and 48 hours later after completing his antibiotics course, he was sent home, perfectly normal."

Source : <http://www.searo.who.int/mediacentre/sear-in-the-field/diphtheria-survival-after-24-7-treatment/en/>

"The GoB and its health ministry are grateful to WHO whose presence all through the crisis helped us manage health hazards which had the potential to turn into mega problems. Whether it was the measles outbreak, cases of watery diarrhoea or cholera or diphtheria outbreaks, different target groups were handled with specific interventions. All vaccination campaigns had their support along with several technical guidance documents developed and which are being used by teams two years down the line."

Dr Md Abdus Salam, Former Civil Surgeon in Cox's Bazar, MoHFW, Bangladesh

A good example of emergency response

"The Independent Oversight and Advisory Committee (IOAC) has been impressed by WHO's progress in WHE programme implementation."

"WHO has played a vital role in accelerating collective action amongst the humanitarian actors with regard

to setting up early warning and surveillance systems for infectious disease control, diphtheria treatment centres across agencies and emergency immunization programme."³



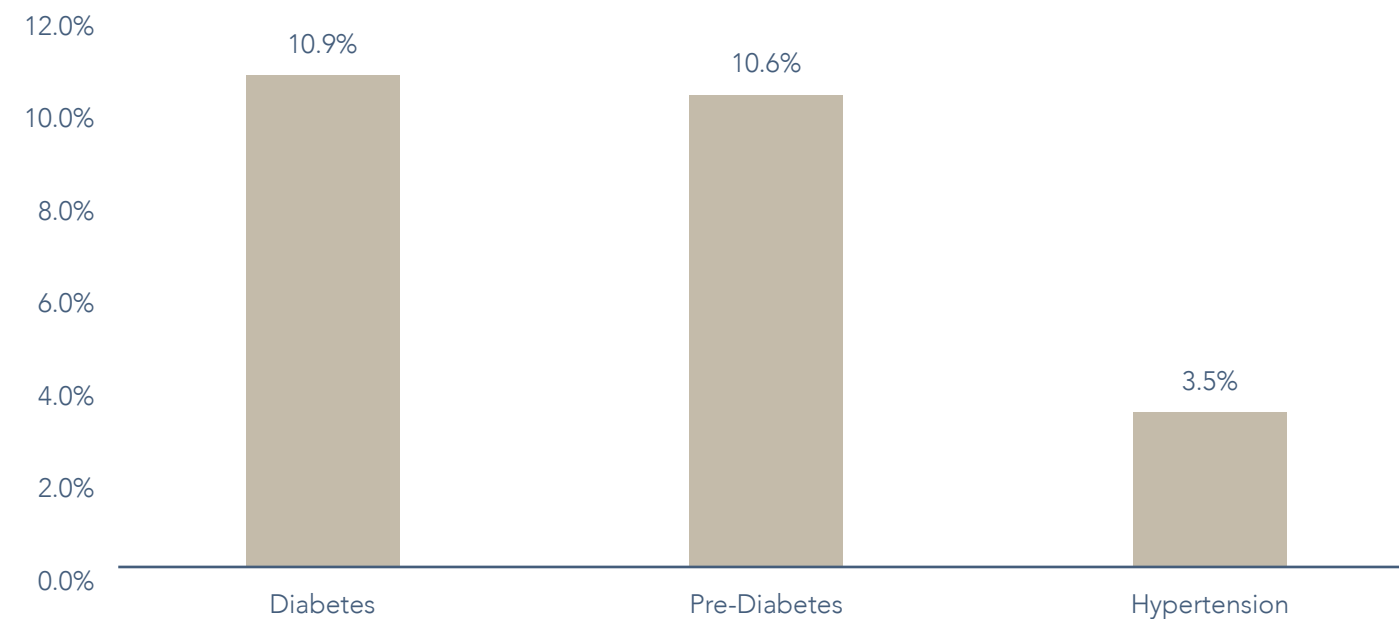
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Noncommunicable diseases

As the crisis unfolded, less acute public health risks started becoming apparent. These included NCDs that had been neglected at the individual and institutional levels due to obvious competing priorities. Lack of awareness and adherence to treatment further compounded the problem. Moreover, reliable morbidity data for the Rohingya population continues to be a challenge.

However, in Kutupalong (Camp 1W) and Balukhali (Camp 9), a systematic approach to health screening programmes to identify NCDs has been followed, with special emphasis on hypertension and diabetes, since October 2017 by a partner. Estimates among screened patients in limited sites revealed a significantly high prevalence of diabetes, prediabetes and hypertension, at 10.9%, 10.6% and 3.5%, respectively, thus calling for a dedicated focus.

Fig. 3.2. Prevalence of diabetes, prediabetes and hypertension among screened patients from Camps 1W and 9



Source: Health Sector Bulletin No. 9; 20th May 2019

WHO's role in addressing urgent issues related to water, sanitation and hygiene

Access to clean water remained a critical need, which had an impact on health and nutrition outcomes. Up to mid-2018, 33% of the affected population did not have access to a safe source of water, with significantly higher rates in the Teknaf camps where ground water was poor. The WASH sector's coordinated piped water approach, to draw on ground water in Ukhiya and surface water in Teknaf, was designed to address this need. A combined 53% of households continued to have access challenges to sanitation infrastructure, such as distance, overcrowding, location and overflowing due to the high-water table and construction challenges.

To meet minimum WASH standards, more latrines needed to be built across the camps but there was not enough space for construction. The latrines constructed were pit latrines that soon got clogged with fecal sludge and were no longer usable. It led the Working Group on WASH to re-evaluate the situation and initiate desludging of these latrines and find space for sanitary latrines. As of mid-2018, in 57% of households, women and girls felt unsafe using the latrine facilities at night.

As a result, people bathed and defecated in or near their shelters, increasing the grey and sometimes black water that was released into open drains, even though around 83% of existing latrines and 95% of bathing shelters were reported to be functional. About one third of the population disposed of solid waste in an indiscriminate manner and sewage waste often ended up in open drains, resulting in more blockages and flooding.

Twelve months into the response, only 55% of households used a communal latrine while shared and single-household latrines accounted for about 48%. Water was also often contaminated at the household level due to lack of awareness. A major and continuous health promotion and behaviour change initiative has been launched, with trained community health workers and community health volunteers going house to house to create awareness on the importance of hand hygiene.





