WORLD BANK CONSORTIUM:

THE BIG QUESTIONS IN FORCED DISPLACEMENT AND HEALTH

BANGLADESH COUNTRY REPORT

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COLUMBIA | MAILMAN SCHOOL OF PUBLIC HEALTH

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Building the Evidence on Forced Displacement


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LIST OF ACRONYMS

4Ws	Who is doing What, Where, When
ANC	Antenatal care
ARI	Acute respiratory infection
ARSA	Arakan Rohingya Salvation Army
ASEAN	Association of Southeast Asian Nations
ASEM	Asia-Europe Meeting
BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi taka
BIMS	Biometric Identity Management System
BRAC	Bangladesh Rehabilitation Assistance Committee
CBR	Crude birth rate
CDC	United States Centers for Disease Control and Prevention
CDR	Crude death rate
CHW	Community health worker
CHWG	Community Health Working Group
CiC	Camp-in-Charge
COVID-19	Coronavirus Disease 2019
CPI	Community Partners International
DGFP	Directorates General of Family Planning
DGHS	Directorates General of Health Services
DHIS2	District Health Information System version 2
DHS	Demographic and Health Survey
ECMWG	Epidemiology and Case Management Working Group
EmONC	Emergency Obstetric and Newborn Care
EPI	Expanded Programme on Immunization
ESP	Essential Service Package
EU	European Union
EWARS	Early Warning, Alert, and Response System
FDMN	Forcibly displaced Myanmar national
FGD	Focus group discussion
FP	Family planning
FTS	Financial Tracking Service
GoB	Government of Bangladesh
HAEFA	Health and Education for All
HNPSP	Health, Nutrition, and Population Sector Plan
HSSAG	Health Sector Strategic Advisory Group
icddr,b	International Centre for Diarrhoeal Disease Research, Bangladesh
ICT	Information and communication technologies
ICU	Intensive care unit
IDP	Internally displaced person
INGO	International non-governmental organization

IOM	International Organization for Migration
IRC	International Rescue Committee
ISCG	Inter Sector Coordination Group
J-MSNA	Joint Multi-Sector Needs Assessments
JRP	Joint response plan
LMIC	Lower middle-income country
mhGAP	WHO Mental Health Gap Action Programme
MHPSS	Mental health and psychosocial support
MICS	Multiple Indicator Cluster Survey
MMR	Maternal mortality ratio
MoDMR	Ministry of Disaster Management and Relief
MOHFW	Ministry of Health and Family Welfare
MoU	Memorandum of understanding
MSF	Médecins Sans Frontières/Doctors Without Borders
NCD	Non-communicable disease
NGO	Non-governmental organization
NLD	National League for Democracy
NPM	Needs and Population Monitoring
OCHA	Office for the Coordination of Humanitarian Affairs
OIC	Organization of Islamic Cooperation
PHC	Primary health center
RAMOS	Reproductive Age Mortality Surveys
RRRC	Refugee Relief and Repatriation Commissioner
SBCC	Social and behavior change communication
SDGs	Sustainable Development Goals
SLORC	State Law and Order Restoration Council
SPA	Service Provision Assessments
SRH	Sexual and reproductive health
SRHWG	Sexual and Reproductive Health Working Group
SVRS	Sample Vital Registration System
SWAp	Sector-wide approach
TB	Tuberculosis
TFR	Total fertility rate
U5MR	Under-five mortality rate
UHC	Universal health coverage
UK	United Kingdom
UN	United Nations
UNFPA	United Nations Population Fund
UNGA	United Nations General Assembly
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
US	United States
USAID	United States Agency for International Development
USD	United States Dollars
WASH	Water, sanitation and hygiene
WHO	World Health Organization

CHAPTER 1: BACKGROUND: UNDERSTANDING THE DISPLACED AND HOST POPULATION AND THE POLITICAL CONTEXT OF DISPLACEMENT.

1.1. Describe the profile of the displaced population and the historical and political context of displacement.

1.1.1. Overview of the demographic and historical context

The People's Republic of Bangladesh is a South Asian nation and one of the most densely populated and least developed countries in the world.[1] It has a predominantly Muslim population of nearly 165 million people. Despite achieving one of the fastest poverty reduction rates in the world and being reclassified by the World Bank as a lower middle-income country (LMIC) in 2015, 24 million Bangladeshis still live below the poverty line. Bangladesh shares borders with Myanmar, India, and the Bay of Bengal in the South. Bangladesh is a parliamentary representative democratic republic[2] – 300 Members of Parliament are selected every five years during a national election. The President is the head of state – largely a ceremonial role – but the Prime Minister, as the head of government, wields executive power.[2] Bangladesh's Sheik Hasina, leader of the Awami League party, has served as Prime Minister since 2009 and retained power during a 2019 election that was marred by violence and accusations of election fraud.[3] More than 60 percent of Bangladesh's population is rural and most Bangladeshis rely on subsistence farming.[2] The country is undergoing significant social and economic changes, including rapid urbanization. Bangladesh confronts major challenges, including poverty, high unemployment, overpopulation, and corruption, some of which have been exacerbated by the Rohingya refugee crisis.[2]

The low-lying country is also highly vulnerable to climate change and regularly experiences natural disasters, including floods, cyclones and tidal bores.[2]

The Rohingya are a Muslim minority who have resided in Myanmar (formerly Burma) for centuries, predominantly in the northern Rakhine State (formerly Arakan)[4]. The Rohingya population has been brutally oppressed and persecuted in Myanmar and was stripped of citizenship by the 1982 citizenship law.[4] The nationality law recognized 135 ethnic groups in the country, including the dominant ethnic Buddhist group known as the Rakhine.[5] Myanmar was under a military dictatorship from 1962 to 2011. Aung San Suu Kyi's National League for Democracy (NLD) party was elected in 2015 and she has served as the country's *de facto* civilian leader since then, sharing power with the military. The official position of Myanmar's central government is "that there is no such ethnic group as Rohingya and those living in the country have illegally migrated from Bangladesh." [6]

Since the late 1970s, the Rohingya in Rakhine state have been denied basic rights, including education, employment, health, and freedom of movement, and they have been subjected to forced labor, forced relocation, arbitrary arrest, rape, execution and torture.[7] More than 1 million Rohingya refugees have fled Myanmar.[8] As of April 2022, Bangladesh was hosting an estimated 925,380 displaced Rohingya (195,257 families) in Cox's Bazar,[86] while smaller numbers of Rohingya refugees have fled to countries including Indonesia, Thailand, and Malaysia.[5,9] While the pace of arrivals has slowed, Rohingya refugees continue to seek refuge in Bangladesh.[8]

The Rohingya have entered Bangladesh in successive waves of displacement since 1978, when 200,000 Rohingya refugees fled a military campaign waged by the then Burmese government. Another 250,000 Rohingya refugees were displaced between 1991 and 1992, following further military operations; while 87,000 Rohingya refugees fled in October 2016, following sectarian violence between the military and the Arakan Rohingya Salvation Army (ARSA), a Rohingya militia group. Myanmar security forces (officially known as the Tatmadaw) commenced so-called 'clearance operations' in August 2017, stating they were a response to violent attacks by ARSA. The Myanmar military razed Rohingya villages and committed mass killings (causing an estimated 6,700 deaths between August and September 2017[1]), systematic rape, sexual violence, and other atrocities.[1] More than 744,000 Rohingya refugees fled to Bangladesh between 2017 and 2018. This was one of the most rapid refugee flows in the world and added to around 200,000 Rohingya who were already present in the country.[7]

An independent United Nations (U.N.) fact-finding mission determined in September 2018 that the Myanmar military's actions "constitute crimes against humanity, war crimes and possible genocide." In December 2019, thee Gambia accused Myanmar of genocide during an emergency hearing of the International Court of Justice in the Hague. Aung San Suu Kyi vigorously denied the charges, defending the military's actions as a campaign against terrorists.[10] On December 28, 2019, the United Nations General Assembly (UNGA) approved a resolution strongly condemning rights violations against the Rohingya and other minority groups in Myanmar and calling on Myanmar's government to act urgently to protect minorities including the Rohingya living in Myanmar.[11]

Timeline of events

Year	Event(s)
1948	Burmese independence from Britain – some Rohingya are issued national registration cards. An uprising by the Muslim minority (of which the Rohingya are the largest group) in Rakhine, demanding equal rights and an autonomous area, is defeated.
1962, March	Military *coup d'etat* in Burma. The military begins to systematically infringe on Rohingya rights.
1974	The Rohingya are barred from voting in elections under the Burmese military
1977-1978, Feb	**Operation King Dragon: Burmese military purges "illegal foreigners", causing 200,000 Rohingya to flee into Bangladesh.** Mass arrests, persecution and violent atrocities ensue. Some 10,000 Rohingya who remain in Burma die, the majority of them children affected by cuts to food rations.
1979	Forcible repatriation of the majority of the Rohingya in Bangladesh to Burma occurs.
1982	Burma's new citizenship law identifies 135 national ethnic groups but strips the Rohingya of citizenship, rendering them stateless.
1988, Sep	Aung San Suu Kyi, a scholar and journalist, co-founds and leads the National League for Democracy, the democratic opposition party.

1989	After a military crackdown against a popular uprising, Burma becomes Myanmar and northern Arakan State is renamed Rakhine, elevating the rights of the non-Rohingya Rakhine inhabitants above the Rohingya who live alongside them. The ruling State Law and Order Restoration Council (SLORC) increases its military presence in Rakhine state. The majority of the Rohingya population resides in Rakhine state and they are reportedly subjected to forced labor, forced relocation, rape, execution and torture. **250,000 Rohingya flee to Bangladesh (MSF).** From June-July 1989, Aung San Suu Kyi is placed under house arrest for the first time, accused of attempting to divide the military. She will be arrested a total of four times (and also have her sentence extended) from 1989 to 2010, including for breaching travel restrictions.
1990, July	Aung San Suu Kyi wins the first multiparty election in Myanmar with 80 percent of the votes. The result is nullified by the military.
1991	Aung San Suu Kyi is awarded the Nobel peace prize for her struggle for democracy and freedom.
1991-92	Operation Clean and Beautiful Nation – military action persecuting the Rohingya in Rakhine causes the exodus of 260,000 Rohingya into Bangladesh.
1992	Bangladesh ceases to recognize the refugee status of Rohingya. The presence of newly arrived Rohingya refugees in Bangladesh is considered illegal. Forced repatriation occurs after the governments of Bangladesh and Myanmar sign a repatriation agreement. Hundreds of thousands of Rohingya are sent back to Myanmar and incoming Rohingya refugees are denied entry into Bangladesh.
1994	Médecins Sans Frontières/Doctors Without Borders (MSF) starts operating in Rakhine state. International aid agencies become the main healthcare providers (limited).
2003	Only two of the 20 camps built in Bangladesh in the early 1990s remain: Nayapara camp near Teknaf and Kutupalong camp near Ukhia. Conditions are dire and 58 percent of children and 53 percent of adults are chronically malnourished in these camps.
2006	Nearly 90 percent of the shelters in Bangladesh's two refugee camps flood during the rainy season, leading to outbreaks of diarrhea, acute respiratory infections (ARIs) and widespread malnutrition.
2010	Aung San Suu Kyi is released from house arrest but barred from the upcoming national election by a law that prevents prisoners from running for elected office.
2012-2013	**Sectarian violence kills more than 200 people (mostly Rohingya) and leads 140,000 Rohingya to flee to internally displaced persons (IDP) camps.** They effectively become internment camps. 36,000 Rohingya are stranded in villages surrounded by hostile parties. Their freedom of movement and access to livelihoods and aid is severely restricted. Rohingya start fleeing to neighboring countries by boat.

2014	Buddhist extremists attack aid agencies serving the Rohingya, and the government restricts aid activities. MSF is ordered out of Rakhine by the government in February 2014 and 300 foreign aid workers are evacuated in April 2014. The military conducts the country's first census in 30 years, excluding the Rohingya. By July 2014, more than 1,000 Rohingya are documented as having drowned while trying to flee by sea. By December, aid organizations are permitted to resume operations in Rakhine.
2012-2015	Over this period, it is estimated that between 90,000 and 112,000 Rohingya attempt to flee by boat to neighboring nations. Hundreds are killed or sold into slavery by people smugglers.
2015	The U.N. reports a four-fold rise in attempted boat crossings by Rohingya. Myanmar threatens to boycott a U.N. conference on boat refugees if the term "Rohingya" is used. "Race and Religion Protection Laws" which place limits on Rohingya births, enforce birth spacing and ban inter-religious marriage, are expanded across the country. The Rohingya are barred from Myanmar's first democratic elections since the end of military rule. Aung San Suu Kyi's party wins and she becomes a *de-facto* civilian leader, entering a power-sharing agreement with the military.
2016, March	Aung San Suu Kyi's party forms government.
2016, Oct 9	Myanmar's state media reports that 300 Rohingya men attacked military border posts in Rakhine State and killed nine police officers. Rohingya insurgents, the ARSA, claim responsibility for the attacks. **Military reprisals against the Rohingya population trigger the exodus of 87,000 Rohingya to Bangladesh.**
2017, Aug 25	Myanmar's state media reports that 12 security officials were killed in attacks by ARSA militia against more than 20 police outposts and an army base in Rakhine State. State security forces respond with a campaign of violence ('clearance operation') targeting the Rohingya population in Northern townships of Rakhine State. **700,000 Rohingya refugees flee across the border into Bangladesh**.[88] The Government of Bangladesh considers them forcibly displaced Myanmar nationals (FDMNs).
2017, Sep 19	Aung San Suu Kyi condemns human rights violations but is criticized for failing to condemn atrocities committed by the military. Myanmar's military denies committing atrocities.
2018, Aug	U.N. investigators find that Myanmar's military conducted mass killings and systematic rape of the Rohingya population with 'genocidal intent'. They recommended that Myanmar's commander-in-chief and five generals be prosecuted under international law.
2018	An outbreak of diphtheria, a deadly vaccine preventable disease, rages through refugee camps in Cox's Bazar.
2019, Jan	Government of Myanmar restricts access of humanitarian and development agencies in five townships (Kyauktaw, Ponnagyun Buthidaung, Maungdaw and Rathedaung in Rakhine State) – later expanding restrictions to additional areas including Mrauk U township.

2019, April	United Nations High Commissioner for Refugees (UNHCR) begins registering Rohingya refugees in Bangladesh, giving them documentation that verifies their identity. This protects their right to voluntarily return to Myanmar if and when circumstances allow.
2019, April	16 international non-governmental organizations (INGOs) supporting communities throughout Rakhine state in Myanmar release a joint statement expressing concern about violence and urging "all parties to the conflict to ensure the protection of civilians in compliance with international humanitarian law and human rights law". They note that continuing government restrictions on humanitarian access in six conflict-affected townships have left at least 95,000 people living in these areas with no access to basic and essential services, including healthcare, education, water, sanitation and hygiene (WASH), livelihoods programs, agricultural support and other development programs.
2019, Aug	More than 912,000 Rohingya reside in Bangladesh, many in crowded Kutapalong camp, the largest refugee settlement in the world. There are two government-run, UNHCR-supported refugee camps: Kutupalong and Nayapara. In addition, there are more than 30 unregistered makeshift settlements in Bangladesh.
2019, Dec	Myanmar is accused of genocide in an emergency hearing of the International Court of Justice in The Hague; a charge that Aung San Suu Kyi denied.

1.1.2. Political Context

The Government of Bangladesh (GoB) has a long history of hosting displaced Rohingya populations. Bangladesh has sheltered large numbers of Rohingya refugees since the 1970s. In 1979 and the mid-1990s, Bangladesh periodically denied entry and restricted aid to Rohingya refugees and forcibly repatriated them. Since this period, the country has been careful not to commit to a long-term refugee presence and maintains that repatriation is the only acceptable outcome. Bangladesh's response to the most recent Rohingya refugee influx has been generally sympathetic, and the country has opened its borders, offered temporary asylum, and mobilized a large-scale humanitarian response with international support.[87]

1.1.3. Domestic political context for displacement

Domestic policies relevant to the context for displacement are summarized in Table 1. Bangladesh is party to core international human rights treaties and its Constitution and national laws, including the 1946 Foreigners Act, confer obligations to protect the rights of non-citizens, including refugees.[4] Bangladesh is a signatory to the International Covenant on Civil and Political Rights (ICCPR), which applies "without discrimination between citizens and aliens" and notes that "aliens have the full right to liberty and security of the person…they have the right to liberty of movement."[12] Bangladesh is also obliged under customary

international law to adhere to the principle of non-refoulement and ensure that any repatriation of refugees to Myanmar is voluntary and safe.[13] As a U.N. member state, Bangladesh is also party to the Global Compact on Refugees, which includes commitments to facilitate refugee children's education. Bangladesh has not signed the 1951 Refugee Convention or its 1967 Protocol; the 1954 Convention Relating to the Status of Stateless Persons; or the 1961 Convention on the Reduction of Statelessness.[4] Bangladesh also makes no provisions for refugees or stateless persons in its national legislation.