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“One of the most critical areas related to health and, within that, to interfacing with interventions related to WASH has been a most challenging response. I’m pleased with the leadership that WHO provided. They had to battle not just the complex and constantly changing events but also the presence of multiple players. They followed a coordinated approach, ensuring that standards were set and services offered consistently across an incredibly vast and expansive camp settlement area. We look forward to building on this with WHO and other agencies like UNICEF, IOM, UNHCR and MSF so that we can deal more effectively with new situations like the next monsoon season or cyclone.”

Mia Seppo, UN Resident Coordinator in Bangladesh

Efforts to improve water quality and strengthen WASH initiatives

Improving drinking water quality in Rohingya camps.

To ensure safe drinking water for Rohingya refugees, their host communities and health workers, and protect them from waterborne diseases such as acute watery diarrhoea during the monsoons, WHO implemented several initiatives to provide community and household water filters to health facilities, households and Sadar District Hospital in Cox’s Bazar. Prior to the installation, WHO conducted training for health partners on installing and maintaining filters. They were told about its long-term durability and how proper use could ensure five years of functionality without the need for replacement of any part. WHO distributed water filters based on requests from health partners and, through them, to the community. The focus was more on staff and patients

in health facilities, and on households with pregnant woman and newborn babies.

Building awareness on an ongoing basis.

Special awareness sessions were organized to educate Rohingyas on importance of hygiene, handwashing and safe drinking water. Health sector partners – Food for the Hungry and Medical Teams International (FH/MTI), which ran Joint Rohingya Refugee Response Programme in camps in Kutupalong and Balukhali, and primary health care facilities and health posts, are training community health workers to assemble and use water filters. Special attention was given to pregnant women who were asked to clean the filters as part of good hygiene to safeguard families from diseases.



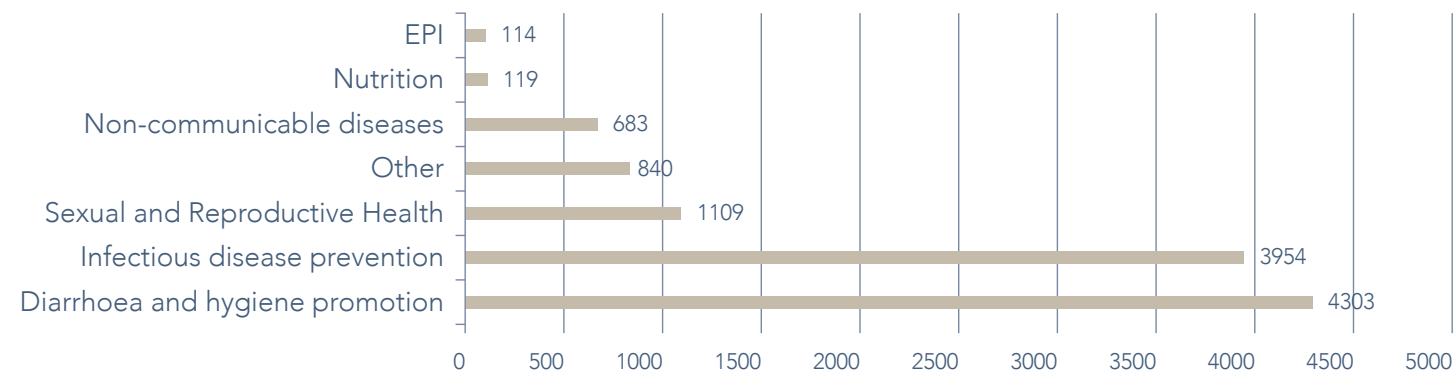
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Community health outreach activities

Community health is critical to the health response. Nearly 30 health sector partners are implementing community outreach activities. These are coordinated through a Community Health Working Group (CHWG) under the health sector, which is responsible for strengthening and standardizing health outreach activities. The co-chair comprises UNHCR and Community Partners International (CPI). Health interventions have been appropriately supported by community health promotion activities (Fig. 3.3).

Community health workers (CHWs) play an important role in preparedness and response during the monsoon and cyclone season. Identifying refugees in need of health and other services is among the key tasks of CHWs, as well as recording institutional and domiciliary deliveries. A key activity for the CHWG is to support community awareness and health promotion efforts through review of existing information, education and communication (IEC) materials and develop additional materials where gaps exist.

Fig. 3.3. Number of health promotion sessions conducted by CHWs, by type (n=11 122)



Source: Health Sector Bulletin No. 9; 20th May 2019

Keeping a close watch to prevent a malaria outbreak in Cox's Bazar

The rainy season increased the risk of mosquito-borne diseases such as malaria, dengue and chikungunya in the camps, making it critical to create awareness on protection, signs to watch out for and treatment. Cox's Bazar was among the districts reporting many malaria cases and deaths. WHO and the Institute of Epidemiology, Disease Control and Research, established a state-of-the-art laboratory at the Cox's Bazar Medical College to facilitate quick diagnosis of diseases.

Cox's Bazar is a malaria-endemic zone though there has been some improvement in recent times due to control efforts. WHO supported malaria prevention efforts across all sectors by working with community members to eliminate mosquito larval habitats. To protect the vulnerable population from diseases caused by mosquito bites, WHO worked with a Bangladesh-based international development organization known

as Building Resources Across Communities (BRAC), CHWs to mobilize Rohingyas in Ukhiya and Teknaf camps to prevent mosquito breeding by keeping their environment clean and promoting the use of long-lasting insecticide-treated nets (LLINs). The Health Risk Communication Task Force led by WHO played a critical role in creating community awareness of vector-borne diseases. WHO's surveillance and immunization medical officers supported training of CHWs and development of key messages and advice, which included the use of mosquito nets, both during the day and night. They were told to cover all water containers and prevent water collection in coconut shells and other such material that could be potential breeding grounds for mosquitoes. Special care was taken to draw the attention of pregnant women and young children by informing them about their vulnerability to diseases transmitted through mosquito bites.





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Five-year-old Harun lives in a Kutupalong camp that houses about 60 000 Rohingyas. Harun's father took him to the IOM-run primary health care centre in Kutupalong, Ukhiya, when he had a high temperature. The doctor examined Harun and referred him to the laboratory for a malaria test. The laboratory technologist Muhammad Assaduzzaman Asad pricked the boy's finger to collect a droplet of blood to put it through the malaria rapid diagnostic tests (RDTs) procedure. The result was available in 20 minutes and it was negative. About 5 km from the IOM's health facility is the BRAC-run national malaria and TB control programme laboratory. Natun Bikash Chakma, the laboratory technologist, says that the laboratory receives samples from various BRAC-operated health centres across Rohingya camps in Ukhiya for malaria and TB tests. Assaduzzaman and Natun are among the 37 laboratory technologists recently trained by WHO and the National Malaria Elimination Programme, MoHFW in the laboratory diagnosis of malaria using rapid diagnostics and microscopy.

Ramping up health delivery services at Sadar District Hospital in Cox's Bazar

Sadar Hospital is the district hospital in Cox's bazar. An estimated 1 million Rohingyas and 300 000 people from the host community needed assistance in this area as they relied on a network of local health facilities coordinated by the GoB and WHO. Between 400 and 600 patients visited the facility daily with numbers further swelling during the monsoon and cyclone season. This

was well beyond its original planned capacity of 250 inpatients. On an average, doctors attended to about 200 outpatients a day, four times the international standard. In the inpatient departments, referrals averaged between 150 and 200 patients per month, with an average bed occupancy rate of 92% and average length of stay of four days.

Strengthening services at Sadar district hospital

A joint improvement project of US\$ 2 million was signed between the MoHFW, WHO and the King Salman Humanitarian Aid and Relief Centre (KS Relief) to enhance health-care services at Sadar Hospital. The joint project doubled the number of inpatient beds from 250 to 500, improved trauma and emergency obstetric care services, and outpatient care. Three wards with a total capacity of 32 beds were fully renovated. Five more wards, with a total capacity of 168 beds, were renovated by the end of 2018.

The aid also rehabilitated wards for men, women and children. Additional doctors, nurses and cleaners were hired to upgrade hospital services and the new staff was trained on infection prevention and treatment of diseases such as acute watery diarrhoea. The grant was also used to provide medical equipment, medicines, supplies, safe drinking water and food to inpatients, as well as increase the number of doctors and nurses treating the patients. Further, one ambulance and one 150 kVA generator were donated to the hospital. WHO is also supporting the setting up of an additional operation theatre in the hospital.

Meeting the challenge of acute jaundice syndrome

Cases of acute jaundice syndrome (AJS) were being reported through EWARS. About 100–150 weekly cases of AJS were reported in February and March 2018. WHO initiated an exhaustive laboratory sampling campaign to identify the causes associated with AJS in the camps. AJS samples were collected from 269 patients across thirteen health facilities in the refugee camps. All samples were tested for hepatitis A, B, C, E and *Leptospira*. Out of these, 56% was positive for hepatitis A and 13% for hepatitis B,

9% for hepatitis C and 5% for leptospirosis. Only one case was positive for hepatitis E. This epidemiological analysis and extensive sampling campaign was useful for distinguishing disease conditions and taking preventive measures, especially before the monsoon season when such outbreaks were expected. Hygiene promotion and WASH interventions were scaled up to prevent large-scale outbreaks. A separate report on the AJS is available.

New treatment and isolation facilities in Cox's Bazar proved beneficial during the diphtheria outbreak

As the diphtheria outbreak hit one of the world's largest refugee settlements, medical experts joined forces and supported the Bangladesh government to save lives and stop the spread of the disease. Three newly built specialist isolation wards at established IOM medical centres provided inpatient care for over 120 patients a night, allowing them to receive the expert treatment they needed while safeguarding others from potential infection. Medicines, beds and other equipment were provided by WHO to support treatment at the new facilities, while a major vaccination programme headed by the GoB with support from health partners was

carried out. As the new wards received their first patients, specially trained IOM teams, following WHO guidelines on contact tracing, hoped to track down those who came in contact with suspected infected individuals and ensured that they got medicines that prevented them from becoming ill. Additionally, medical experts from across the world flew in to support local and international medical staff already on the ground. WHO also conducted diphtheria case management training for medical staff treating patients in the settlements. Some of the diphtheria treatment centres of partner agencies were run in the medical camp kits (MCKs) provided by the WHO.



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Preparing for cyclones and other natural disasters and emergencies

Natural disasters such as floods and cyclones can be particularly devastating in their impact in refugee settings such as Cox's Bazar. Given Bangladesh's vulnerability to natural disasters, the health sector established an emergency preparedness and response (EPR) taskforce that has been undertaking intensive contingency planning. It coordinates with the Inter-Sector Coordination Group (ISCG) emergency preparedness process, trains mobile medical teams (MMTs) in triage, stabilization, referral and transportation of patients; prepositions medical supplies and trains CHWs on their roles and responsibilities during cyclone, flood or any emergency.

In the first week of May 2019, emergency preparedness was put to test following the warning of Cyclone Fani. The Cyclone Preparedness Programme's (CPP) first flag was hoisted in the camps and host community. A 72-hour response plan was activated, which included sharing of relevant documentation and information with partners. In the end, Cyclone Fani did not make landfall in Bangladesh and the impact was minimal in Cox's Bazar district. However, the experience revealed the preparedness and resolve of the system, while also identifying areas for improvement.



REUTERS / Mohammad Ponir Hossain

Sexual and reproductive health

SRH of women and adolescent girls was one of the biggest concerns in the camps. The demographic data gathered by UNHCR through its family-counting exercise estimated that women and girls accounted for 52% of Rohingya people and included approximately 316 000 women of reproductive age. Surveys revealed the estimated proportion of pregnant women to be 2.4% of the total Rohingya population. Sexual abuse, preterm childbirth, pregnancy-related complications, sexually transmitted diseases and severe anaemia were found across camp settlements. Also, transporting women in labour to safe birthing facilities, especially at night, proved difficult as such services could be far and hard to reach, resulting in avoidable maternal and infant deaths. In the initial phase of the crisis, some partners were providing the minimum initial service package of SRH. However, access to essential reproductive, maternal and newborn health services, especially in hard-to-reach areas, remained a major concern.

The Sexual and Reproductive Health Working Group (SRHWG) was established to address the immediate and emerging needs of refugees in camps. The SRHWG is coordinated by UNFPA and includes more than 50 partners. The Group focuses on both strengthening SRH services and strengthening the health response to sexual and gender-based violence (SGBV).