An estimated 34,172 Rohingya (approximately four percent of the refugee population) who arrived in the 1990s are registered and recognized as *prima facie* refugees by the Government of Bangladesh (GoB).[14] The GoB does not recognize the legal status of most Rohingya as refugees and "*de jure stateless*", instead referring to them as "forcibly displaced Myanmar nationals" (FDMNs).[4] This designation ensures access to basic humanitarian assistance, but denies their refugee status and many of the rights attached to that status. This framework restricts freedom of movement, access to formal education, livelihoods or wage-earning employment among Rohingya designated as FDMNs.[87] In June 2020, a National Task Force established by the GoB approved the delivery of the Myanmar curriculum within informal learning centers for Rohingya refugees, as well as some life skill development programs with the intention to prepare refugees for repatriation.[87]

The GoB considers the UNHCR's mandate to apply to the 29,000-34,000 registered refugees residing in the two official refugee camps, Kutapalong and Nayapara, restricting access and services to displaced Rohingya living in makeshift settlements in the surrounding Cox's bazar area (Figure 1). The GoB delegated responsibility to the International Organization for Migration (IOM), which lacks a protection mandate, for providing humanitarian services to this population.[12] At the height of the 2017-2018 crisis, the GoB nominated IOM as lead of the international humanitarian response, causing friction between the IOM and UNHCR.[15] A GoB-UNHCR Joint Registration process that started in June 2018 had issued special identity documents to 805,673 Rohingya refugees, as of 30 November, 2019 and aimed to cover the entire refugee population by the end of 2019.[8] The registration process collects biometric data using UNHCR's Biometric Identity Management System (BIMS) and issues cards indicating Myanmar as the country of origin to Rohingya refugees aged 12 years and above.

Figure 1: Rohingya refugee camps in Bangladesh. Source: GoB and UNHCR, April 30, 2022

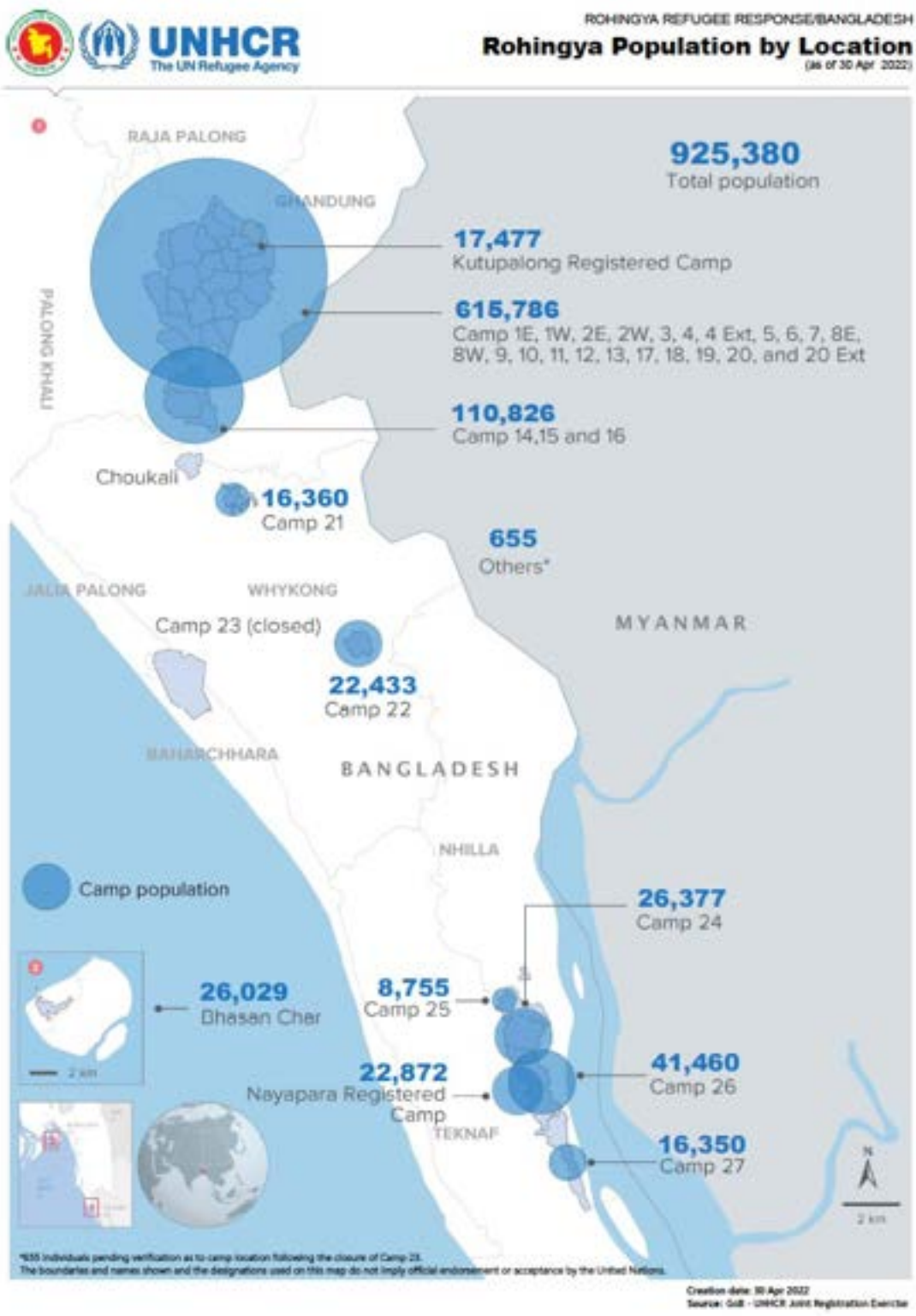

Table 1. Government of Bangladesh Refugee Response Policy Dimensions as of June 30, 2020 (Source: UNHCR Refugee Policy Review Framework)[87]

HOST COMMUNITIES	
Policy Dimension	**Details of relevant policies**
Support for communities in refugee-hosting areas	• No specific national fiscal policies • GoB coordinated efforts to ensure assistance for host communities • International support extended to Bangladeshi host communities in Ukhiya and Teknaf (e.g., health services, livelihood programs, mitigating of environmental impact)
Social cohesion	• Not reported
Environmental management	• Bangladesh constitution includes environmental protection and preservation • Existing policy frameworks: National Environmental Policy (1992), Environmental Management Plan (1995), Environmental Conservation Act (1995), Environmental Conservation Act Rules (1997), Bangladesh Forest Act (1927; Amended in 1994) • Measures to mitigate environmental impact of refugees living on previously classified forested land includes reforestation efforts, wildlife protection, and sustainable fuel programs
Preparedness for refugee inflows	• 2013 National Strategy on Myanmar Refugees and Undocumented Myanmar Nationals and the establishment of a National Task Force in 2017 provides oversight on Rohingya response • The Refugee Relief and Repatriation Commissioner (RRRC) mandated to provide coordinated refugee response operations • District Commissioner in Cox's Bazar responsible for coordinating operations for Bangladeshi host communities
REGULATORY ENVIRONMENT AND GOVERNANCE	
Policy Dimension	**Details of relevant policies**
Normative framework	• Bangladesh has provided international protection to refugees for decades. Articles in the Constitution of Bangladesh do not restrict certain rights to citizens and cover refugees on Bangladesh soil. The Constitution also includes non-discrimination policies • Bangladesh is not a signatory to the 1951 Convention relating to the Status of Refugees or its 1967 protocol • Ratified international human rights policy frameworks including the International Covenant on Civil and Political Rights, International Covenant on Economic, Social and Cultural Rights, the Convention on the Rights of a Child, the Convention Against Torture, and those on gender and racial discrimination • Has not ratified the 1954 Convention relating to the Status of Stateless Persons or the 1961 Convention on the Reduction of Statelessness • No specific legislation on asylum procedures and refugee status
Security of legal status	• GoB has maintained commitment to ensuring protection and provision of life-saving basic assistance to refugees • Does not confer legal status • Maintains that repatriation should be done in compliance with international standards of voluntariness, safety, and dignity
Institutional framework for refugee management and coordination	• Established task force on the Implementation of the National Strategy on Myanmar Refugees and Undocumented Myanmar Nationals in 2017 • Refugee response is managed by the Ministry of Disaster Management and Relief (MoDMR) • In Cox's Bazar, the response is coordinated by the Refugee Relief and Repatriation Commissioner (RRRC) who reports to MoDMR • Camp-based operations are coordinated by the Camp-in-Charge (CiC) who report to RRRC
Access to civil registration and documentation	• No specific laws, policies, or institutional arrangements for refugee registration • In 2017, the Ministry of Home Affairs introduced biometric individual registration of recent refugee arrivals • In 2017, RRRC and UNHCR introduced a 'family counting exercise' (i.e., household registration) • In 2018, the GoB introduced large-scale biometric registration in coordination with UNHCR, which included identity cards for individuals 12+ years of age • Birth and Death Registration Act (2004, amended in 2013) requires birth registration of all children born in Bangladesh. This was suspended for birth registration in Cox's Bazar between 2017-2020 for both the refugee and host community

Justice and security	• Constitution guarantees access to justice and protection of the law for everyone in Bangladesh territory. Access to the Bangladeshi justice system is limited for refugees due to lengthy procedures, backlogs, and the absence of a legal framework covering refugees • Muslim Family Ordinance (1961) has been interpreted to exclude refugees, limiting their access to local courts • National laws preventing gender-based violence and violence against women and girls: Prevention of Oppression Against Women and Children Act (2000, amended in 2003), Domestic Violence Act (2010), Child Marriage Restraint Act (2017), Children Act (2013)

ECONOMIC OPPORTUNITIES

Policy Dimension	Details of relevant policies
Freedom of movement	• In 2017, the GoB restricted settlement of Rohingya refugees to camps ('special zones') in Cox's Bazar • Refugees required to stay in/within vicinity of camps in Cox's Bazar and require permission from camp authorities to travel beyond these boundaries
Right to work/ rights at work	• Bangladesh Labor Act (2006) restricted to citizens • No codified policy/law explicitly prohibiting refugees from working, but the GoB maintains a position that refugees should not have formal access to the labor market or other income generating activities • Rohingya refugee volunteers who provide essential services within the camps may be given small incentives
Land, housing and property rights	• Constitution states that citizens have the right to acquire, hold, transfer, or otherwise dispose of property • Common understanding that refugees are not able to purchase, lease, or use land in Bangladesh due to lack of legal status
Financial/ administrative services	• Rohingya refugees cannot open an account with a regulated bank or mobile financial service due to the lack of legal identity documentation. Biometric ID card is not an acceptable form of identification for banking or financial services • Central Bank of Bangladesh sets rules and regulations of public and private banks. The principles specify restrictions of bank activities to people with a valid national identity document • Directive on Biometric Verification Systems (2015) specified that all SIM card registration must be biometrically validated against a national ID database, which excludes Rohingya refugees

ACCESS TO NATIONAL PUBLIC SERVICES

Policy Dimension	Details of relevant policies
Education	• GoB has made progress toward achieving universal access to basic education for Bangladesh nationals. Rohingya refugee students are not included in the national plan on education and are not allowed to enroll in state schools • Following the 2017 refugee influx, humanitarian actors developed the Learning Competency Framework Approach, which enabled Rohingya refugee children to enroll in an informal education program • In 2020, the GoB authorized use of the Myanmar education curriculum in learning centers within refugee camps
Healthcare	• National Health Policy (2011) established a minimum package of primary healthcare services, which refugees can access through healthcare services in the camps • Refugees can be referred to the district hospital in Cox's Bazar for secondary and tertiary care at the same costs as those charged for nationals • Refugees have free access to the national Tuberculosis (TB) and HIV services provided by the Ministry of Health and Family Welfare (MOHFW) and the GoB's immunization and family planning services, among other services provided in the camps • National Preparedness and Response Plan for COVID-19 (2020) enables access to government-run testing and medical treatment facilities for COVID-19 services
Social protection	• National Social Security Strategy (2015) and Action Plan (2018): Refugees are not included in the national social protection system
Protection for vulnerable groups	• Certain policies addressing the prevention and protection of survivors of human trafficking, the prevention of violence against women and children, and people living with disabilities cover refugees and any person within Bangladesh • Humanitarian agencies offer specialized protection services for people with specific needs within the camps in coordination with GoB authorities

1.1.4. History of repatriation of Rohingya refugees

During the most recent influx of Rohingya refugees (2017-2018), Bangladesh's borders remained open to fleeing Rohingya refugees, as required by customary international law. Bangladesh and Myanmar signed a bilateral repatriation agreement in January 2018, seeking to return Rohingya refugees (who arrived from August 2017 onwards) within a two year timeframe.[1] UNHCR signed a memorandum of understanding (MoU) with Bangladesh in April 2018 to establish a framework for voluntary repatriation; and with Myanmar in June 2018 to create conducive conditions for voluntary, safe, and sustainable repatriation.[16] Far from creating conditions conducive to return, Myanmar security forces continued their campaign of murder, rape and arson in Rakhine state while the repatriation agreement was being negotiated.[7] The prospect of safe, sustainable voluntary returns has also been undermined by the installation of new structures and roads over razed Rohingya villages and land and the transmigration of Rakhine Buddhists into Rohingya lands, facilitated by the government.[7] Two repatriation attempts failed in November 2018 and August 2019, as no Rohingya refugees agreed to voluntarily return to Myanmar.[17] Two aid organizations were banned from the camps following concerns that they have stoked opposition to repatriation efforts.[19] In compliance with international standards, the GoB states that these repatriation activities must be voluntary and conducted in a safe and dignified manner.[87]

The current repatriation attempts must be placed within the context of historical displacement and repatriation dynamics. In 1978, the GoB offered temporary asylum to Rohingya refugees without the opportunity to locally integrate or to remain as refugees. The GoB and Burma signed an historic repatriation agreement on July 9, 1978[7] but many refugees refused to return to Myanmar due to safety concerns. In 1979, the GoB withdrew food rations and basic services[14], forcing most of the camp population to repatriate. Of those who remained in Bangladesh, an estimated 10,000 people died largely due to starvation, the majority of them children[7].

In the early 1990s, the GoB welcomed Rohingya refugees, anticipating a short-term crisis.[14] The GoB, with the UNHCR and its INGO partners, formally recognized the Rohingya's refugee status and hosted them in 20 refugee camps in and around Cox's Bazar, in southeastern Bangladesh.[7] However, as refugee inflows continued and the protracted nature of the crisis became apparent, the GoB shifted its approach. In 1992, the Bangladeshi government ceased to recognize the refugee status of the Rohingya, restricted entry to the country and commenced a program of refoulement.[14] This effort to repatriate Rohingya refugees drew international condemnation.[14] The UNHCR signed three formal

MoUs with the Bangladeshi government between 1993 and 1995 and attempted to facilitate voluntary repatriation efforts. However, the government of Myanmar refused to provide assurances regarding the citizenship, civil rights, and safety of returned Rohingya. An estimated 230,000 refugees were forcibly returned to Myanmar between 1993 and 1997 during mass deportations[14] and the UNHCR was censured by human rights organizations for its role.[7,12] Two refugee camps (Nayapara and Kutapalong) with 20,000 refugees remained open in Bangladesh after this period and restrictions were placed on organizations providing assistance to unregistered refugees living outside of these camps.[7, 12]

In 2012, when sectarian violence between Buddhist and Muslim communities in Rakhine state erupted and more than 140,000 Rohingya were internally displaced, Bangladesh's borders were closed to those attempting to flee the country.[7] Non-governmental organizations (NGOs) were prohibited from providing services to Rohingya refugees in Bangladesh who were unable to seek third country resettlement.[12]

1.1.5. Recognition of Rohingya refugees' rights

The GoB maintains the position that the Rohingya refugees will not have a long-term presence in Bangladesh. To strengthen this position, many of the policies focused on Rohingya refugees offer short-term solutions to address acute needs, but limit Rohingya refugees' access to basic rights, including the right to work, freedom of movement, education, the ability to legally marry, to build permanent shelters, or to integrate with the host community.[1, 18,19] Poor conditions and limited livelihood opportunities in the camps historically led between 200,000 and 300,000 Rohingya to settle in Bangladesh host communities without permission from the Bangladeshi government, where they lacked legal protection or access to services. [7,20]

In June 2020, the GoB approved the delivery of the Myanmar curriculum within informal learning centers for Rohingya refugee youth. Prior to this change in policy, nearly 400,000 school-age Rohingya children did not have access to formal education and were not permitted to enroll in local schools or NGO-operated formal education programs. Instead, informal learning centers operate for two hours per day.[7] Access to information is also limited. The GoB cut cell phone service and confiscated phones throughout refugee camps in Cox's Bazaar in 2019, in response to demonstrations on August 25 at the Kutapalong refugee camp.[7,19] Within the camps, there are safety and security concerns, including reports of Rohingya refugees, particularly women and children, being kidnapped from camps and sold to international human traffickers. The IOM identified 420 cases of trafficking between December 2018 and June 2019, and some international organizations

alleged that Bangladeshi security officials (including border guards, military officials, and police officers) have provided traffickers with access to the camps in exchange for bribes.[7] In November 2019, Amnesty International called on Bangladesh authorities to stop extrajudicial executions and protect Rohingya refugees' rights, after at least eight Rohingya refugees were shot dead by Bangladeshi police in Cox's Bazar camps.[20]