Through its continued advocacy for a minimal initial service package for comprehensive SRH service delivery, the SRHWG aims to improve the delivery of obstetrics and newborn care, uptake of family planning services and clinical management of SGBV. The proportion of institutional deliveries among Rohingya women continues to be low as is evident from data from the FDMN District Health Information System (DHIS-2), which consistently shows higher numbers reported of first consultations for postnatal care for mothers and newborns (PNC) than the number of live births (in both Ukhiya and Teknaf) (Fig. 3.4).

As a measure of continuous improvement of SRH services and outcomes, in 2019 the SRHWG aims to attain the target of >55% of deliveries in health facilities assisted by a skilled attendant (JRP 2019 target). The SRHWG also strives to reduce avoidable maternal mortality and aims to improve timely investigation (maternal death reviews) from 83% of all reported maternal mortalities investigated within 48 hours (Q1 2019) to 100%. Importantly, to monitor maternal health outcomes, the SRH subsector initiated a community-based maternal mortality surveillance in early 2019, using EWARS to trigger alerts for deaths among women of reproductive age, as reported by CHWs. This then formed the basis of maternal death audits, led by the SRH working group.

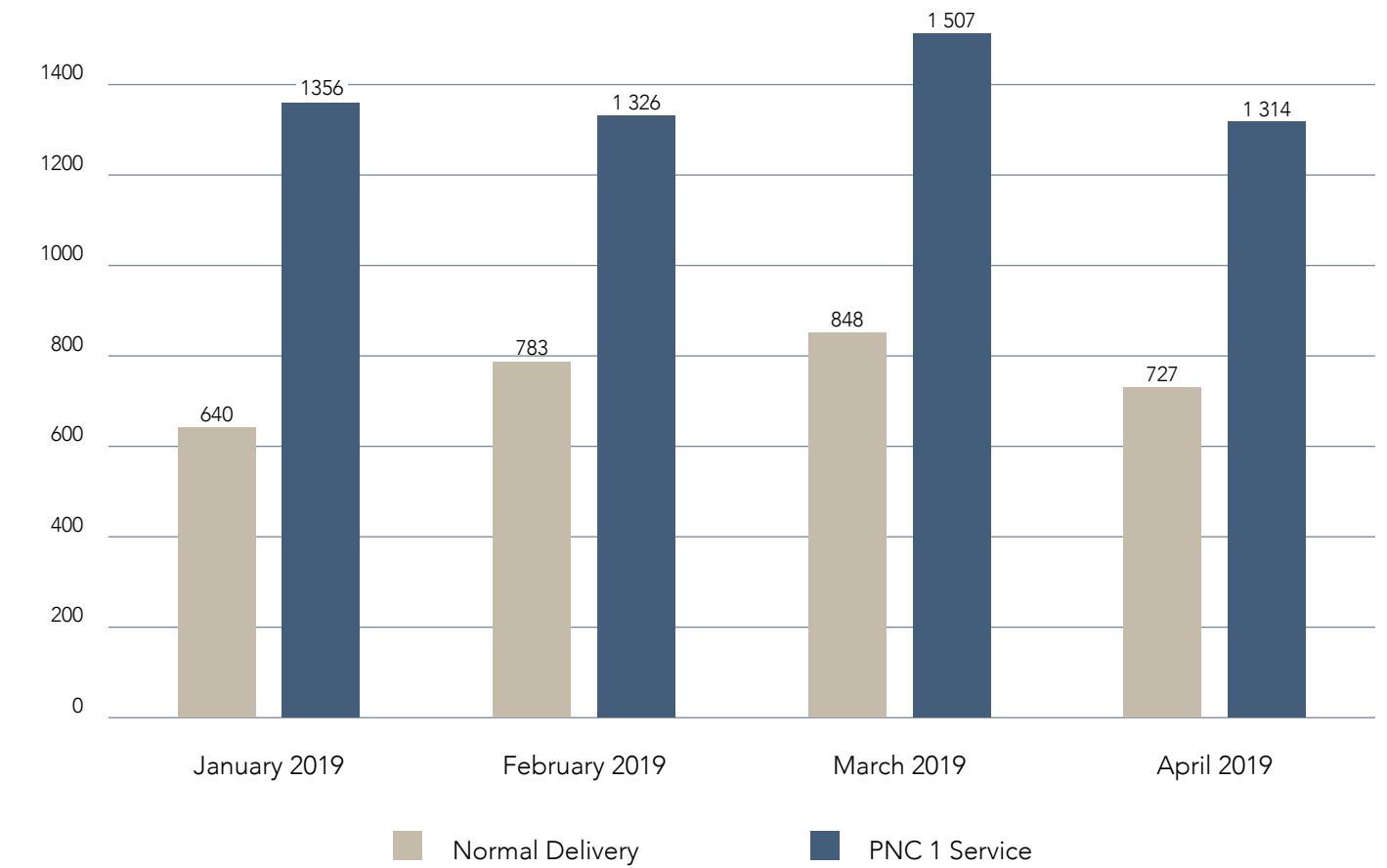
Other key achievements of the subsector included development of a service quality monitoring checklist to guide on-site mentoring of health providers. Alongside,

a series of training was launched to improve the quality of care provided to FDMNs and the local population with a focus on SRH/maternal health and neonatal care.



WHO SEARO / Mehak Sethi

Fig.3.4. Normal deliveries vs first postnatal care visit as reported in the FDMN DHIS-2 from January to April 2019 (Teknaf and Ukhiya combined)



Source: DHIS 2 FDMN (Forcibly Displaced Myanmar Nationals) Database⁴

Gender-based violence

In October 2017, WHO felt the need to strengthen its work on gender-based violence (GBV) in humanitarian contexts through additional staffing, quality supply chain, improved internal capacity and that of partners, as well as consistent participation in interagency initiatives. Bangladesh (Cox's Bazar) was one of six pilot countries chosen for a global project. Since May 2018, there have been three technical support visits to Cox's Bazar by the WHO Gender-based Violence in Emergencies (GBViE) advisor and a GBViE consultant to identify and support opportunities for strengthening GBV responses in the health sector. Findings from the initial scoping mission and follow-up consultations found that although health actors are often the first (and only) point of contact for many survivors, more work is needed to improve the availability of and access to health services for GBV.