The GoB has relocated over 100,000 Rohingya refugees to a remote, uninhabited silt island, Bhasan Char, that is being steadily eroded and is at high risk of flooding and cyclones.[1,21] Human rights advocates and NGOs, including Human Rights Watch, have stated that the island is not suitable for human habitation and expressed concerns about relocated refugees' rights, health, safety, and access to services, as well as the possibility of forced relocations. Some have referred to Bhasan Char as a "prison island".[21]

1.1.6. Regional political context for displacement

The Rohingya refugee crisis has been shaped and sustained by ethno-religious and geopolitical forces. Some scholars attribute the persecution of the Rohingya to the economic and geostrategic importance of Rohingya lands in Rakhine, including trade routes, gas pipelines, and natural resources.[7] Others have pointed to ethno-religious identity politics and deep-seated conflicts over land and resources between Buddhist and Muslim populations in Rakhine, dating back to the British colonial era (1824-1948).[7]

The Rohingya refugee crisis has strained relations between Myanmar and Bangladesh for decades. In Bangladesh, public opinion was initially "broadly supportive of the government's decision to allow Rohingya refugees into the country" in 2017-2018[14], with many Bangladeshis expressing sympathy for the plight of the Rohingya, including at large-scale demonstrations in several cities in Bangladesh.[6] The Rohingya and local Bangladeshi population share many ethno-religious and linguistic similarities. However, there are growing tensions between refugees and host communities, particularly in the Cox's Bazaar area of Chittagong, where Bangladeshi residents are concerned about the impact of refugees on jobs, living costs, infrastructure, resources and the environment.[6] In a context of high poverty, unemployment, and overpopulation and an underfunded humanitarian response, these fears are not unfounded.[7]

Public opinion in Bangladesh is also influenced by discourse that links the Rohingya refugee population to national security threats, including terrorism and militancy, illegal trades including arms and drug

smuggling, human trafficking, sex work, environmental degradation, petty crime, and "anti-social activities".[7] Shahid observed that there is "little prospect of Rohingyas being integrated into Bangladeshi society, because it sees Rohingyas to be a threat to sovereignty, economic development, and social cohesion." Local integration has been opposed by the GoB – such a strategy is seen as politically unfavorable and economically infeasible (due to the size of the refugee caseload). Third country resettlement is also contentious, and only a small number of refugees have been resettled to countries such as Canada. The former director of UNHCR commented that even discussing the possibility of third country resettlement "might unsettle the remaining half a million or so Rohingyas still living in Myanmar and provoke them to join the queue in Bangladesh".[7] Prospects for third country resettlement are limited by a reluctance of resettlement states to accept large numbers of refugees (in part due to increasing xenophobia, anti-Muslim, and nationalist sentiments), and fears that large-scale resettlement efforts might set a precedent encouraging other states to commit atrocities against minorities.[7]

Bangladesh has exerted diplomatic pressure on Myanmar through China and argued its case at various international summits, including the U.N. General Assembly, the U.N. Security Council, the Asia-Europe Meeting (ASEM), the Association of Southeast Asian Nations (ASEAN) and the Organization of Islamic Cooperation (OIC). In September 2019, Prime Minister Sheikh Hasina presented a four-point proposal that demanded concrete actions by Myanmar to ensure safe, sustainable returns, (including the abolition of discriminatory laws and practices and presence of civilian monitors in Rakhine state) and by the international community to ensure accountability for atrocities committed against Rohingya populations.[22] She also urged the international community to "understand the untenability of the [Rohingya refugee] situation" and warned that "the crisis is now going beyond the camps. Despite all our efforts to contain it, the crisis is now becoming a regional threat". [22]

There are concerns that the ongoing crisis could destabilize the wider region and fuel militancy and Islamic extremism not only in Bangladesh, but also in countries including India, Indonesia and Malaysia. In 2017, Al-Qaeda urged Muslims in Southeast Asia (including Bangladesh) to support the Rohingya in Myanmar "financially, militarily, and politically".[6] Academics and media sources have speculated that the ongoing crisis could foment Islamic extremism, radicalize Rohingya refugee youth in camps, and lead to a resurgence of Arakan independence movements. The literature, including a United States Agency for International Development (USAID) risk assessment in 2012, reports that Rohingya refugees are vulnerable to recruitment by extremist Islamic groups.[6]

Hefazat-e-Islam and Jamaat-e-Islami were both reportedly operating in refugee camps before the August 2017 refugee influx. The Hefazat-e-Islam movement, which has headquarters based in Chittagong, has risen to national prominence during the crisis.[6] The movement has demanded the liberation of Rakhine and threatened to wage "jihad" on Myanmar for its treatment of Rohingya Muslims.[6]

The Rohingya crisis has strained relations between Bangladesh and other countries in the region, particularly India.[6] India and China, seeking to further economic and strategic interests in Myanmar, have both publicly supported Myanmar and its narrative characterizing the military's actions as defense against terrorism. India has economic interests, including the India-funded Kaladan multi-modal project, in Myanmar, and the country relies on Myanmar to support efforts to combat insurgents in India's north-eastern states.[6] Indian Prime Minister Narendra Modi visited Myanmar in September 2017 and expressed concerns about extremist violence in Rakhine, initially failing to reference the plight of Rohingya refugees.[6] India's Hindu nationalist government has forcibly repatriated tens of thousands of Rohingya refugees.

1.2. Describe the demographic and disease profile of the displaced and host population. How are these the same? How are they different?

1.2.1. Secondary data sources

Bangladesh host community

Data availability covering demographic and epidemiologic indicators is relatively complete and high-quality for the Bangladeshi host community. In addition to data from the Demographic and Health Survey (DHS) 2017-2018 and Multiple Indicator Cluster Survey (MICS) 2012-2013, data is available from the Bangladesh Bureau of Statistics Sample Vital Registration System from 2018. Data from these three sources is disaggregated by division, allowing for an analysis of the host community in Chattogram Division which includes the district of Cox's Bazar (see Appendix 2 for more information). The Inter Sector Coordination Group (ISCG), along with REACH and UNCHR, has conducted a series of Joint Multi-Sector Needs Assessments (J-MSNA) for both the host and refugee communities (see Appendix 1 for more information about data sources). Our team has not yet identified information on morbidity and mortality among the host population suggesting limited data availability in the public domain.

Rohingya in Cox's Bazar

Data availability is relatively complete for the Rohingya living in Cox's Bazar (see Appendix 2 for more information about which groups are covered in this analysis). There are several ongoing data collection efforts by humanitarian actors and the GoB. These include the J-MSNA referenced above, the ongoing Family Counting Exercise undertaken by UNHCR and the GoB RRRC, and the IOM's Bangladesh Needs and Population Monitoring (NPM) Site Assessments. These three sets of data are primarily comprised of demographic data, although the J-MSNA and the IOM NPM both include some information around health-seeking behavior. All three datasets utilize the block system in the camp for sampling and therefore exclude any refugees living outside camp boundaries (see Appendix 1 for more information about these sources). The health sector publishes publicly available data, including weekly epidemiological bulletins which report World Health Organization (WHO) Early Warning, Alert, and Response System (EWARS) data. This data includes morbidity and mortality measures, including the number of consultations for each ailment by camp and the number of deaths reported, cause of deaths, and location of death (i.e. home, community, facility). As of November 2019, approximately 75 percent of health facilities reported in EWARS. We currently lack data on crude birth rate (CBR) and age-specific fertility rate.

Rohingya in Myanmar

Our preliminary search indicates a scarcity of recent, reliable data on the Rohingya population in Myanmar. At least 16 international NGOs are operating in Rakhine state and may be able to provide basic data. For example, the International Rescue Committee (IRC) runs 22 static health clinics, including in Rohingya IDP camps and has launched an IRC Health Geo-Spatial Information Management System. Very basic demographic data (gender, age group) on "people in need" (including Rohingya although they are not described as such), is included in the U.N.'s Myanmar 2019 Humanitarian Response Plan, with data from 2018. The country's most recent census (2014) excludes the Rohingya, and there is no evidence that the most recent DHS and MICS surveys include Rohingya populations.

Similarities and differences in secondary data availability across populations

Demographic and epidemiologic data were relatively complete for both the Bangladesh host community and the Rohingya refugee community in Cox's Bazar. Several data collection initiatives, such as the J-MNSA, were applied to both the refugee and host community enabling cross-

population comparisons. Publicly available datasets, such as the DHS and MICS, did not include an indicator for displacement that enabled disaggregation by population. Thus, we relied on geography as a proxy for estimating differences in demographic and epidemiologic indicators across these populations (see Annex 3).

In contrast, data from Rohingya in Myanmar was limited, precluding any demographic and epidemiologic comparisons with the host or refugee community in Bangladesh.

1.2.2. Health needs among Rohingya refugees in Cox's Bazar

The Health Sector Strategic Advisory Group (HSSAG) and Health Sector Working Groups in Cox's Bazar were organized to address critical health needs of both the refugee and host community. Working groups include epidemiology and case management, sexual and reproductive health (SRH), community health, mental health and psychosocial support (MHPSS), and emergency preparedness and response. Since 2017, the health response has adapted to identified health needs such as: infectious disease outbreaks, acute watery diarrhea, and varicella; SRH priorities including skilled delivery attendance, gender-based violence, and family planning; and MHPSS through coordinated community-based approaches, integration into primary care, and specialized psychiatric services.[73]

Key informants and community members who participated in focus group discussions identified similar health needs as those focused on by the health sector, while also describing the increasing prevalence of non-communicable diseases (NCDs). In addition to non-communicable health needs, key informants and focus group discussion participants described skin problems, women's health conditions, and mental health problems as common issues facing refugees in Cox's Bazar. Only one key informant, whose role was to coordinate the COVID-19 health response, described COVID-19 as a major health need. For each of these priority health needs, women and girls, children and adolescents, and the elderly were described as key vulnerable groups who were disproportionately affected by health problems in the refugee community. There was also spatial variation in the health needs in the camps. For example, in our focus group discussions conducted in camps 4, 4 extension, 20, 20 extension, and 26, some camps (4, 4 extension) reported more health concerns than those reported in camps 20 and 26. Specifically, camp 26 reported fewer concerns and only once mentioned communicable diseases.

Non-communicable diseases

Non-communicable diseases were reported by almost all key informants and in focus group discussions as an emerging health need in the refugee community. Several key informants described that health needs in the early stages of the response appropriately focused on infectious diseases and outbreaks of diphtheria, cholera, measles, and diarrhea. In recent years, NCDs have become increasingly common, yet health services and medication to manage these conditions are scarce within the facilities in the camps.

Infectious diseases

Many infectious diseases continue to be monitored in the camps. Since the response, there have been cholera, measles, and other infectious disease outbreaks; however, these were not emphasized by participants in key informant interviews and focus group discussions. Some key informants alluded to emerging and infectious diseases. Skin diseases were mentioned repeatedly in focus groups and some key informant interviews as a common, likely infectious disease affecting refugees largely due to the conditions within the camp.

Women's health

Women's health was identified as a persisting health need that has not been sufficiently addressed by the health response for both displaced and host populations in Cox's Bazar. One key informant described this health need as being driven by the lack of many basic services in the host community. Whereas, for refugees, there are additional barriers to women's health services such as mistrust in the health system, mistreatment of women and gender-based violence, and limited capacity to respond to pregnancy and obstetric complications.

Mental health

Most key informants and many of the female focus group discussions described the increasing mental health needs in the refugee communities. Participants described a range of mental health needs including anxiety, depression, and suicidal ideation. While a lot of agencies involved in the health response report providing mental health and psychosocial support, the available services are limited, and mental health needs remain neglected. Individuals with psychiatric disorders require referral to specialized care due to the lack of psychiatrists and other specialized mental health providers (e.g., psychologists) working in facilities within the camps. One key informant also noted the burden of mental health issues among healthcare providers involved in the response who also lack options for support and services.

1.2.3. Determinants of health needs among Rohingya refugees in Cox's Bazar

When describing the health needs of the refugee population, focus group participants regularly connected these to determinants of health related to the camp context. Frequently cited determinants included the living conditions in the camp (over-crowding, poor hygiene), lack of quality food, limited livelihood opportunities, violence, and lack of education. Elderly people and those living with disabilities faced increasing difficulties and health problems due to these conditions in the camp. For example, the poor walking paths and roads make it difficult for people with mobility restrictions to access health facilities and these individuals are also at greater risk of falling, particularly at night due to lack of lighting in certain areas of the camps.

Camp conditions, cleanliness, and hygiene

Focus group participants described the overcrowded and unsanitary camp environment as a leading risk factor for communicable disease. Many of the shelters are made out of materials that are not well-ventilated and were also perceived to amplify infectious diseases. These conditions were also described as leading to depressive symptoms and unhappiness. Children, women and girls, and the elderly are particularly affected by these conditions. For children, the combination of staying home from school and having limited space to play makes them more vulnerable to communicable diseases. Children also play in trash sites and often get injured or burned. One focus group also described concerns about children's physical safety due to kidnappings and killings that have happened in the camps. Female focus groups recommended the development of playgrounds to improve the living conditions of children.

> ***"Children have a high risk of getting diseased as they play outside and we cannot control them because of having a small shelter. As there is very little space, children become dirty very frequently and we do not have enough soaps to clean them every time. Also, we do not have enough water to bathe them frequently. Therefore, children develop diseases such as diarrhea, vomiting, and fever." –*** Female Focus Group Discussion Camp 20

The lack of light and infrastructure (e.g., safe roads or walkways) in certain areas of the camp also created health and safety concerns. Women described feeling unsafe when using latrines at night and felt 'confined' to small shelters. Several key informants and focus group participants described concerns relating to trafficking and kidnapping. Within the home, women described the challenges staying clean as their shelters are often near drainage and this results in perinatal health problems, as well as rashes and skin diseases. Women explained that having other things to do, such as a job, outside of the home would improve their quality of life and ability to mitigate the impacts of these environmental conditions.

> Feeling confined: ***"The shelter is small and we have to stay in it all the time. Therefore, we, women, are in difficult conditions. Our children do not get proper foods and medicines, that is why they are suffering from skin diseases. Here, we all are suffering from mental problems. We always worry about going back to our country. Sometimes the police come here and sometimes people are being killed here. Sometimes we hear about rape cases. We are worried about these problems." –*** Female Focus Group Discussion, Camp 20
>
> Latrines: ***"Women also face difficulties using the toilet at night because they don't feel safe using it."*** – Female Focus Group Discussion, Camp 20 Extension
>
> Kidnapping: ***"Adult women are taken away and brought back after some days. We do not know who takes them away. Parents stay silent because they fear the marriage of their daughters. We have a security concern about that."*** – Female Focus Group Discussion, Camp 20

The same issues related to lack of light and poor infrastructure created challenges for elderly refugees who were not able to access services that were a distance from their home. The rough roads and darkness at night make it difficult for people to move around the camp, including to the latrines. There were several reports of elderly people falling and injuring themselves. More access points would help alleviate this problem.

> ***"In the camp, people are mostly suffering from the broken roads and the darkness at night. As there are no lights in the camp, it is difficult for people to go to outdoor latrines at night. Due to darkness, elderly people often fall on the way while going to use outdoor latrines." –*** Female Focus Group Discussion, Camp 4 Extension

Food and nutrition

Many focus group discussion participants described the limited food options as a major cause of emerging health needs, particularly NCDs, in the refugee community. In addition, the skin conditions that are reportedly more common among children due to the unsanitary conditions in the camp were also attributed to the lack of proper food and medicines. Another concern raised by focus group discussion participants was that pregnant women not having proper nutrition can lead to poor maternal and child health outcomes. In Myanmar, refugees had more land for cultivation, more natural foods, and healthier food options (e.g., vegetables). These foods are no longer available in the camps and refugees have diets with limited diversity.

Livelihoods

Refugees face limited opportunities to generate income and livelihoods in the camps. This was related to numerous poor health outcomes including non-communicable diseases and mental health. Focus group participants reported that the lack of physical work and more sedentary lifestyle increased their risk for a range of NCDs including gastritis, hypertension, pain, and diabetes.

> ***"When we were in Burma, we kept ourselves occupied with physical works such as watering crops on the farm. Now that we don't have any work to do, we keep sitting at home all the time and it causes us illness. I often fall sick with blood pressure or diabetes." –*** Female Focus Group Discussion, Camp 4 Extension

The lack of opportunities also led to sadness and poor mental health.

> ***"There are also many diseases due to sadness. People don't have jobs here and too many people***

> ***are living in small shelters. So, there are also arguments among people. So, people face stress and sadness."*** – Male Focus Group Discussion, Camp 4 Extension

> ***"Women get depressed because they sit home all day. It would be extremely beneficial for them if an NGO could provide them with opportunities of embroidery jobs."*** – Female Focus Group Discussion, Camp 20 Extension

Women requested additional tools and resources (e.g., a sewing machine) that could help them earn an income. They reported feeling like they are 'living in a prison' and need a job or something to do to improve their quality of life.

Education

Lack of education was a key determinant of distress for women with children and seen as a central risk factor for health problems among their children. Many schools were closed during the COVID-19 pandemic, which was a serious concern and distressing to parents. Women described how painful it was to see their children working instead of learning.

> ***"We are very unhappy about our children not receiving education. It is very painful for us to see our children carrying people's bags in the market. If learning centers were open, they would be able to go there and learn education, and they would not be having to carry people's bags."*** – Female Focus Group Discussion, Camp 4 Extension

Women and girls were unable to complete their education when they fled Myanmar. Three female focus group discussions described wanting to learn additional skills to provide them with more opportunities and income. Lack of education was also perceived to be a reason that they can't access certain types of healthcare and treatment for health problems.

> ***"When we were in 6th or 7th grade, girls my age had to flee their country, we are quite disappointed that we were unable to complete our studies, which is why we require education here in order to live a better life***." – Female Focus Group, Camp 20 Extension

Violence

Mental health problems were closely related to violence experienced prior to displacement, as well as violence occurring within the camps. Refugees described fear and worry related to police abuse, rape, kidnapping, and killings happening in the camp, as well as the killing of community leaders, all of which relate to trauma-related distress.

> ***"We left our property in Myanmar when we fled, and now we're mentally ill, worrying about when we'll be able to return because we can't live here the way we did in Myanmar. We've seen people being murdered here, which makes us worry a lot. We fled our country just to save ourselves, but we have to experience the same trauma here as well."*** – Female Focus Group Discussion, Camp 20 Extension

> ***"People are being killed here by extremist groups and we are deeply worried about that. We are suffering from mental problems because of these killings. Some Arabic students were killed inside the Mosque and now we are worried about admitting our children to Madrasa (Arabic primary schools)."*** – Female Focus Group Discussion, Camp 20

> ***"In the camp, there are a lot of sounds of gunshots at night. And our children get traumatized hearing them, and they often fall sick because of it."*** – Female Focus Group Discussion, Camp 4 Extension

1.3. What changes can we observe over time in terms of disease burden, demographic profile, and healthcare access for the displaced population?

Refugee community members who participated in focus group discussions reported several trends in their health status since arriving in Cox's Bazar. These changes were attributable to temporal trends as well as differences in the environment and health system in Bangladesh as compared to Myanmar. It is important to note that we were unable

to access health data for Rohingya in Myanmar to corroborate findings related to differences in health needs of Rohingya in Bangladesh as compared to Myanmar. Similarly, focus group discussions with the host community were not completed, thus we are unable to directly contrast the health trends between Rohingya refugees in Cox's Bazar and Rohingya in Myanmar or the Bangladeshi host community.

1.3.1. Changes in health profile over time

Regarding time trends, refugees most often reported that their health initially improved after arrival, but then began to deteriorate. This deterioration in health was attributed to the refugee camp environment and infrastructure, declines in the number of visits from community health workers, increasing cost of healthcare, and increasing stress, unhappiness, and tension.

> Camp environment and infrastructure: **"At first, everyone helped us and we did not know the consequences of living under tarpaulin shelters. As time passed, we are suffering a lot under tarpaulin shelters and our health condition is deteriorating now."** – Female Focus Group Discussion, Camp 20

> Fewer visits from community health volunteers: ***"The first two years when we came it was better. We had volunteers who visited us regularly and provided information and also helped us get the kind of care we needed. But for the last two years very few volunteers come, and we are not able to get the same service as we did before."*** – Female Focus Group Discussion, Camp 26

In 2018, a community health worker mapping was conducted in Cox's Bazar to allocate an appropriate number of community health workers to each camp. It is possible that this redistribution may have altered the frequency of visits differently across communities. Policies in the camp state all households are visited at least once every two weeks. During COVID-19, the frequency of visits increased to once per week. Participants also noted other changes in access to health personnel and services due to the high demand for formal services offered by the health system.

Changing access to health services (increase followed by a decline due to high demand): ***"At first, there were no hospitals in the camps and we used to take advice from community elders about diseases. Some people used to advise us to see a traditional healer. Then, [primary health centers] were given and we went to the [primary health center] for treatment. Now, many people go to [primary health centers] for treatment and we have to stay in line for a long time. In our area, there is only one [primary health center] and therefore we have to stay in line for a long time."*** – Male Focus Group Discussion, Camp 20

Increasing cost of healthcare when seeking services outside of the formal humanitarian health system: ***"We could get treatment [outside of the U.N./ NGO supported health facilities] for less than 100 BDT (Bangladeshi taka) when we first arrived, but today we can't get anything for less than 500 BDT. Everything has gotten ridiculously expensive." – Female Focus Group Discussion, Camp 20 Extension, referencing the cost of services sought outside of the camps and/or from informal health providers***

Increased stress, unhappiness, and tension: "The condition of my health is worse now than how it was when we first arrived in Bangladesh. We fall sick because of stress and tensions. And when we go to health posts, we can't explain our health issues adequately because we don't speak Bengali and the staff there don't understand our language." – Female Focus Group Discussion, Camp 4 Extension

1.3.2. Changes in health determinants and outcomes by place

Many refugees also attributed their worse health outcomes to differences between their lifestyle and environment in Myanmar as compared to Bangladesh. Specifically, a few focus group participants described how the lack of opportunities to work and earn income had adversely impacted their physical health and their ability to pay for health services sought outside of the formal humanitarian health system since arriving in Bangladesh.

> ***"When we were in Burma, we had work to do, such as farm work. We kept ourselves occupied with physical work back then, and thus we were able to avoid diseases. However, here in the camp, we get sick very often because we are sitting at home all the time and have no work to do. I frequently become sick with gastric problems, blood pressure, pain, or diabetes."*** – Female Focus Group Discussion, Camp 4 Extension

> ***"In our country, we had property such as land and cattle. We could easily cover medical expenses by selling cattle. Here we cannot arrange even 500 BDT."*** – Female Focus Group Discussion, Camp 20

Most focus group discussions described how lack of space, crowded living conditions, and limited access to 'natural' foods in Bangladesh led to more illness than they had experienced in Myanmar.

> ***"In Myanmar, we had fewer diseases because we had good food such as vegetables from the farms. In Bangladesh, different diseases increased. We did not have Hepatitis C in Myanmar. Now here, Hepatitis C is very common. People have other diseases such as heart disease, blood pressure, and diabetes here. We don't know why diseases increased here. Maybe because it is too crowded here. There are not good hospitals here."*** – Male Focus Group Discussion, Camp 20 Extension

> ***"In our country, we had property such as land for cultivation and enough space to live freely and were healthy because of this. After coming to***

Bangladesh, we have to eat chemical-containing food from which we get many diseases. In our country, we used to easily recover from a disease with minor medicines. But here we do not recover easily from diseases even after taking a lot of medicines. This may be because of different environmental conditions." – Male Focus Group Discussion, Camp 20

"My daughter is suffering from skin disease. We did not have any skin disease in Burma, but here in the camps we are living in cramped conditions, and it is not clean and we are getting skin disease." – Female Focus Group Discussion, Camp 26

Focus groups varied in terms of their perceptions of their relative access to healthcare in Myanmar as compared to Bangladesh. Some described having good access to care in Bangladesh, while others described inadequate access to quality care due to travel restrictions outside of the camp and lack of Rohingya doctors. Although health services provided within the camp were free, healthcare costs were reportedly lower in Myanmar due to the high cost of any specialized care outside of the camp sought through self-referral or services offered by a traditional healer. These perceptions varied substantially across camps. For example, focus groups conducted among residents of Camp 20 reported having good access to healthcare, while the other camps did not. There was one clinic in Camp 20 that participants reported provided accessible and quality care, which may explain observed variation in perceptions of access to care across the different camps.

"We did not get proper healthcare in our country. Here we get proper healthcare and are grateful for that. We go to the hospital of Camp 20 as they provide us proper treatment." – Female Focus Group Discussion, Camp 20

"We had access to healthcare in Myanmar, but we had to flee our country in order to save our lives. However, as we don't receive proper treatment here, there is still a threat to our lives. So it seems that our migration to here was pointless." – Female Focus Group Discussion, Camp 20 Extension

"We were able to receive healthcare in Burma from Rohingya doctors and our preferred facilities. But there are so many restrictions here. We cannot travel to Cox's Bazar or Chittagong for serious illnesses and the supplies are very limited." – Female Focus Group Discussion, Camp 26

"There were fewer hospitals in Myanmar because there were fewer NGOs and the government would not provide many hospitals. But here, we have more diseases. People have heart disease, Hepatitis C, piles, brain disease, seizure, and mental diseases. Some hospitals provide us with medicines. Some say they don't have medicine. We had fewer diseases in Myanmar because of the food and living conditions there. But here, we have more diseases." – Male Focus Group Discussion, Camp 20 Extension

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Community members also explained that the increases in morbidity and health needs increased demand for health services that surpassed the increased supply of healthcare offered in the camp. Skin diseases, injury, chronic diseases, and mental health conditions were often mentioned as diseases that have increased since arriving in Bangladesh.

Injury: ***"Many people got injuries while coming to Bangladesh and these people are not getting proper healthcare***." – Male Focus Group Discussion, Camp 20

Skin Diseases: ***"Personally, I've been suffering from skin rash diseases since I arrived here, and despite taking a lot of medicine, it hasn't gone away."*** – Male Focus Group Discussion, Camp 4

Stomach problems: ***"At first, we used to get stomach problems such as diarrhea whenever we ate Bangladeshi foods. Now, we don't have such problems. However, other health problems such as fever still occur."*** – Female Focus Group Discussion, Camp 20

Mental health: ***"We left our property in Myanmar when we fled, and now we're mentally ill, worrying about when we'll be able to return because we can't live here the way we did in Myanmar. We've seen people being murdered here, which makes us worry a lot. We fled our country just to save ourselves but we have to experience the same trauma here as well."*** – Female Focus Group Discussion, Came 20 Extension

Mental health and other non-communicable diseases: ***"We lived a better life in Myanmar. Here we have nothing to do other than sitting home all day, which causes depression and various illnesses such as gastritis, bodily discomfort, and others."*** – Female Focus Group Discussion, Camp 20 Extension

1.4. Describe the impact of COVID-19 on host and displaced communities.

Although COVID-19 presented many challenges for the health and wellbeing of refugees and the host community, key informants and refugee community members also identified some positive impacts that related to increased infrastructure and hygiene practices. Both refugees and key informants reported that COVID-19 improved hygiene practices in the camps, particularly in healthcare settings.

"People are required to wash their hands before entering and after exiting health posts. And I think that is the only positive thing we have because of the coronavirus." – Female Focus Group Discussion, Camp 4 Extension

Key informants reported a range of improvements to healthcare infrastructure, health information systems, and certain health outcomes following the onset of the COVID-19 pandemic. First, a U.N. agency representative responsible for coordinating the COVID-19 response noted the improvements to inpatient capacity and quarantine centers that were established in the camps and to disease surveillance and health information systems, as well as better coordination across

agencies. Prior to COVID-19, the camps did not have an intensive care unit (ICU). During the peak of COVID-19 they had several functional ICUs operating within the camps. However, the quarantine centers and ICUs were difficult to maintain and sustain. After the onset of the COVID-19 pandemic, provider behaviors also changed. They took extra precautions when treating patients, particularly those with flu-like symptoms. Refugee community members also noticed these changes and felt that they reflected poorer experiences in care and worse treatment by health providers due to a less personal experience in care (e.g., more physical distance, perceptions that they had less time with the provider to explain their health condition, etc.).

1.4.1. Patterns of healthcare utilization during COVID-19

Notably, improvements to health infrastructure, outcomes, and provider behaviors reported by key informants were seen by refugees as negative changes resulting from COVID-19. Focus group participants reported the poor conditions of quarantine facilities, the worse treatment they received from health providers, supply shortages, greater perceived stigma, and more barriers to accessing healthcare as contributing to worse quality of care. As a result, the majority of focus group participants described decreases in the use of formal health services often associated with fear of being subject to quarantine and isolation in poor conditions and/or feelings of stigmatization by health providers. Some focus group participants explained that this type of treatment had negative impacts on the mental wellbeing of patients.

> ***"After COVID-19, doctors try to avoid treating patients. Therefore, people do not get proper treatment. We do not [know] if they fear contacting COVID-19 or just hate us. When we go to a hospital with diseases such as stomach problems, they take us to the isolation area by saying that we are COVID-19 positive. When we come home after spending 15 days in isolation, people avoid us by saying that we have coronavirus. What can we do now?"*** – Male Focus Group Discussion, Camp 20

> ***"There is no proper care at the house or the hospital for us. In the quarantine centers, it is too hot and they don't treat us well there. When people hear the experiences of people who lived in the quarantine centers, people don't want***

to go there. The beds are not good there and there are no blankets or mosquito nets. NGO people who come here to raise awareness about coronavirus tell us that there are all the facilities in the quarantine centers but that is not true. They provide patients with food and medicines through a hole. It is too difficult there. Even the roof is not good there and it is too hot. There is a small hospital called Dola Sol near us and they don't have proper medicines. We are also afraid to go to hospitals that are far from us such as MSF because we don't have vehicle costs and we are afraid of the police and the army. There is only Dola Sol hospital within our area and they have treatments only for small diseases." – Male Focus Group Discussion, Camp 20 Extension

Health providers working in the refugee camps reported other COVID-19-related disruptions to regular health services. This included supply chain disruptions and supply shortages, including for basic resources such as water. Refugees reported seeking services from traditional healers, informal providers, and local pharmacies given the perceived lower quality of care provided within the formal health system and to avoid being subject to isolation or quarantine.

"Before COVID-19, hospitals used to provide us with enough medicines. Now, doctors try to avoid treating patients and people try to avoid going to the hospitals. When we go to a hospital with a disease, doctors take us to the isolation area saying that we are COVID-19 positive and we have to stay there for 15 days. When we come back after 15 days, people in our community try to avoid us. Therefore, sometimes we go to traditional healers to take treatment." – Male Focus Group Discussion, Camp 20

"While coming to Bangladesh, we suffered a lot, and here different NGOs and the Bangladeshi government helped us. Before COVID-19, when we got a cough, we used to take normal medicines. After COVID-19, if we get a cough, we do not go to hospitals because we fear staying in the isolation

> ***area. Therefore, we buy medicines from a local pharmacy and take them. Some people died as they did not go to hospitals."*** – Female Focus Group Discussion, Camp 20

Refugees also reported increases in the direct and indirect costs of healthcare. The costs of transit, treatment, and general commodities ("everything") increased during the COVID-19 pandemic, while incomes decreased.

> Transit: ***"After Coronavirus, the transportation costs have doubled. There are also check posts on the way and they do not allow us to pass the check posts. So, we need to change vehicles in the check posts. It increases our costs."*** – Male Focus Group Discussion, Camp 20 Extension

> Healthcare: ***"The expenses of medical care increased after COVID-19. Before COVID-19, we did not take treatment for fever or cold. Now, if someone suffers from fever or cold, he borrows money and gets treatment as early as possible because of the fear of COVID-19. That is why the expenses of medical care have increased."*** – Female Focus Group Discussion, Camp 20

> Healthcare: ***"Before COVID-19 the fee of a [local Rohingya] doctor was 500 BDT. Now the fee is 700 to 1,000 BDT. The prevalence of malaria is increasing now and so are the medical expenses."*** Female Focus Group Discussion, Camp 20

1.4.2. Access to health information during COVID-19

Focus groups varied in terms of reported changes in access to health information. Some described increases in access to information about COVID-19, primarily from community health workers and volunteers. However, many participants also described a decrease in the presence of community health workers and volunteers in the camps, including less frequent visits and announcements. In Camp 26, several participants noted that there was no change in the presence of community health workers and volunteers disseminating information, although they did begin masking and social distancing.

No change: ***"COVID-19 has not changed how we obtain health information because community health workers have visited our homes during COVID-19 as well, so we were able to obtain health information from them. However, since the outbreak of coronavirus, we have seen changes in the conduct of health workers. The changes were that they maintained physical distance while speaking with us, wore masks, and also advised us to wear them. They gave us COVID-19 guidelines and advised us to follow them."*** – Male Focus Group Discussion, Camp 26

Increase in health information: ***"Some Rohingya volunteers come here and provide people with health information, such as which hospital provides, what type of healthcare. Before COVID-19, we used to get health information from volunteers who came here. Before COVID-19, we did not know the importance of washing hands. Rohingya women who do tailoring provide masks to people now. We get health information from different organizations who come here with loud speakers."*** – Female Focus Group Discussion, Camp 20

Decrease in health information in community settings: ***"Before the COVID-19, Rohingya volunteers used to visit blocks looking for patients, and we were able to obtain health information from them. But nowadays, they don't come to the blocks"*** – Female Focus Group Discussion, Camp 4 Extension

Decrease in health information in healthcare settings: ***"Before COVID-19, we would get chances to discuss our problems with doctors. However, after COVID-19, we cannot discuss our problems with doctors because of some restrictions. Now, doctors try to avoid patients and see only patients with serious diseases"*** – Male Focus Group Discussion, Camp 20

1.4.3. Indirect impacts of COVID-19

COVID-19 amplified certain risk factors for poor health outcomes in the community. Focus group participants generally described worsening social and environmental conditions during the COVID-19 pandemic, including more limited education, work opportunities, and food access. Additionally, the camps faced disruptions in their water supply which compromised healthcare delivery and meeting the basic needs of refugees.