In September 2018, WHO received one-year funding for institutionalizing and strengthening the capacity to address gender-based violence. A short-term health sector action plan was developed following a workshop with GBV, health, MHPSS and child protection partners to agree priority activities to improve health responses. This identified key actions to be undertaken by health actors (including WHO) from September to December 2018 to enhance the availability, quality and coverage of health responses for GBV, increase community awareness on the health consequences of GBV and enhance coordination of services and referrals between health, GBV and other actors. The plan included training selected partners to build skills on first-line support, safe referrals and clinical management of rape adapted to the needs and context in Cox's Bazar. This formed the basis for a training that was conducted by WHO and UNFPA in November in Cox's Bazar.



Strengthening of mental health and psychosocial support

Many of the new arrivals were traumatized and disoriented, and were suffering from the consequences of extreme violence, loss of or separation from family members, and the ordeal of displacement. Rape, human trafficking and survival sex were reported among the existing perils for women and girls during the flight. Protection interventions and upscaled outreach and referrals were badly needed, as initially there was only one psychiatrist in Cox's Bazar district (deployed by WHO) with no field support staff. It became more difficult and complicated when the affected, tormented and shocked women and children in Rohingya camps were unable to speak and articulate what they had been undergoing. The impact continued to affect large numbers of Rohingyas. The coordination of MHPSS across different sectors continues to be a crucial domain for effective provision of accessible, acceptable and culturally sensitive services.

Strengthening mental health services was an essential part of the emergency response right from the initial acute phase. Regular training by primary health care workers was undertaken on the assessment and management of priority mental disorders, especially as most mental health conditions could be treated in non-specialized health settings. These efforts acknowledged that even where resources were scarce, with quality care, psychosocial assistance and medication, people with common mental disorders, including depression,

schizophrenia and epilepsy, could lead normal lives. Stepping up comprehensive mental health and psychiatric care to victims of SGBV at health facilities was a primary concern. Services included psychosocial care, treatment for people who may have been exposed to HIV and sexually transmitted diseases, emergency contraceptives, hepatitis B vaccinations and treatment for menstrual regulation.

The Mental Health and Psychosocial Support Working Group (MHPSSWG) was organized and established in 2018. It has been operating through specialized task forces to ensure that there is operational guidance for organizations planning to integrate mental health interventions into primary health care services, translation and adaptation of psychometric tools and scales into the local language, and integration and implementation of the MHPSS EPR plan for monsoon-related events. The Group continues to support the coordination of MHPSS activities together with provision of technical guidance for partners in different sectors working to scale up MHPSS activities.

An MHPSS Emergency and Preparedness (EPR) Plan was launched with the participation of WG members. It includes the development of guidance notes, capacity-building activities and field-level coordination. The EPR Plan is followed by a dedicated task force under the MHPSSWG and works in close coordination with the

health sector EPR Plan task force. Furthermore, a new task force “Child MHPSS task force” has recently been formed with the aim of strengthening child-focused MHPSS activities and supporting partners to scale up their child-focused activities.

Finally, to strengthen the effort to integrate mental health services into primary health care, a mental health Gap Action Programme (mhGAP) has been initiated.

In collaboration with the DGHS and National Institute of Mental Health, WHO conducted mhGAP training in February and September 2018. WHO trained a total of 77 primary health care workers, including physicians, clinical psychologists and counsellors, on the assessment and management of priority mental disorders. The key objective was to strengthen primary health care services to diagnose and manage common mental disorders such as those often observed in emergency situations.



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HEALTH OPERATIONS AND TECHNICAL GUIDANCE

Health operations: overview of WHO's response initiatives

Setting up a robust health information system

- 1st October 2017
WHO coordinates health sector information management and works with government and partners, to provide real-time situation updates, health bulletins, etc.
- 10th September 2017
Initiated public health monitoring and early detection mechanism for health threats.
- 17th September 2017
Set up a Health Emergency Operations Centre to coordinate mobile medical teams covering new arrivals in 68 camps.

In 2017, WHO develops an "FDMN server" for reporting by partners, and capturing information on the mortality and morbidity situation of the affected population.

Health surveillance

- September 2017
Established a paper-based EWARS.

Water quality assessments and testing

- 23rd September 2017
Water quality testing laboratory set up. Eleven rounds of water quality surveillance and Water and Sanitation for Health Facility Improvement Tool (WASH FIT) surveys undertaken in over 100 facilities.
- 24th September 2017
WHO conducts water assessments in Cox's Bazar; a total of 11 rounds of water quality surveys conducted until June 2019.

Strengthening health system and developing a response plan

- 14th January 2018
Response plan developed.
- June 2018
Response accelerated to manage cyclone and monsoon; with advanced metrological alerts, categorization of events, mobile medical teams and alerts to community.
- 21st June 2018
Additional workforce added to health-care personnel in Sadar District Hospital.
- October 2018
Conducted operational review.
- May 2019
Acute Watery Diarrhoea Response Plan reviewed and revised.



Establishment of global norms and guidance in all areas of health is one of WHO's core areas of work, and technical guidance documents from WHO headquarters were readily available through the Global Health Cluster

WHO's health information management lends crucial real-time support

WHO's health information management has been at the core of its emergency response in Cox's Bazar. It coordinated the health operations of over 100 national and international partners running 222 facilities in the Rohingya camps. One of WHO's key role was to gather, analyse and provide information to facilitate lifesaving actions for the nearly 1.3 million vulnerable Rohingya refugees and their host communities.

Since October 2017, WHO has been coordinating the health sector information management team, working with the government and partners, to provide real-time situation updates.

WHO developed and disseminated health sector bulletins and provided updated information on the aspects of the work on health to the various stakeholders. This included information on the location of health facilities, the services they offered and existing gaps. Together with partners, WHO regularly produced

Knowledge Bank. However, country-level and field-level guidelines and policies were not always easy to obtain for the Cox's Bazar office. Where possible, national guidance was shared with partners and integrated into practice.

reports and detailed maps that were then used for various purposes – from daily patient referrals to overall coordination and preparedness and for taking corrective measures. However, the information generated either by the Epidemiology Unit or by the Health Sector Coordination Cell could not connect in time with different health technical operations on the ground till March 2018. This was later improved by streamlining information flow.

Technology plays a crucial role in data-gathering and analysis, a process that involves thousands of staff in challenging geographical and topological conditions. Geolocation devices, simple mobile apps, shared drives, software for data compilation are the weapons of information managers in their battle against time and uncertainty. Given the magnitude of the crisis and its duration, one of the main challenges of information managers is to keep information updated in a fast and continuously changing environment.