> Education: ***"Due to COVID-19, children are unable to attend schools; therefore, they stay home. And when they go outdoors to play, they fight there due to the small area. We can't even let them play inside the shelter because it's too small."*** – Female Focus Group Discussion, Camp 20 Extension
>
> ***Food insecurity and interpersonal conflict: "Since the breakout of coronavirus, disputes, and conflicts among people have increased in the camp. It is because they have a shortage of food. Tired of eating lentils, when people go outside of the camp in search of work, they are beaten by the police. So people are crammed in the camp and they have a shortage of food, which often causes disputes among them."*** – Female Focus Group Discussion, Camp 4 Extension
>
> Lack of work and livelihood opportunities: ***"Yes, there were cases where people faced challenges paying for healthcare due to COVID-19 restrictions. For example, as people couldn't work during COVID-19, they couldn't earn any income, as a result, they couldn't afford the cost of the treatment they needed. There were cases where people even died because they couldn't afford the treatment they needed."*** – Female Focus Group Discussion, Camp 26

Along with the frequent lockdowns, refugees experienced travel restrictions inside the camps, public transportation bans without alternatives, general fear related to COVID-19, increasing poverty, and discrimination. These worsening social and environmental conditions led to increased tension, stress, and worse health outcomes. As observed by one health provider, these conditions created substantial uncertainty and were traumatizing for many refugees.

Many of the negative indirect impacts of COVID-19 related to the inequitable allocation of resources. Key informants reported that while 'COVID-19 changed everything drastically', the overall spending was roughly the same as for the pre-COVID-19 era. More resources were allocated to the COVID-19 refugee response and thus, according to one provider, the host community fared worse during COVID-19 and received less support from international organizations. Additionally, most of the health and emergency response resources were allocated to the COVID-19 response and many other health issues and services were neglected. This included reductions in resources for child immunizations and facility-based delivery, which were perceived by one U.N. agency staff member who was involved in managing the COVID-19 response to have gone down during COVID-19, alongside general reductions in primary healthcare. Health providers working with the camps suggested that COVID-19 became 'an excuse for a lot of difficult things' when, in reality it exposed existing weaknesses in the health system and response. These weaknesses included the limited emergency facilities and transportation issues. Key informants recommended that these weaknesses identified within the context of COVID-19 remain central to any strategy to improve the refugee health response even after the pandemic has subsided.

CHAPTER 2:
HOW THE HEALTH SYSTEM HAS ADAPTED OVER TIME TO MEET THE NEEDS OF THE DISPLACED POPULATION, AND HOW THIS COMPARES TO HOST POPULATION EXPERIENCES OF THE HEALTH SYSTEM

2.1. Describe the organization of the health response for both the displaced and host population. Please capture the transition from the initial phase of the response (likely a parallel humanitarian response) to the longer-term strategies that have been put in place to respond to the needs of displaced populations.

2.1.1. National health system

Organization of the national health system

Bangladesh's national health system is pluralistic, with four key actors, described in more detail in Section 6: the public (state or government) sector, the private sector, NGOs and the informal sector.[32] Under Bangladesh's Constitution, the GoB commits to providing healthcare to all citizens.[32] The Ministry of Health and Family Welfare (MOHFW) is the ministry responsible for all health-related matters, including "the formulation, implementation, management, coordination and regulation of national health, nutrition and population related activities,

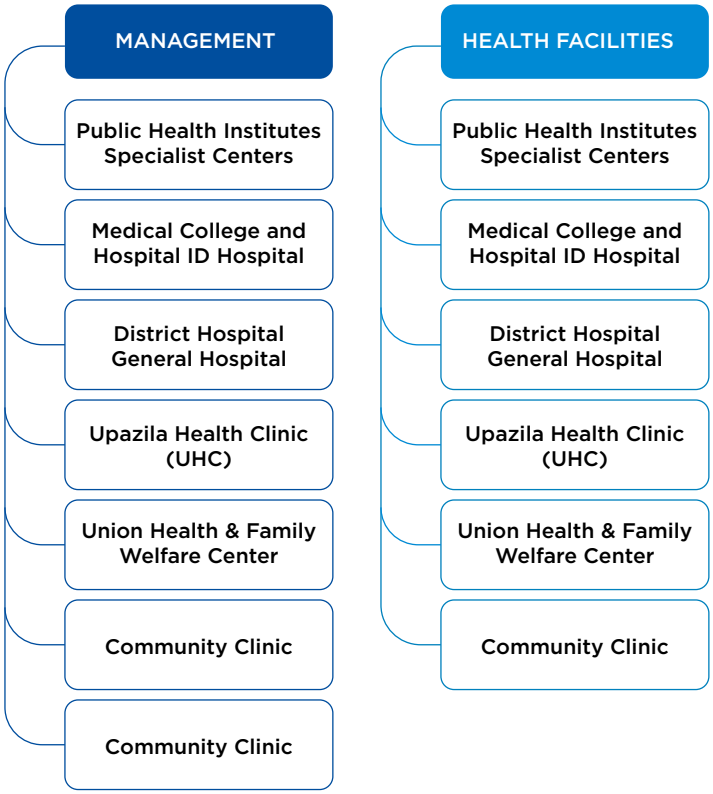
programs and policies."[33] Responsibilities include national health-related policymaking, health system financing, recruitment and deployment of human resources, setting technical standards and regulating the health sector (both the public and private sectors).[2] While the health system is decentralized in principle, power and decision-making remains highly centralized in practice, primarily lying with the MOHFW in Dhaka. The Secretariat is responsible for policy development and administration and comprises eight functional wings and units.[33] Health policies are implemented by nine implementing authorities, most notably the Directorate General of Health Services (DGHS) and Directorate General of Family Planning (DGFP), which are responsible for implementing health, nutrition and population services in the field. In addition, several directorates, including the Directorate of Drug Administration and the Directorate of Nursing Services, are designated administrative duties under the MOHFW.[33]

Health infrastructure is divided into six geographic tiers, consisting of national, divisional, district, upazila (sub-district), union (a collection of a few villages) and ward (village) levels. The DGHS and DGFP manage primary healthcare and family planning services through district-level general hospitals, sub-district level upazila health complexes with 10-50 beds; local union-level Health and Family Welfare Centers and ward-level community clinics.[2,32] Primary care is also delivered by private, NGO and informal providers.

Secondary level care is delivered through upazila and district hospitals, general hospitals and special centers including infectious disease hospitals and tuberculosis hospitals, as well as private hospitals in urban areas.[2] Tertiary care is provided through tertiary hospitals (including medical college hospitals and national level super specialty hospitals that provide high end medical services specializing in particular areas of healthcare) in large urban centers.[34] There is no structured referral system between primary and higher levels of care.[2]

The MOHFW is the main agency providing public health services, which include health promotion and preventive services.[2] Public health services including Directly Observed Therapy programs for tuberculosis which cover all upazilas; the Malaria and Parasitic Disease Control Program which targets approximately 11 million people in high risk areas; Kala-azar (visceral leishmaniasis) control which has expanded to cover 27 districts.[2] National Public Health Institutes support prevention programs, while sections of the DGHS and DGFP coordinate health promotion.[2]

Figure 2: Bangladesh health system organization



Health policy

Historically, Bangladesh has planned its health policies through national five-year plans that have outlined the GoB's development strategy. These plans largely used a project-based modality, separately identifying targets in health and family welfare.[33] In contrast to previous project-based strategies, in 1998 the GoB transitioned to a sector-wide approach (SWAp) for the health, nutrition, and population sector, aiming to integrate and coordinate health services, align financial and technical support around national priorities, and promote the involvement of NGOs and private partners (see Table 2).[33] The most recent SWAp, the 4th Health, Nutrition, and Population Sector Plan (HNPSP), is the first plan to incorporate the health needs of the Rohingya population. In addition to components on improving governance and promoting systems strengthening, the 4th HNPSP incorporates a component to develop health services for the Rohingya population.

The GoB has committed to achieving universal health coverage (UHC) by 2032, as announced by Prime Minister Sheikh Hasina at the 64th World Health Assembly in May 2011[35] and reflected in policy documents including the Health Care Financing Strategy 2012-2032 and the Communications Strategy for UHC 2014-2016.[36] As part of the effort to

meet the Sustainable Development Goal targets, the implementation of an updated Essential Service Package (ESP) has been identified as the first milestone toward achieving UHC.[36] The MOHFW worked with partners to update the ESP in 2016 to be implemented as part of the 4th HNPSP.[37]

In February 2019, the World Bank approved additional financing to the existing Health Sector Support Project that had been awarded for the implementation of the 4th HNPSP in an effort to support the additional component related to the Rohingya population.[38] In coordination with WHO, United Nations Children's Fund (UNICEF), United Nations Population Fund (UNFPA), and IOM, the agreement between the World Bank and the GoB aims to strengthen the government's capacity to respond to the health needs of the Rohingya. It has a particular focus on the services included in the ESP, as well as services for mental health and gender-based violence. The agreement specifies that the additional financing is not intended to replace the existing humanitarian assistance for the Rohingya population.[38]

Table 2. Major Health Policies in Bangladesh, 1975-2022

Health Policies	Years	Objective
Nutrition, Health and Population-related project		
Bangladesh First Population Project	1975-1980	Increase use of family planning and maternal and child health services
Bangladesh Second Population and Family Health Project	1980-1986	Development of national family planning program
Bangladesh Third Population and Family Welfare Project	1986-1991	Reduction of fertility and infant mortality rate
Bangladesh Fourth Population and Health Project	1992-1998	Reduction of fertility and infant mortality rate, improvement of maternal child health
Health SWAps		
Health Population Sector Program	1998-2003	Decentralize the delivery of the ESP; deliver basic health and family planning services through community clinics
Health, Nutrition, and Population Sector Program	2003-2011	Increase the availability and utilization of health, nutrition, and population services
Health, Population, and Nutrition Sector Development Program	2011-2016	Strengthen health systems; improve health and family planning services
Health, Nutrition, and Population, Sector Program (4th HNPSP)	2017-2022	Strengthening governance and stewardship; strengthening health systems; improving service quality; develop health, nutrition, and population services for Rohingya population

Source: Ahsan et al., updated to include the 4th HNPSP 33

Key health actors and role(s) in the national health system

Public sector (Government): A more in-depth description of the public sector's organization is described above in section 2.1.1. The public sector has an extensive network of primary healthcare facilities, but it is generally perceived to be under-resourced (i.e., lacks essential commodities and human resources), provide lower quality care, and to have poor coverage of rural and urban poor populations. Secondary and tertiary care networks have expanded rapidly around Bangladesh over the past few decades., although diagnostic, laboratory and specialist services have not yet met the demand.[34]

Private sector: The private sector consists of hospitals, clinics, and laboratories which provide both western and traditional (Unani and Ayurvedic) services. Private sector health services are perceived to offer higher quality care and to have better staffing and resources (including medicine availability) than the public sector, but they are inaccessible to many due to their cost and concentration in urban areas. Health expenditure in private health facilities is almost entirely from out-of-pocket payments (93 percent).[36] The private sector is poorly regulated.

Informal sector: Bangladesh has a large cadre of informal health workers. The informal health sector in Bangladesh includes semi-qualified allopathic providers (e.g. community health workers (CHWs), medical assistants, trained midwives, pharmacists, and drug vendors); traditional healers (practitioners of Ayurvedic, Unani and homeopathic medicine), and faith healers.

In 2007, the informal sector comprised 88 percent of all healthcare workers in the country, and it is the primary source of healthcare for Bangladeshis in remote areas of the country. The informal sector is highly accessible and low-cost and serves 80 percent of the population.[32] Quality of care is an issue in the informal sector, with a lack of skilled, trained and qualified providers. Outside the public sector, there are 64,000 licensed pharmacies and 70,000 unlicensed drug stores, which do not require prescriptions. Polypharmacy and a lack of rational prescribing is common[35] and there have been reports of counterfeit and expired medication. Medical country of origin information (MedCOI) reports that in rural shops, training in dispensing was provided exclusively by pharmaceutical companies.[32] Medication availability is not guaranteed, and cost is highly variable. Drug shops frequently provide services outside the scope permitted under drug license regulations, such as injections, burn and wound dressing, vaccinations and diagnostic service, although not permitted under drug license regulations.[32]

NGOs: Bangladesh has an international reputation for a dynamic NGO sector, with over 4,000 NGOs involved in the population, health and nutrition sector.[2] These include large national NGOs such as Bangladesh Rehabilitation Assistance Committee (BRAC), Gonoshasthaya Kendra, and Grameen Bank. NGOs' presence is strongest at the community level and in health promotion, prevention and primary care. For example, in family planning, maternal, neonatal and child health (including the Expanded Programme of Immunization countrywide), and nutrition, as well as health system strengthening, community engagement and social and behavior change communication (SBCC) activities.[36] A 2010 study found that 80 percent of NGO funding comes from donors and the role of NGOs is increasing.[2,32] NGOs are primarily engaged in increasing service coverage and quality, and focus on hard-to-reach areas and populations.

Donors: Numerous donors provide technical support and financial assistance to the health sector in Bangladesh. Major bilateral donors include the United States (U.S.), United Kingdom (U.K.), Australia, Japan, European Commission, Canada and Germany. Major multilateral donors include the World Bank, WHO, European Union (E.U), UNICEF, Asian Development Bank, International Monetary Fund, Global Fund to Fight Aids, Tuberculosis and Malaria, and GAVI – The Vaccine Alliance.

2.1.2. Humanitarian health system

Organization

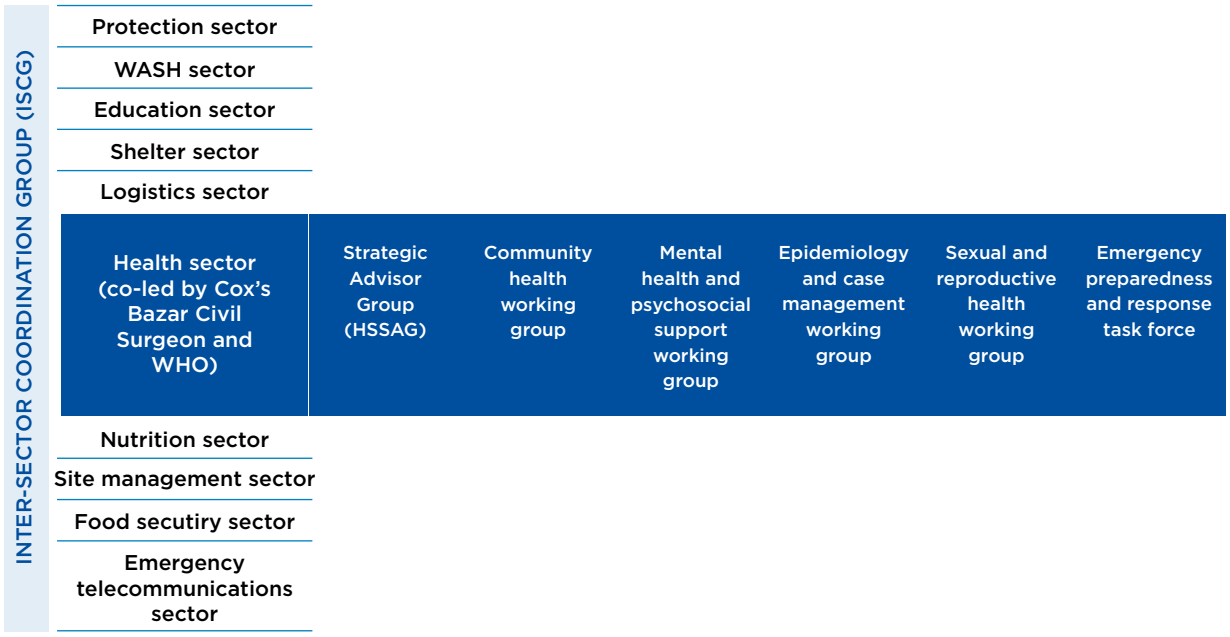
Due to the restrictions on movement described previously, Rohingya largely depend on health facilities run by NGOs and INGOs within the camps to access healthcare. An August 2019 assessment conducted for ISCG found that 97 percent of households who reported that a member was sick with an illness that required medical treatment in the past 30 days sought care, with the majority seeking care at a NGO health facility (79 percent), while 8 percent sought care at a government clinic, 29 percent at a private clinic, 22 percent at a pharmacy, and 3 percent at a traditional or community healer.[46(p)] Within the camps, health sector partners run 129 health posts and 32 Primary Health Centers (PHCs). Health facilities in the camp are largely run by national and international NGOs with a small percentage of MOHFW facilities. NGO partners heavily support operations of approximately 25 MOHFW facilities within the camp, as well as providing support to facilities in the host community, including ten community clinics, six union sub-centers, six health and family welfare centers, two upazila health complexes, and Sadar District Hospital.[47] Gaps in access to primary healthcare exists with five camps reporting no primary healthcare facilities.[47] DGHS is in the process of building 20 PHCs in the camps in coordination with

UNHCR, IOM, Turkish Disaster and Emergency Management Agency/ Turkish Red Crescent, Swiss Red Cross, and Health and Education for All (HAEFA).[48] The 2019 Joint Response Plan (JRP) emphasizes sustaining field hospitals in the camp as a mechanism to decrease pressure on government hospitals outside the camp.[49]

Cox's Bazar has an active Health Sector that, as of 2022, involves 98 partners including local and international NGOs, governmental, and U.N. agencies.[89] Jointly led by the MOHFW Coordination Center, the Civil Surgeon's Office of Cox's Bazar, and the WHO, the Health Sector has a well-developed coordination structure with a strategic advisory group at the district level and additional coordination staff at the upazila, union, and camp levels. The strategic advisory group is comprised of main Health Sector partners and advises on health coordination.[47] The Health Sector meets twice a month and publishes publicly available minutes following each meeting. Field coordination is supported by a field health sector coordinator, health sector field coordinators at the upazila levels, and Camp Health Focal Points at camp level.[47] The Health Sector includes a number of working groups, including the Sexual and Reproductive Health Working Group, the Community Health Working Group, the Epidemiology and Case Management Working Group, the Mental Health and Psychosocial Support (MHPSS) Working Group, and the Emergency Preparedness Response Working Group (Figure 3) The Health Sector is currently working on updating the minimum essential service package for health facilities within the camps.[50]

Key informants reported that coordination of health activities is challenged by the number of NGOs operating within the camps. Some of the challenges that key informants reported experiencing included limited communication and duplication of efforts, which sometimes led to inefficient allocation of resources. Some key informants identified the following coordination challenges: conflict and competition among health organizations and actors, the lack of unified health instructions or guidelines, different mandates across health sector agencies and stakeholders, and different policies and health responses to the needs of refugee and host communities.