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In addition to specific needs for information management such as weekly/bi-weekly situation reports (sitreps), epidemiology bulletins and health sector bulletins, the health sector led major adaptation of the mainstream DHIS2 in the National Health Management Information System (HMIS) tool in Bangladesh.

In 2017, the DGHS developed an "FDMN server" for reporting by partners working in the Rohingya response with the aim of better capturing and informing on the mortality and morbidity situation of the affected population. This process involved a wide consultation workshop with key stakeholders, a technical review by SAG members and field-piloting of a draft format of revised variables under the DHIS-2.

Health surveillance in Cox's Bazar: WHO's disease detectives

Alongside specific health interventions to prevent the occurrence of outbreaks of infectious diseases, the health sector response established a paper-based EWARS in the immediate aftermath of the crisis in August–September 2017. This was replaced by a more efficient electronic EWARS (EWARS-in-the-box) in January 2018 that streamlined disease surveillance and enabled generation of alerts and monitoring of trends of outbreak-prone diseases using both indicator-based surveillance (IBS) and event-based surveillance (EBS).

Since then, the system has matured and, as of June 2019, a total of 152/196 (78%) of functional health facilities are registered with the Early Warning, Alert and Response System (EWARS) for weekly reporting. These facilities include community clinics, health and family welfare centres; fixed and mobile health posts; primary health centres and subcentres; upazila health complexes; and secondary facilities. The remaining 22% are not registered. About 99% of the population is under surveillance in EWARS. In 2019, the cumulative completeness and timeliness stood at 87%, and 84%, respectively.

In 2019, the EWARS generated a total of 1 417 alerts of which all (100%) were verified by the epidemiology team. Most of the cases reported cumulatively in EWARS in 2019 were ARIs, which contributed the highest percentage (16.8%), followed by acute watery diarrhoea (4.9%),



Over 5.7 million patient consultations were held in 222 facilities. WHO established an Early Warning Alert and Response System (EWARS), with over 95% of the target population under surveillance.

suspected varicella (4.2%), unexplained fever (3.7%), other diarrhoea (2.7%), injuries and wounds (2.3%) and bloody diarrhoea (0.5%). Other less commonly reported illnesses included diphtheria, severe acute malnutrition, AJS, measles/rubella, suspected haemorrhagic fever, confirmed malaria, meningitis, acute flaccid paralysis (AFP), adult and neonatal tetanus, suspected and confirmed dengue and consultations for other illnesses.

Providing real-time information and reporting about any suspected case of infectious disease was an important part of the rapid investigation process. Poor access to clean water and safe sanitation and barely any vaccination history made the Rohingya population extremely vulnerable to life-threatening diseases and outbreaks. This inevitably placed enormous responsibility on the shoulders of the surveillance teams.

A paper-based EWARS was set up within a short time span and collected some useful information for response planning. However, the system was slow and easily overwhelmed, and coverage was low. The first reports were generated one month after the onset of the crisis and the EWARS did not capture and communicate the initial diphtheria outbreak in a timely fashion. An enhanced electronic EWARS was implemented in January 2018 with high coverage.

Environmental surveillance in support of disease surveillance. EWARS was supported by environmental surveillance that involves water quality surveillance in camps both from sources of drinking water and household storage. So far, 11 rounds of water quality surveys have been conducted. Results consistently show that water contamination rates are high for both source and storage. However, storage at household level shows more contamination, thus highlighting the challenges as well as the need for education and health promotion among communities. This has been continuously undertaken by the WASH group with an aim to improve compliance at the household level.

In addition to interventions to improving water quality in community settings, an important contribution of the WASH group was to help address water quality in health facilities through “water and sanitation for health facility improvement tool (WASH FIT)”. Health sector partners were trained in implementing interventions through a series of training.

Mortality surveillance. With the objective of gaining a more complete understanding of the health status of Rohingyas in camps and informing targeted interventions, community-based surveillance for causes of mortality was started in early 2019. WHO, in collaboration with the health sector and CHWG rolled out a prospective community-based mortality surveillance. The surveillance continues to be carried out through more than 1 300 CHWs who facilitate partners’ outreach activities. In addition, EWARS was used to generate alerts for any mortality reported among women of reproductive age, which would trigger a verbal autopsy process through the SRHWG, to ascertain whether the death was a maternal death.



Improving laboratory diagnostic support

EWARS was complemented by strengthening laboratory surveillance. Through the support of health sector partners, laboratory capacity was increased, especially in the diagnosis of infectious diseases. In April 2018, the field laboratory of the Institute of Epidemiology, Disease Control and Research (IEDCR) at Cox's Bazar Medical College was strengthened. One of the priorities for the field laboratory has been to conduct a survey that included testing of blood samples of patients with

unexplained fever to determine the cause of infection. The effort was largely in response to the surge in reported cases of unexplained fever in 2018. Strengthening of laboratory services was also important to ensure that health facilities met the requirements set out for laboratories in the minimum *Essential Health Services Packages (MoHFW, GoB, August 2016)*⁵ as well as prepare for the possible increase in infectious diseases during the monsoon period.



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Contingency plan and special teams/task forces to deal with specific public health risks

As part of contingency planning, contextualized disease risks were assessed in the event of a natural disaster and scenarios were developed for these. These outlined data on the background profile, estimation of burden, alert and verification thresholds, case definitions for post-emergency surveillance, among others. Disease-specific toolkits have been developed for cholera, hepatitis A/E, malaria and dengue, as well as standard operating procedures (SOPs) and a training package for rapid response teams to be deployed in the event of an outbreak.

Forming a joint assessment team

Despite specific interventions such as OCV campaigns and WASH interventions across all camps, persistence of risk factors continued to threaten the Rohingyas in camps with a significant risk of acute watery diarrhoea/ cholera outbreaks. This is exemplified by sporadic laboratory-confirmed cases of cholera (both from the Rohingya and host community) and 231 145 cases of acute watery diarrhoea that were reported in EWARS as

of 31st December 2018. While all these cases and alerts were successfully investigated by the WHO Epidemiology Team in collaboration with the MoHFW, WASH sector and health sector partners, the effort also imposed a considerable strain on their competing functions.

Accordingly, as part of the multisectoral acute watery diarrhoea response plan for 2019, a pool of experts from the health and WASH sectors was identified. These experts were then further trained. Out of this trained pool of experts from both health and WASH sectors, joint assessment teams were constituted to support investigation, risk assessment and guide the response for control of any acute watery diarrhoea outbreaks. Since April 2019, joint assessment teams have provided essential surge capacity support in the early detection and effective response to alerts of acute watery diarrhoea that present a serious risk of an outbreak. The joint assessment team is also an example of intersectoral mechanisms that allow for greater efficiencies through collaboration.