Figure 3. Coordination structure of humanitarian stakeholders



Adapted from Jeffries et al., 202173

Chaired by UNFPA, the Sexual and Reproductive Health Working Group (SRHWG) is well-established and meets twice a month. The SRHWG, in partnership with the community health working group, led a major effort to increase facility delivery. As of November 2019, 47 percent of deliveries were conducted in health facilities, compared to 32 percent at the end of 2018, although these vary significantly by camp.[47] There are currently 98 maternity beds available 24/7 in primary health clinics, organized by the SRHWG. Within the camps, comprehensive Emergency Obstetric and Newborn Care (EmONC) services are provided at Hope Field Hospital, Turkish Field Hospital, and Friendship Comprehensive Maternity Center.[51] Field hospitals are supported by 24/7 on call services and referrals to Ukhiya and Teknaf Upazila Health Complexes.[51] Referrals outside the camp are made to MOHFW Ukhiya and Teknaf Health Complexes and then onto Sadar District Hospital in Cox's Bazar, which is located over two hours away by car. Refugees were previously largely dependent on these MOHFW referral facilities, however this has shifted now that the camps have developed additional field hospital capacity. Post abortion care is available at all four field hospitals; clinical management of rape and emergency contraception is available at two field hospitals.[51] Menstrual regulation and post abortion care are available at both nearby health complexes and the district hospital.[52] Current priority areas for the SRHWG are:

- capacity-building and mentorship to health service providers and developing a cadre of master trainers for training of trainers ;

- improving maternal mortality surveillance;
- provision of comprehensive SRH;
- improving the EmONC referral pathway (particularly for late night referrals);
- developing referral pathways for Hepatitis C;
- promoting the use of District Health Information System version 2 (DHIS-2);
- improving infection prevention; and
- developing the Minimum Essential Service Package for SRH services in field hospitals.[53–55]

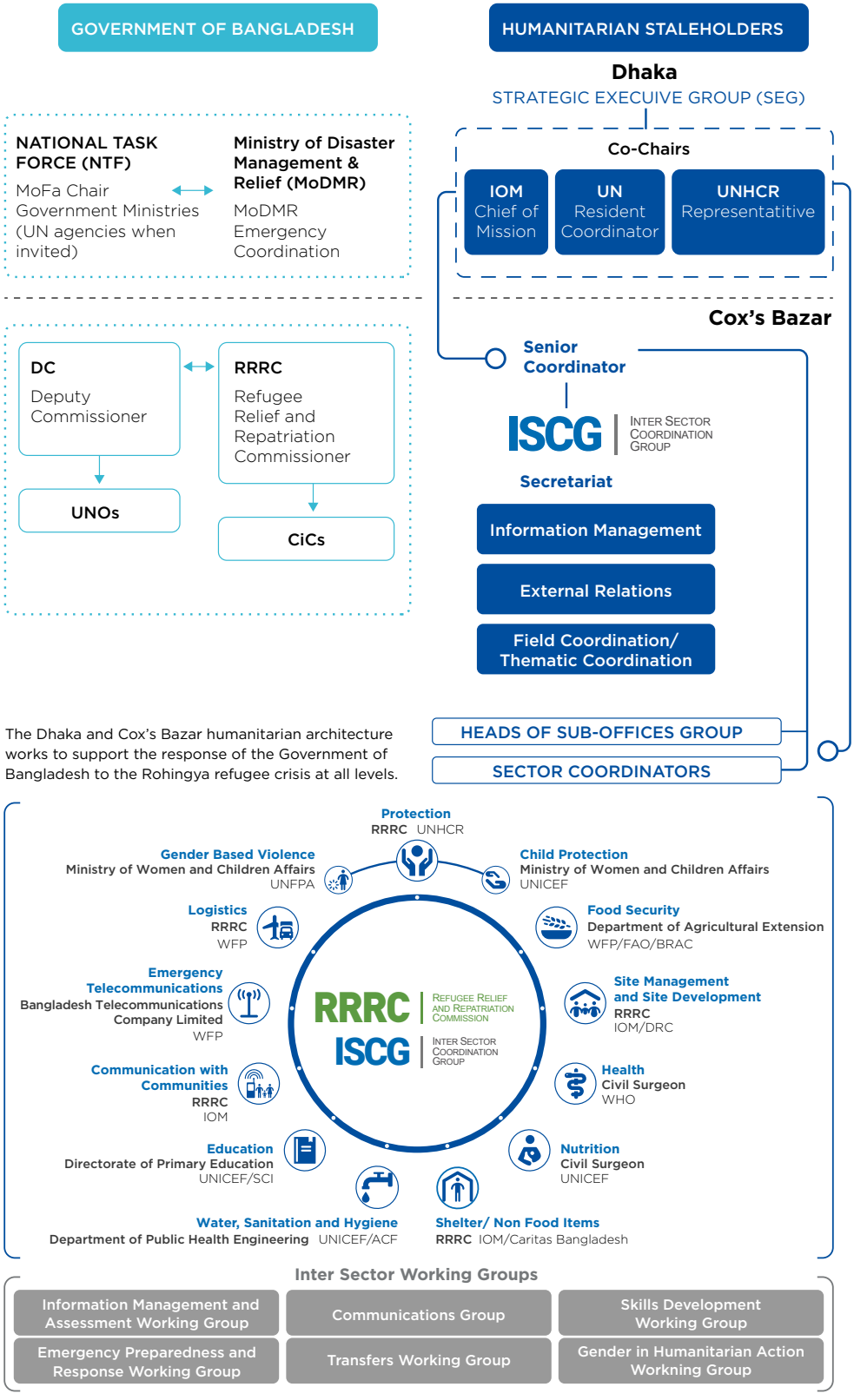
The Epidemiology and Case Management Working Group (ECMWG), chaired by WHO, is responsible for the coordination of outbreak preparedness and response plans, disease surveillance, and weekly reporting through the Early Warning, Alert, and Response System (EWARS).[56] While routine vaccination is available through outreach and fixed sites, increasing the number of days the services are offered, improving the cold chain, and reducing the dropout rates continue to be priorities.[47] In early 2020, the ECMWG conducted a measles and rubella campaign for children age six months to ten years. As of February 3, 2020, total coverage was 250,378 with actors continuing to conduct a mop-up campaign into February.[50] The ECMWG continues to work with the Community Health Working Group (CHWG) to strengthen routine immunization coverage. The ECMWG publishes weekly epidemiological updates using data collected by EWARS. It has been working to improve reporting, and in the most recently published week, 139 of 166 health facilities were registered in EWARs and 102 of those facilities submitted weekly reports.[57] While there was an increase in reported measles cases in early 2020, hovering around 500 reported cases per week, there has been a decreasing trend in cases since late February to mid-April 2020.[57]

The CHWG is chaired by UNHCR with a co-chair elected annually. In 2021, the CHWG was co-led by UNHCR and World Concern/Medair. Previous co-chairs have included Partners in Health Development (2020) and Community Partners International (CPI, 2019). The CHWG is responsible for training and managing community health workers (CHWs). There are over 1,400 CHWs supervised by 120 CHW supervisors/managers affiliated with 24 partner agencies. During COVID-19, CHWs were responsible for visiting households weekly and encouraged health seeking, as appropriate, disseminated health education information, and promoted vaccine uptake. They also played a central role in the community-based surveillance system designed to monitor a range of health conditions, as well as promoting reporting, risk communication, and community engagement on health issues.[89]

Prior to COVID-19, health sector partners led an assessment and training for partners around the WHO Package of Essential Noncommunicable Disease Interventions for Primary Care in Low Resource Settings.[47] During the assessment phase, 90 facilities in Cox's Bazar were studied.[47] The assessment found that approximately 10-15 percent of health posts, community clinics, and upazila health complexes had limited ability to diagnosis diabetes. These facilities reported limited supplies to manage diabetes, including urine ketone test strips and insulin, which was only found at 46 percent of PHCs. A number of other drugs specified by the national protocol – including Amlodipine, Losartan, Aspirin, and Metformin – were available at more than 75 percent of camp-level secondary health facilities and 50 percent of PHC.[47] Coinciding with this assessment in late 2019, staff from eight partners representing 18 PHCs received training on the Package of Essential Noncommunicable Disease Interventions and 16 partners were supported with WHO essential medicines and supplies.[47]

During the third quarter of 2019, the MHPSS Working Group reported that 81 percent of the 32 PHCs reported having at least one staff member trained to provide mental health services, often through the WHO Mental Health Gap Action Programme (mhGAP).[47] Partners, such as MSF, report that MHPSS services remain a gap in the camps.[58] In particular, they note a lack of psychiatrists who can prescribe medicines for severe mental disorders, such as chronic psychosis, which they report is high among their patients.[58]

Figure 4. Dhaka and Cox's Bazar Humanitarian Architecture, source ISCG



The Dhaka and Cox's Bazar humanitarian architecture works to support the response of the Government of Bangladesh to the Rohingya refugee crisis at all levels.

Key informants reported that a strength of the health response is that the organization aligns with the system for the host community in Bangladesh. The Health Sector has made an effort to ensure the structure of health facilities within the camp (e.g., health posts, PHCs) is consistent with the structure of the national health system. Many of the health professionals working in the camp are also Bangladesh national staff. The major difference in human resources between the camps and national health system is the community health workers. In camps, CHWs are often from the Rohingya community given the reliance on effective communication and outreach in these roles. In the host community, volunteer CHWs are from the host community. With regard to service delivery, the health criteria, medication indications, and other services are intended to remain consistent between the humanitarian and national health system, but implementation of standard procedures across these systems is challenging. There remain challenges to referrals between the humanitarian (primary) health system and the national (secondary and tertiary) health system, particularly for chronic conditions, that include the lack of available services in the host community and financial constraints.

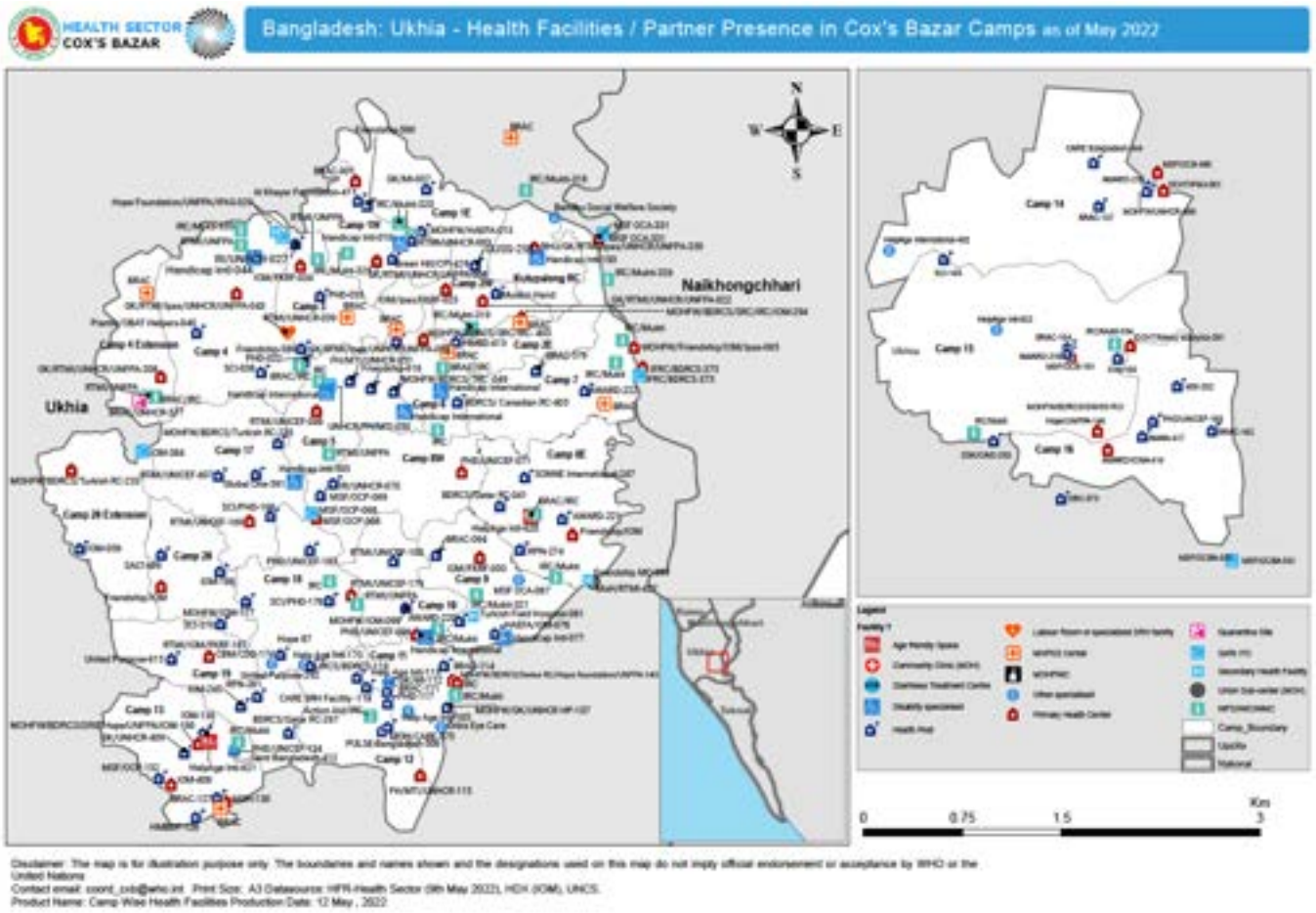
Key health actors and role(s) in the humanitarian health system

As noted above, Cox's Bazar has a large number of health actors with an active coordination structure which oversees the activities of 62 international partners, 59 national NGOs, and 8 U.N. agencies.[47] Actors in the camps must complete numerous levels of regulatory approval to be permitted to operate in the camps, including an FD7 approval that must be completed every three months by the NGO Affairs Bureau.[59] The refugee emergency response is led by the GoB with health services led and approved by the Civil Surgeon's Office in coordination with the WHO. As described above, although the GoB has an active role in coordination through the involvement of the MOHFW Coordination Center, MOHFW facilities in the camp are supported heavily through NGO and U.N. involvement, including from Ipas, International Committee of the Red Cross, Turkish Red Crescent Society, Bangladesh Red Crescent Society, Research, Training and Management (RTM) International, Swiss Red Cross, IOM, UNFPA, HOPE Foundation, HAEFA, Friendship, and CARE.[48] Working groups are led by UNFPA (Sexual and Reproductive Health), UNHCR (Community Health and MHPSS), CCPI (Community Health), WHO (Epidemiology and Case Management and Emergency Preparedness Response), and IOM (MHPSS).[47] Active operational partners in the health sector at the time of the latest 4Ws assessment (October 2021) include the following U.N. agencies, national NGOs, and international NGOs:[60]

- **U.N. Agencies:** IOM; UNFPA; UNHCR; UNICEF, WHO.
- **National NGOs:** Association for Muslim Advancement Network; Bandhu Social Welfare Society; Bangladesh Red Crescent Society; Bangladesh Rehabilitation Assistance Committee (BRAC); Community Initiative Society; Cox's Bazar Baitush Sharaf Hospital; Dhaka Community Hospital Trust; Friendship; Gonoshasthaya Kendra; Global Unnayan Seba Sangstha; Health Management BD Foundation; HOPE Foundation; Integrated Social Development Effort Bangladesh; Light House Bangladesh; Partners in Health Development; Prantic; Reaching People in Need; Research, Training & Management International; Resource Integration Centre; SALT Financial Literacy International; Young Power in Social Action
- **International NGOs:** Bangladesh Regeneration Trust-UK; Canadian Red Cross; Care International; Center for Disability in Development; DoPeace; Food for the Hungry; Global Medic; Handicap International; HelpAge International; Helping Hand for Relief and Development; International Federation of Red Cross and Red Crescent Societies; IRC; Japanese Red Cross Society; Malteser International; Medair; MSF; Medical Teams International; Mercy Malaysia; OBAT Helpers; Orbis International; Pathfinder International; Peace Winds Japan; Qatar Charity; Qatar Red Crescent Society; Relief International; Save the Children; Swiss Red Cross; Terre des Hommes; Turkish Red Crescent Society; United Purpose; World Concern Development Organization; World Jewish Relief.

Health partners reported active health programming in all camps and host communities with the exception of the host communities in Teknaf Union (i.e., small settlement) within Teknaf Upazila. Figure 5 displays the distribution of health facilities in Ukhiya.

Figure 5. Health Facilities in Ukhiya camps May 2022



https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/hs_cxb_ukhia_may2022_cox.pdf

(Note: Focus Group Discussions were conducted in Camps 4, 4 Extension, 20, 20 Extension, and 26).

2.1.3. Health system challenges

Service delivery at the national level

Issues of access, equity and quality particularly affect rural and poor urban populations.[2] Rural populations lack access to specialist health services, as tertiary care is limited to urban areas.[32] Quality of care is closely linked to ability to pay, with those who can afford it preferring to seek healthcare in the private sector.

Cost is a major barrier to accessing healthcare. In principle, basic health services should be provided free of charge in government hospitals and other public health facilities, and equity in healthcare is enshrined in the Constitution; however, in practice, almost two-thirds of healthcare costs are borne by individuals and households as out-of-pocket expenses[34] Patients are often responsible for the cost of "medicines, laboratory

tests and other unseen costs" (e.g. have to pay for x-ray film). This severely restricts access to most public healthcare services for poor and disadvantaged populations.[2,22]

Bangladesh's DHS 2014 found inequity in most health indicators, based on socioeconomic status, location (urban vs rural), and geography (divisions).[36] A lack of respectful care and a lack of adherence to ethical principles in healthcare provision are also common complaints.

Service delivery for refugees in Cox's Bazar

A major challenge in service delivery noted by both key informants and refugee community members who participated in focus groups included the lack of specialized treatment facilities in the camps. There are very few specialists working in the camps who can manage emergencies or non-communicable diseases requiring ongoing care. Key informants noted that if a patient were to come to a health facility within the camp with a critical condition, such as a myocardial infarction, there is no other option than to refer them to higher levels of care outside of the camp. Refugees require permissions provided by the RRRC to leave the camp, which is often a lengthy and complex process. Providers noted that when it is not possible to provide this emergency care, they resort to providing palliative care. Most of the services available within the camps are limited to primary healthcare. Key informants noted that many of the providers are not well trained and lack basic equipment, lab testing capabilities, and other supplies. Complex NCDs which are becoming increasingly prevalent within the camps, are difficult to manage without specialist knowledge and with the limited medication available within the camps.

Within the services available in the camps, key informants and focus group discussion participants described cultural barriers that impeded effective service delivery. The perception that healthcare providers lack understanding of the culture created major challenges to providing services to refugees. One health provider noted the importance of respecting these cultural differences, particularly by Bangladeshi staff who he observed considered Rohingya and Bangladeshi culture 'close enough' to overlook the cultural appropriateness of service delivery. This also became apparent in the way the language barrier was handled. The overlap in the local Bengali dialect and Rohingya often prevented health providers from utilizing translators for patient interactions resulting in refugees not being able to fully discuss their health needs with the provider.

Health workforce

These findings are discussed in more detail in chapter 3. Bangladesh's health workforce is characterized by critical shortages, geographic maldistribution, inappropriate skill-mix, gender imbalances, and poor motivation and morale.

The formal health workforce (doctors, dentists, nurses) is concentrated in urban areas, with significant regional variation.[2] Doctor-population ratios are ten times lower in rural regions[35] and the percentage of healthcare worker vacancies rises in direct proportion to distance from the capital Dhaka.[34] There are also fewer female health workers in rural areas.[35] In addition, there is an inappropriate skill mix, skewed towards doctors. WHO recommends three nurses for one physician, while Bangladesh has 2.5 practicing doctors for every nurse and midwife (El-Saharty).[35] Doctors comprise up to 70 percent of the total registered professional health workforce; the remaining 30 percent is made up of support staff.[35] The majority of doctors, technicians, dentists, and pharmacists are male, while the majority of nurses are female.[35]

Critical staff shortages are observed in rural and hard-to-reach areas, and they are compounded by high vacancy rates, inefficient recruitment (which can take years, with a World Bank study finding that a third of sanctioned public posts for doctors remain unfilled and 20 percent of DGHS posts were vacant)[35] and production shortfalls, due to insufficient numbers of training positions.[35] A rule mandating retirement of all public sector workers at age 59 has also resulted in the loss of skilled providers.[35]

Low staff motivation and morale and health worker underperformance has been linked to low public sector salaries; excessive workloads; inadequate support and training; a lack of resources and essential commodities; stigmatization, and the low status of certain health professions (e.g. nursing).[35] Staff absenteeism and poor retention is observed particularly among doctors and nurses, with absenteeism rates estimated to range between 7.5 to 40 percent on any given day.[35] Dual-practice is common, creating potential conflicts of interest and misuse of the system.[35]

Refugees are prohibited from engaging in formal employment in Cox's Bazar. There have been efforts to engage Rohingya refugees in the health workforce in the camps as volunteers who receive a small daily wage. Including Rohingya volunteers in the health workforce was consistently recommended by community members in focus group discussions as a strategy to improve engagement and utilization of healthcare and to promote culturally appropriate and accessible services for refugees.

Essential commodities

The availability of essential commodities, including drugs, medical supplies, and equipment, and family planning commodities, is an ongoing challenge in Bangladesh's health facilities.

Lower-level facilities commonly lack basic instruments, such as clocks and scales.[2] Ambulances are frequently non-operational (65 percent deemed inoperable at any given time), due to misuse, misappropriation, poor maintenance, or a lack of funds for fuel. Equipment, including X-ray machines, often requires urgent repair or replacement.[2,34]

Bangladesh has a well-developed domestic pharmaceutical sector, due to the National Drug Policy introduced in 1982, with the country exporting medication to more than 80 countries. Except for certain cancer medication, Bangladesh is generally self-sufficient, covering up to 98 percent of its demand for medicines in 2015.[32]

The Central Medical Store is responsible for drug procurement and distribution and supplying the public sector with medical equipment and supplies. Drugs are meant to be distributed free of charge to public sector hospitals and facilities, but clients frequently complain that medication is unavailable from facilities including upazila health complexes.[22] Stockouts are frequent and attributed to issues with logistics, inadequate supply chain management, lack of funds (or timely release of funds), corruption, and misappropriation.[34] Essential drugs and family planning supplies that are meant to be provided free of charge to patients are often diverted and sold on the black market to private vendors, where they are resold at high cost to the public.[34] Due to a lack of availability, most Bangladeshis source medicines from private suppliers by paying out-of-pocket.

The provision of medication was referenced frequently in focus group discussions and considered an indicator of overall access and quality of healthcare. There was general displeasure with the frequency and reliability of medication. Receiving paracetamol for pain, febrile illness, and high blood pressure was cited as representing both lack of capacity in camp facilities as well as poor appropriateness of care. Focus group participants criticized the lack of provision of more than a few days of medication for chronic conditions, and hospitals that do provide longer prescriptions were preferred, even when they were farther away. Notably, the participants were mixed on their thoughts regarding lack of preferred medication being a result of stigma or discrimination; other reasons cited were lack of availability at the facility and inability to appropriately communicate with Bangladeshi doctors. Issues related to provision of medication are described in more detail along with example quotations from focus group discussions:

1. Availability of medication: Medication was not available for certain health conditions, particularly more serious and chronic diseases (e.g., Hepatitis C, asthma). Patients with these conditions were referred to secondary health facilities outside of the camps, which were often inaccessible due to costs associated with transport and health services, as well as difficulty obtaining permissions to leave the camps. Availability of medication also varied by facility. Focus group participants reported that NGO-supported facilities often didn't have an adequate supply of medication or equipment. COVID-19 was also perceived by focus group participants to reduce the availability of certain medication. Key informants confirmed that medication shortages were a challenge. Essential medicines were usually available, but their concern was that many of the providers prescribing medication lacked specialized training on the use of several of the drugs used within the camps.

> *"We are not getting proper healthcare here. Different groups of people such as pregnant women, children, and elderly people of our community are suffering from many diseases. The existing hospitals cannot provide treatment for serious diseases such as jaundice, hepatitis, hypertension, and diabetes. When a patient with a serious disease goes to the hospital, they provide only two to five paracetamol tablets. We need treatments for diabetes, Parkinson's disease, cancer, and hepatitis. Many people got injuries while coming to Bangladesh and these people are not getting proper healthcare. The existing hospitals do not provide medicines for chronic diseases such as diabetes."*

> *"However, after coronavirus, maybe the facilities are not receiving enough supplies so they cannot provide us with good medicines and other supplies for serious diseases."*

> *"Because of the shortage of necessary equipment and medicines, health facilities often refer patients to other hospitals, for which, people are required to obtain a written permission from CiC."*

2. Appropriateness of medication provision: Focus group participants recommended that people, particularly those with diabetes and other chronic illnesses, receive a longer course (e.g., a full month) of medication from one visit. Some focus group participants noted difficulty obtaining longer course prescriptions despite standard operating procedures specifying that NCD medication, in particular, is provided in monthly courses. Another challenge identified by focus group participants was that medication was often provided to only one family member even in instances when multiple family members are ill.

> *"Many people are suffering from diabetes. Diabetic patients require medicines for a long time and hospitals provide medicines only for three to five days. If they go again after five days, hospitals do not provide medicines anymore. Therefore, we need good staff in the hospitals."*

> *"If a mother and her baby go to the hospital, the hospital does not give medicines for both. They give medicines to only one person. As our shelters are made of plastics, it is very hot here and people are having itching infections. It transmits from one person to another. The hospital gives medicine to only one person in a family. But other family members are also sick. We are in difficulty with this."*

3. Perceptions of ineffective medication: Paracetamol was frequently given but perceived by focus group participants as a medication that does not effectively address their health concerns. Refugees reported attempting to ask questions to the provider about the medication they were prescribed but were frequently met with derision. They also reported not being able to adequately express their needs to the provider, which led to receiving medication that was not considered appropriate for their health conditions.

> *"Whatever the disease is, they only provide paracetamol."*

> *"But when we visit health facilities, we are not provided with the right medicines. It is very important for us to receive good and the right*

medicine for the disease to be cured, so we want them to provide us with the right medicines."

"Most of the time the doctors or the health staff present there would give us paracetamol when we take our ill children to the hospital. And they treat us with disrespect if we ask questions about the medicine."

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4. Equity of medication access: Focus group participants reported difficulties accessing medication. Although mixed, some focus group participants reported that difficulties accessing medication was a result of stigma and discrimination. On the other hand, some focus group participants reported that they were denied medication when in need because health providers were pressured to provide medication equitably to all. In a key informant interview, one health provider from an NGO clinic reported that they had stringent rules on prescribing medication due to concerns that patients were requesting medication to later sell within the community.

"The reason we don't receive healthcare is that we are Rohingya. They discriminate against us. We are not given anything other than paracetamol in the health facilities, while local people are provided with good medicines."

"We do receive treatment, but it is unlikely to fulfil our needs. When we ask for all the treatment we require, they say they cannot do so because they must provide it to all of us equally."

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5. Cost of medication: Participants reported that medication from NGOs in the camps is free, but costs may be incurred from accessing traditional sources, utilizing pharmacies, and traveling outside of the camp for treatment.

"Even if we somehow manage some money, we can buy only half medicines and later we need to sell our food items to buy another half... it is very risky. People die in such cases if they cannot take their medicines."

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6. Alternative sources of medication: Focus group participants reported seeking medication from other sources, specifically traditional doctors, local pharmacies, and facilities outside of the camp. Traditional doctors serve as a source of care for those who do not feel adequately covered by formal health services within the camps. In-camp pharmacies were also sought out in response to dissatisfaction with healthcare provision. Refugees would sometimes leave the camp to get medication. However, they experienced several barriers in doing so including the cost of medication and travel as well as permission burdens.

> ***"When we are sent back from health facilities without medicines, we have to go to other health care providers, such as Rohingya doctors. And when we receive treatment from them, we have to pay some money or some items from our rations. The Rohingya doctors understand our difficulties, so if we are unable to pay in full, we can persuade them to accept payment in installments."***
>
> ***"But sometimes we have to get some medicines that we cannot find in the camps, so then my husband has to go outside."***

Leadership and governance

Despite efforts to decentralize the health system in Bangladesh, authority and decision-making remain highly centralized, leading to a lack of responsiveness to local needs. Upazila health complexes are led by bureaucrats and there is a lack of meaningful community participation in planning and providing healthcare services at the local level. While Community Management Committees are intended to oversee upazila health complexes, they are not representative of their community and lack real power to demand accountability from health officials.[35]

The health policy-making environment is weak and inefficient, and is vulnerable to political and interest group influence. As stakeholders often have competing interests, there is a lack of strategic planning and prioritization, resulting in complex and often contradictory national policies.[35] A cumbersome bureaucracy, which requires multiple government entities to sign off policy changes, contributes to slow implementation of reforms, a weak response capacity, and an inability to fill health worker vacancies. Poor regulation and enforcement, particularly in the private sector, contributes to high costs, high public

sector absenteeism, the pervasiveness of unqualified health workers, a lack of rational prescribing, and misuse and abuse of the health system.[35] Multiple key informants also referenced that corruption is a major problem among organizations in Cox's Bazar, which hampers the health response.

Health financing

These challenges are discussed in more detail in chapter 6. In brief, challenges are summarized by the MOHFW in the Health Care Financing Strategy, including 1) inadequate health financing (deficiencies in per capita health expenditure, share of national budget allocated to health, health expenditure inadequate to meet population needs) 2) inequity in health financing and utilization, and 3) inefficient use of existing resources.

Out-of-pocket expenditures (including catastrophic expenditures) are compounded by a lack of financial risk protection mechanisms, including social insurance and private insurance.[36] A health-financing scheme, Shasthyo Suroksha Karmasuchi (SSK), has been piloted in three upazilas of Tangail District, initially targeting poor populations. The government pays the premium and the scheme entitles populations living below the poverty line to free treatment for 50+ disease conditions.[36] Research conducted by Joarder and colleagues (2019) highlights social and cultural issues as a barrier to the scale-up of final protection mechanisms, due to the reluctance of Bangladeshis to contribute money to a pooled fund, or to pay for government health services that people perceive they are entitled to at no cost.[36]

Health information systems

These findings are discussed in more detail in chapter 4. In brief, the GoB and other actors have invested in efforts to build health information system capacity. However, challenges related to poor infrastructure and unreliable internet connectivity, insufficient training, and outdated guidance limit the implementation of new health information and communication technologies.

Challenges related to the Rohingya refugee response

Since the large influx of Rohingya into Cox's Bazar in 2017, numerous challenges have hindered the response. The rapid influx in late 2017 outpaced the ability to provide services and build infrastructure in the camps. Camps remain extremely congested with the largest camp, the Kutupalong-Balukhali Expansion Site, hosting approximately 626,500 Rohingya refugees.[49] Even two years after the influx, many Rohingya in the camps still lived in the same basic bamboo structures as when they first arrived.[63] Density in some areas of the camps has reached 10

square meters per person, which is significantly less than the Sphere standard of 45 square meters per person.[49] The poor road network in the crowded camps makes certain areas of the camp difficult to access, limiting the ability of humanitarian actors to provide services.[49] The low-lying nature of the camp and deforestation to build shelters have exacerbated risks during the monsoon season, in which rainfall can trigger landslides and flash-flooding, further reducing access.[49,64] The proximity of shelters has facilitated the spread of communicable diseases such as measles and diphtheria, while highly uneven coverage of WASH infrastructure and flash-flooding have increased the risk of cholera and other waterborne diseases.[49,64,65] Those Rohingya living in the host community are additionally vulnerable with limited access to services.