Joint WHO Operational Review in October 2018

Several reviews were undertaken to take stock of the ground situation and plan interventions. For instance, findings from the surveys on availability of essential medicines in the camps as also surgical capacities and health service delivery helped in laying the ground for a transition towards a more health systems-oriented approach at a later stage.

A year after the first wave of Rohingya families arrived, a review was done to evaluate the quality and adequacy of the emergency response since 2017. The review examined key performance indicators specified in the WHO Emergency Response Framework⁶ and conducted an internal operational review in October 2018. This was conducted by a team that comprised WHO staff from Headquarters, South-East Asia Regional Office, Bangladesh Country Office and Cox's Bazar field office. Following the recommendations from the review:

- WHO implemented an operational plan with focus on strengthening the local health system, building technical capacities and scaling-up innovations tried as best practices.
- Considering the protracted emergency phase and uncertainties around repatriation of the Rohingyas,

the field office of WHO was changed into a sub-office of the WHO Country Office, Bangladesh. It meant creating a position of Head of Sub-Office and allowing it to function independently, both administratively and technically.

Over the past year, WHO has succeeded in providing key public health interventions and organizing the health sector for the Rohingya response through a sustained presence in Cox's Bazar, following the incident management system guided by the WHO Emergency Response Framework.

As the emergency in Cox's Bazar enters into a protracted phase and the changing partner landscape, WHO's engagement will be focused on health systems strengthening, localization of the response, prioritizing key technical areas and further promoting innovations.

As the lead of the Health Sector, WHO will continue to work towards equity and quality of services, advocate on behalf of the Health Sector on inadequately addressed issues, strongly engage government in localization efforts and stimulate documentation and publication of lessons learned in the crisis.

HEALTH INNOVATIONS WITH THE POTENTIAL FOR SCALING UP

Health innovations:

Established mobile app-based early warning and alert response system (EWARS-in-the-box)

Addressing language barriers in uptake of emergency health services

New digital soft-ware "Go.Data" to support outbreak investigation

"Surround sound" - a new approach in risk communication



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EWARS using information and communication technology (ICT) to respond to outbreaks

One innovation that made a big difference to the outbreak response was the mobile-based EWARS. Epidemiologists shifted from the paper-based EWARS to the mobile app-based EWARS¹, a disease surveillance system developed by WHO using their laptops. An EWARS dashboard allowed health workers to introduce the information via laptops and cell phones. They recorded and analysed each of the disease alerts that came to them from 170 health facilities spread across the Rohingya camps as well as the general population. Each alert was reviewed, verified and assessed and, if more evidence was needed, a team was sent out to investigate.

EWARS proved to be an extremely useful tool with respect to collecting the correct data since it served as the main platform for disease surveillance. All health services were asked to report to EWARS so that the team could get an idea of the latest numbers, geographical location and population affected at the end of the day and plan their next steps accordingly. The strength of EWARS is that it can work even when doctors and health workers are in remote areas. They can use their smart phones to enter data even when they are offline. The information, which is gathered on the spot, is updated when the device is connected to an Internet network.

response – assign roles and responsibilities, organize data entry and coordinate analysis. The software runs in online and offline modes, allowing more flexibility in working and sharing data. In addition, it allows access through mobile devices, especially to support field work of the contact tracing teams. The software is based on multiple modules, uses a set of roles and permissions, and

an optional mobile app for contact follow up. The tool is built with a modular approach in mind, which allows future expansion to accommodate new scenarios. The joint project received excellent response from the field, with health-care personnel finding the digital technology useful in their health operations.

Addressing language barriers

Public health interventions are effective only if they are followed by the people they are intended for. Language plays a big part in communication. The doctors and other health staff in Cox's Bazar spoke mainly Bengali, and some spoke the Chittagonian dialect, which is only 70% similar to the Rohingya language, leaving ample room for miscommunication. Further, the nuances are different; words that have one meaning in a language could mean

something totally different in the Rohingya language. In health, a misunderstanding could cost lives. WHO worked with 'Translators without Borders' to develop a glossary of health terms, leading to the first Rohingya language broadcast on health. This has really helped in WHO's mental health Gap Action Programme, interactions with the affected women, children and elderly and facilitated improved access to health-care services.

Introducing new digital software for epidemiologists to support disease outbreak investigation

WHO, GOARN and partner organizations developed a new outbreak investigation software called Go.Data to train public health experts in Cox's Bazar as part of a global roll-out. Go.Data allows outbreak investigations to be conducted, including field data collection, contact tracing and visualization of disease chains of

transmission.⁷ This improved the speed and effectiveness of contact tracing. The training was attended by public health experts from the government, UN agencies, local and international NGOs working in Cox's Bazar. They were equipped with the functionalities of the software to enable them to play an administrator's role in the

"Surround sound" - a new approach in risk communication

WHO piloted an innovative communication approach during March 2018-June 2019; directly addressing clinical staff and communities using a "surround sound" approach, including through community theater, radio productions, narrow-casting and spot-casting, to complement conventional communication such as billboards and

posters on key public health messages, particularly on immunization. To better target messages and understand community needs ten focus group discussions were conducted with different group compositions and an ethnographic study was also undertaken.

¹WHO developed EWARS to detect disease outbreaks in humanitarian and emergency settings. It has been used around the world in countries such as Bangladesh, Democratic Republic of the Congo, Fiji and South Sudan. It is designed and operated by the local people to benefit communities at risk.

MOVING FORWARD

Given the complexity of a grade 3 emergency and therefore the response, it was essential for WHO to be even more rigorous and thorough in ensuring the quality of response through periodic reviews and evaluations. A full external review of the health services was conducted in November 2018. This made several key recommendations, including reassessing the geographical distribution of health facilities; reducing duplication, maintaining an up-to-date database on the facilities and services available; considering the use of health cards to maintain service records; providing induction training of health-care providers; developing simple clinical guidelines and algorithms; and improving the physical infrastructure of health facilities. These recommendations and others from the numerous assessments also informed the 2019 planning and will require considerable efforts by the health sector at large to implement. A review of the operational aspects of the response was conducted in March–April 2019.

Scale up and refinement of the interventions will therefore have to be planned, considering ground reality in the background. What needs to be constantly worked upon is developing and updating technical and clinical guidance for health events such as outbreaks and other natural disasters. The response needs to be agile where guidance is not available, these need to be developed, as in the case of the diphtheria outbreak. In-country expertise will also need to be upgraded both for staff who can conduct regular assessments and to build institutional knowledge.

Going forward, WHO's technical engagement needs to be stepped up in areas such as SRH and nutrition. Finally, the slow transition from humanitarian “fire-fighting” to a more sustained, systems-strengthening-oriented approach must be further strengthened. WHO intends to not only address the immediate needs, but also develop and implement a sustained development strategy in partnership with the government to deliver health services to the Rohingyas and the host population. Although major outbreaks have been averted and thousands of lives saved, the Rohingyas continue to be vulnerable. Work will have to continue while factoring in all the challenges. Keeping this in mind, WHO is focusing on the following key priorities for 2019:

- robust disease surveillance, outbreak prevention and response, including immunization services;
- strengthening essential health services (with a focus on SRH, MHPSS, NCDs and essential medicines);
- prepositioning essential medical supplies for quick access during emergencies;
- coordinating events in the field and managing information for improved monitoring of health service delivery;
- strengthening the health sector linkage with the WASH, nutrition and protection sectors for improved referrals.

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Chapter 4

LOOKING INTO
THE FUTURE

LOOKING INTO THE FUTURE

It has been nearly two years since the Rohingyas arrived in Bangladesh. They are grateful for the generosity of GoB's response, supported by humanitarian actors, including local and national NGOs, international NGOs and the UN. The Rohingyas now have access to basic needs, shelter, food and health care. With WHO leading the health sector effort, a strong, multifaceted collaborative response was initiated and strengthened over the past 24 months since August 2017.

As complexities at different stages of the crisis evolved and their resolution was sought, the situation gradually settled into what is being called as a "protracted emergency" where basic assistance has been provided, living conditions in the camps have improved and disaster risk mitigation measures have been largely successful.

However, despite progress, the situation remains extremely precarious, and there is no room for complacency. The fundamental issue is that of sustainability. The Rohingya people have designated areas to live, but the shelters they live in are temporary. Their limited movement curtails opportunities for growth and livelihood. Although health services have been established, a constant flow of resources is needed – human, financial and material.

The continued presence of the large number of Rohingyas in Cox's Bazar has strained the local infrastructure for all. The hills have been denuded to

build camps for them. This has made them vulnerable to landslides and the likelihood of long-term ecological consequences. Water, including groundwater, already a scarce resource, is now being significantly depleted due to the rapid increase in the population in such a short time. Concurrently, the shallow water table allows for easy contamination. This affects the host community as well as the Rohingyas. Notwithstanding the tremendous welcome by the host community, there have been reports of some strain in the social relationship between the hosts and the new arrivals, as in all cases of such population movements in history.

The uncertainty over their future looms large. Two years after their plight made headlines across the world, they remain in a state of uncertainty about what comes next.

The issue of sustainability

The scale and speed of the influx has, without doubt, had some far-reaching consequences for the Rohingya people, the communities that allowed them entry and made provisions for their stay, safety and rehabilitation; and the environment that they were a part of. Bangladesh is known for its tradition of compassion towards migrants and displaced persons. It needs to be commended for the sheer scale of its efforts in this emergency, both at the political and societal levels, with bold decisions backed by concrete actions.



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However, if there is no larger political solution in sight, the stay of the Rohingyas in Bangladesh will inevitably bring with it other challenges and issues, which will be difficult to address. The significant impact on the host communities in Cox's Bazar is something that will have to be quantified, along with a deeper analysis of the implications in the medium- to long term.

Due to the ongoing uncertainty about their future, there will be gaps in the uptake of health services and other essential needs such as education, sanitation, reproductive and mental health. Unless a solution is found, in the long run, this could have an impact well beyond health. The continuous and generous support of international donors is therefore critical to the current situation.

Call for political and diplomatic consensus

Overall, political and diplomatic efforts to address the Rohingya crisis have seen limited progress. The Myanmar government signed a memorandum of understanding (MoU) with UNHCR in June 2018, extended for another year in May 2019, committing to create "safe and dignified" conditions for the return of the Rohingyas to Rakhine, including the guarantee of security, freedom of movement and possible citizenship. Recognizing the already complex situation, Bangladesh has announced plans to relocate some Rohingyas to an island and Myanmar has revealed plans to set up designated

complexes away from their erstwhile homes for the returning Rohingyas.

"No man, woman or child left behind"

To address ongoing needs, a new JRP was launched in February 2019, requesting US\$ 920.5 million to provide life-saving assistance to 1.2 million displaced people and local host communities. As of 17th April 2019, the appeal was only 17% funded. Given that there are no solutions in sight to the drivers of this crisis, the cycle of plans and appeals need to be sustained. It would be important to identify a model for international co-financing of government services to Cox's Bazar, which serves both the very large number of affected Rohingyas and the smaller local population, particularly in the health sector. Efforts around this have begun with financial institutions such as the Asian Development Bank and the World Bank; however, more work is required to ensure that such investments land on stable ground.

The present situation must evolve into a more collaborative one that balances the interests of the humanitarian community on the one hand and government authorities and nation states on the other, as they jointly deliver support to the affected population and host communities.

The current situation is clearly unsustainable. The Rohingyas cannot continue seesawing on this ledge of uncertainty, and neither can international support and

financial aid continue indefinitely. The status quo is not a tenable option – politically, socially and economically.

With the Rohingyas now visible to the world, it would take all involved to walk the extra complex miles to truly attain the spirit of "no one left behind".



WHO SEARO



A mass movement of the Rohingya people started on 25th August 2017 from the Rakhine state of Myanmar to Cox's Bazar district of Bangladesh. This resulted in humanitarian camps of 1 million people, of whom the majority were women, children and the elderly. They are now living in approximately a 24 sq.km. area and have basic needs for survival. The world knew little about the Rohingyas before this event.

INVISIBLE – The Rohingyas: the crisis, the people and their health, describes the Rohingyas, their struggle for survival, the humanitarian health crisis in Cox's Bazar, and the joint response that followed from the Government of Bangladesh, WHO, UN and humanitarian agencies, and the donor community. The publication describes in detail the health risks and commensurate health response. More importantly, it attempts to tell the story of those who are voiceless and for the most part, invisible.