The Rohingya population arriving in Cox's Bazar experienced numerous risk factors in Myanmar and during flight. WHO has estimated that vaccination coverage among Rohingya was low prior to arrival in Cox's Bazar, which is believed to be related to the Rohingya population's limited access to healthcare in Myanmar.[65,66] Low vaccination coverage has been exacerbated by reported vaccine hesitancy and concerns about limited privacy for women and girls during vaccination campaigns.[66] An initial study in fall 2017 suggests that nutritional status among Rohingya children was poor, likely due to poor nutritional status in Rakhine state compounded by the multi-day journey to Cox's Bazar.[67] While nutritional status has improved, the overall malnutrition rate remains serious, which is partially due to continued reliance on food rations of rice, pulses, and oil that have resulted in poor dietary diversity.[49,67]

Numerous challenges to the provision of health services have emerged within the camps. Establishing and ensuring the availability of 24/7 services has been difficult due to constraints on the presence of humanitarian staff in the camps at night. Although field hospitals are now well-established in the camps, the distance to the closest district hospital and upazila health complexes presented a challenge in the earlier part of the response. Others have cited difficulty with procurement of supplies, transportation of supplies to the camp, and storage of medicines and supplies, particularly those that require a cold chain.[68] Furthermore, the sprawling and hilly terrain of the camps means that geographic distribution of clinics is critical; however, the rapid influx and spontaneous settlement meant that health services were not able to be established before shelters were built.[69] Finally, many of the services provided in the camp have depended upon local Bangladeshi staff; however, while the Chittagonian language spoken by the local community is similar to Rohingya, Translators without Borders estimates

that 36 percent of Rohingya do not understand even a simple sentence in Chittagonian.[70] These factors have challenged the Health Sector response in Cox's Bazar.

2.2. Describe the health infrastructure that exists nationally, and within the parallel system, where the parallel infrastructure continues to exist.

Government services are designed to support host communities in Cox's Bazar, but Rohingya may receive services through the national system through referral or out-of-pocket payments. The government has committed to supporting the humanitarian response, yet does not see the emergency as a protracted situation that should be fully integrated into the national system. Government representatives perceive that there is inefficient communication and less focus on host community needs when programs are integrated for Rohingya refugees. For example, a health facility in Kutubdia received minimal budget and development initiatives from the international community because it does not have a Rohingya population nearby. NGO and U.N.-supported programs offered within the camps are typically more accessible to and designed for Rohingya refugees yet are also accessible to surrounding host communities. NGO and U.N.-supported health facilities mostly provide primary care services and make referrals to the national system for more specialized healthcare. In the camps, IOM and UNHCR manage the majority of health facilities in coordination with the GoB. IOM manages 49 primary and secondary health facilities, some located in the host communities, which make up approximately 30 percent of the overall response of the health sector. UNHCR manages 39 health facilities.

2.3. What does our fieldwork tell us about how the health system responds to health needs of the displaced population versus the host population at various points along the health care continuum? How have these responses evolved over time?

2.3.1. Differences in access to care between displaced and host communities

The humanitarian and national health systems in Cox's Bazar are designed and coordinated with the intention of providing similar services to both the refugee and host population. Key informants described both of these systems being used, to varying degrees, by the refugee and host communities and revealed the barriers that limited access to care for displaced and/or host communities. Primary healthcare provided within refugee camps is available to both populations. One NGO clinic health provider noted that often host community members received preferential treatment within the camps, 'out of respect for the host community'. He noted that if a host community member came to a facility within the camp, which didn't often happen, they would be given slight priority over Rohingya refugees. Refugees were also able to access health services within the national health system outside of the camp given the shortage of secondary or tertiary health facilities in the camp. However, there were several obstacles to obtaining these services including the indirect costs of transport, the number of permissions required to leave the camp, etc. As a result, Rohingya primarily rely on services provided by humanitarian actors within the camps.

Several key informants noted that the emergency, short-term funding and existing health policies don't promote sustainable or reliable access to certain, particularly specialized, services. Many donors, for example, would prefer to give funding for specific camps and do not prioritize the host community. Under emergency funding, donors allocate funds to refugees, which means that recipient facilities must be in the camps and are not always accessible to host communities. Some development donors, such as the World Bank, focus more on the host communities via community health clinics, health posts, PHCs, and even health complexes.

These differences in access to health services have aggravated tensions between the refugee and host communities. Host communities feel frustrated by having fewer facilities relative to the refugee community, while the refugee community perceives having more restricted access to services, particularly specialized services.

2.3.2. Accessibility and appropriateness of healthcare

The primary healthcare system in Cox's Bazar has evolved in response to identified access and health-related needs. The Health Sector conducts service mappings and health facility assessments regularly to monitor accessibility, utilization, quality, and other key indicators in order to inform how resources (including facilities and health workers) are allocated across the camps. Despite these coordinated efforts, the high burden of health problems among refugees and the host community often exceeds the availability of services and produces barriers to the accessibility of healthcare. For example, focus group participants and key informants described several barriers to accessing healthcare. These included *logistical and operational barriers* such as expensive transportation, long wait times, high patient volume, and difficulty obtaining permissions required to leave the camp to seek specialized services. These barriers often deterred people from seeking healthcare.

> ***"Our young women don't want to go to hospitals because it is too crowded with people and women feel uncomfortable getting pushed in the crowd. It is also too hot there. Women don't like talking with many people. So, they don't want to go there."*** – Female Focus Group Discussion, Camp 20 Extension

Key informants described strategies their organizations had used to reduce these barriers. To address the issue of distance, the health sector mapped the location of health facilities within the camps to identify where they are not within walking distance. Individual health clinics implemented different triage systems to improve access to care for follow-up and patients with more severe needs. Pregnant women were identified as particularly vulnerable to poor health outcomes due to these barriers.

Technical barriers included the lack of standardized guidelines or treatment protocols for the refugee population, regular shortages of medication and other equipment, and the limited capacity of the health workforce.

Cultural barriers were commonly reported by focus group participants as well as some key informants. The language barrier, lack of respect, not providing gender-sensitive care, and stigma and discrimination reduced health seeking behaviors. One key informant described stigma and discrimination increasing over time thus presenting greater

barriers to care. As refugees were increasingly viewed as a burden so doctors' treatment of refugees worsened and it became more difficulty for them to obtain the approvals needed to access certain types of healthcare (e.g., permission to leave the camps). Most male and female focus group discussions described concerns about women and girls being uncomfortable or unable to speak with male health facility staff (including providers, interpreters and volunteers) about their health concerns. Seeking out female staff and women-friendly spaces, which were available in Camp 20, and/or having a female companion accompany them to the health center were suggested by focus group participants as ways to deal with the lack of female providers.

> ***"Another problem is that some hospitals have only male doctors and our daughters cannot discuss their problems with male doctors***." – Male Focus Group Discussion, Camp 20
>
> ***"We prefer to go to other healthcare facilities rather than the one closest to us even if the travel cost is expensive for us because there we can explain our problem to the MSF women staff."*** – Female Focus Group Discussion, Camp 20 Extension
>
> ***"Young women have many diseases and they are shy to talk about them. They can talk about their diseases only to women doctors and nurses. If another woman accompanies a young woman so that she can help her with explaining her disease to the doctor, the hospital people do not allow another women to enter. They say only one person can enter there."*** – Male Focus Group Discussion, Camp 20 Extension

Focus group participants and some key informants recommended the use of Rohingya volunteers as translators and patient navigators and increasing the availability of female staff to provide more appropriate care to women and girls. One NGO clinic provider reported ending the contracts of national health staff who lacked respect for refugees.

Cost was consistently described as a barrier to healthcare by focus group participants. Some focus group participants described feeling fearful or worried that their children would not be able to access care, either because it wasn't available or because they couldn't afford it. These barriers are discussed in more detail in Chapter 5.

"Also, we are unable to afford better treatment, which is why we would like to request that you provide us with better healthcare for our children. We are very worried about their future." – Male Focus Group Discussion, Camp 4

"And it is so far from here to go to Cox's Bazar or Chittagong that sometimes we cannot take the patient to hospital on time. Some people had died like this as well. And this scares us and we don't know when some serious disease or health issue arises if we will be able to save the patient or give the patient treatment on time. I get scared for my children all the time." – Female Focus Group Discussion, Camp 26

2.3.3. Quality of care

Key informants noted that the quality of healthcare varies substantially across different facilities. Differences in quality of care were attributed to the level of standardization in service delivery, the capacity of health providers, and cultural competency of personnel involved in the health response.

The cultural differences between health staff and patients influenced perceptions of quality of care. The refugee population's perceptions and expectations of what a health facility should provide often didn't align with what was available. This resulted in the facility being labeled a 'bad facility' by refugee community members. There have been efforts to mitigate this. For example, organizations have been involving community members in the planning of facilities and isolation centers. Health actors have assembled community health focal groups who meet every month and invite key members of the community to discuss any issues they have with those in charge of health facilities. During these meetings, they also monitor community health needs to ensure that health planning and decision-making aligns with health priorities. Similarly, non-health humanitarian actors independently gather information about the health response to provide to health actors on issues relating to privacy, dignity, rights, and confidentiality of refugees.

One NGO health facility in Camp 20 was repeatedly referenced by focus group participants as a facility that provided good services and treated refugees with respect. A health provider from this facility described how they maintained high-quality, appropriate care while reducing barriers to accessing services. This provider explained that:

"As an organization, our first and primary focus was to provide respect and dignity for patients. Our staff included Rohingya volunteers who worked as translators, [international] staff, and national Bangladeshi staff. We had multiple religions and cultures and ethnic groups all working in the clinic. There were three main providers – one nurse practitioner and two doctors. All services were outpatient. We were open six days per week for eight hours per day. We would primarily see acute and chronic conditions. We focused on chronic conditions to enable long-term follow-up, but also made room for acute visits. The chronic conditions included diabetes, hypertension, asthma, among others. We would do monthly follow-up visits with patients. The acute visits were mostly for skin infections and accidents. If we couldn't treat them at the clinic we would refer them to other facilities. We had a small pharmacy where the patients could get medicines right away. The clinic usually had to send away as many as 100 patients per day because we didn't have enough providers. With three providers we could see about 120 patients per day. We didn't focus on numbers, we focused on care and quality and dignity unlike other facilities. We spent more time with patients. We really wanted to hear their stories. Mental health problems and trauma were a big problem and we needed to give them more time even if their presenting problem was something else. We tried to make a lot of room for that. We tried to have high quality medicines and were willing to pay more to improve quality of care." – NGO Clinic Nurse Key Informant Interview, paraphrased

2.3.4. Vulnerable groups

Accessibility and appropriateness of healthcare often differed by certain subgroups. For example, pregnant women were identified as particularly vulnerable to poor health outcomes due to lack of appropriate, high-quality care, particularly EmONC services and emergency transportation. Respondents also described fear of operations and a desire to avoid cesarean deliveries, leading them to avoid delivering at hospitals.

> ***"Pregnant women require some extra care such as regular check-ups, vaccines, and other medicines. However, hospitals do not give priority to pregnant women... they deliver babies at home and sometimes babies get injuries. Our people fear to do an operation for delivery. Doctors and nurses are male in many hospitals and women feel uncomfortable discussing female problems with them." –*** Male Focus Group Discussion, Camp 20

Elderly people and people with disabilities also faced challenges accessing health facilities due to lack of mobility and inability to wait in line. Social support was seen as a key means of addressing this issue (i.e., family members could carry an elderly person to a health facility, etc.). One NGO clinic in Camp 20 provided transportation to elderly people which helped to overcome these challenges.

> ***"Elderly people and people with disabilities have the most difficulty accessing healthcare. As they are unable to go to health facilities themselves, they need other people to carry them. And because we have no carrier available here, it is difficult to carry people with disabilities on the shoulder to a health facility. So I think they are the ones who face obstacles accessing the healthcare they need."*** – Male, Camp 26

CHAPTER 3:
HUMAN RESOURCES FOR HEALTH RESPONSE

3.1. How is the health workforce deployed to meet the needs of both the host population and the displaced population, with a view to issues of availability, distribution and training?

Key informants' perception of the adequacy of training and deployment of health workers varied by the type of organization/employer. Representatives of large international NGOs and U.N. agencies noted that they had standardized training processes for their staff that include evaluation and supervision. In contrast, a health provider working with a smaller NGO noted that their staff may have received technical training, but lacked the training required to work within a humanitarian context. This finding was also reflected in references to quality of care (Section 2.3.3) whereby many national staff providing health services to the refugee population lacked proper training and orientation for working within a humanitarian setting.

> ***"Many providers have no experience or training in working with refugee populations" –*** Health Provider

To promote standardization and consistency in capacity-building, the health sector has begun coordinating and disseminating training opportunities in Cox's Bazar. Key informants noted that capacity-building opportunities became less frequent during the COVID-19 pandemic. Prior to COVID-19, there was required training for all health and community workers in the camp. However, restrictions on and hesitancy about in-person activities reduced the amount of training, particularly inter-agency training. A U.N. representative noted that the

gap in training that happened during the lockdown has been difficult to bridge even after restrictions on in-person activities were lifted.

Other frequently cited issues were staff turnover and the lack of qualified health professionals. U.N. agency representatives reported that staff typically rotate every 1-2 years. The high rate of turnover necessitates frequent training, and this often relies on expert trainers travelling to Cox's Bazar. A U.N. representative noted that they currently lack specialists operating within the humanitarian health system to provide continuous support for health worker capacity-building and it is becoming increasingly difficult to get specialists to travel to Cox's Bazar to deliver training. They have also had difficulty filling health worker vacancies and report having to anticipate openings and recruit early to maintain essential human resources. It has been difficult for agencies to recruit specialist to fill health provider roles within the camps. U.N. agencies and NGOs reported that they have continued to reduce the job requirements for health positions to fill these positions. To promote sustainability and affordability, they have opted for hiring national staff to fill health worker positions within the camp. However, the differences in the educational system and diplomas offered in Bangladesh have made it difficult for U.N. agencies and NGOs to determine who is qualified to serve in different health worker positions.

3.2. What good practices can we identify on human resources mapping, training, deployment, management, and supervision at all levels of care?

3.2.1. Strategies to strengthen human resources

Improved models of training and supervision

Particularly in the early stages of the response, much of the training provided was not sufficient, meaning that it was often brief and lacked appropriate follow-up, supervision, adaptation, and evaluation.

> "Basically, the standard approaches were used – Psychological First Aid training without any follow-up. This will not bring any results or behavior change. Even mhGAP training for five days is still not enough to ensure that clinicians will be confident enough to provide services... The main challenges are related to supervision, the permanent support for the staff with practical advice instead of theory and global guidance. They need practical case examples and support during direct supervision of clinical interactions." – U.N. Agency Representative

Strategies that key informants perceived to be effective included on-the-job training and ongoing supportive supervision. These approaches to applied training, as opposed to brief didactic training activities, reinforce good clinical practice and help to build sustainable capacity.

One key informant also highlighted the need for regular Training Needs Assessments to determine which training is necessary and remove barriers to building capacity in priority areas. They also noted that training evaluation is rarely done and is often poor quality. Most staff do not have performance reviews, which would be an important approach to improving the quality of care and ensuring that training skills are adopted into clinical practice.

Systems strengthening across the humanitarian and national health systems

The health sector has aimed to improve the consistency of healthcare delivery across facilities by unifying and coordinating their training approaches, engaging multiple actors in these capacity-building activities and making training accessible to governmental and non-governmental actors. U.N. agencies have tried to proactively reach providers working in government health facilities with their training. Feedback from key informants varies — it was reported that it has been difficult to provide cross-system (humanitarian and national health system) training. However, a project led by the World Bank was mentioned that aims to strengthen the health system and government by identifying gaps in human resources at different levels. The WHO then organizes staff training to fill these identified gaps at the district hospitals. They have also hired and deployed specialists to work in the district and sub-district hospitals to provide services to both the host community and refugees who are referred and have permission to seek treatment outside of the camp.

Prioritizing quality of care

One NGO clinic in Camp 20 that was spoken highly of by focus group participants approached their capacity-building by strengthening quality of healthcare, as opposed to training more health staff to reach more people. A nurse who worked at this health clinic reported that they were worried if they expanded too much, they would become like the other big facilities and hospitals. They intentionally avoided hiring too many staff because they wanted to 'operate more like a family unit and to provide quality care instead of scaling and increasing the numbers.' In focus group discussions, refugee community members independently reported feeling that, despite the long wait times, they appreciated the

respect they received from staff which increased their willingness to seek services from this facility.

Inclusion of refugees in the health workforce

Including refugees as part of the health workforce was identified by almost all focus groups and key informants as a good practice that improves the appropriateness and acceptability of care (language, respect, understanding). This is described in more detail in Section 3.3 as well as in a case example in Section 3.2.2.

Engaging traditional healers and community leaders

In addition to including refugees within the formal health workforce, several key informants and focus group participants described the importance of engaging other health stakeholders working outside of the formal health system who are trusted by the community. One key informant noted that most of the health facilities close after office hours and traditional healers become the only source of healthcare for patients seeking support after hours.

Traditional healers often remain a hidden population to representatives of the formal health system and the community is hesitant to reveal their identity. Several key informants perceived that informal health workers and traditional healers were responsible for a lot of malpractice, including providing certain medication or treatments that caused harm. They attributed this to low levels of knowledge among traditional healers.

One key informant noted that:

> ***"All refugees feel more comfortable going to the traditional healer than coming to the camp for doctors. They have more faith in the kobiraj and informal healer than the camp hospital doctors."*** – NGO Health Facility Manager

Traditional healers remain a trusted source of information in the community and most key informants recognized the importance of engaging with them to promote health seeking behavior and to reduce the provision of services that cause harm. Some organizations have been working to train traditional healers in some healthcare practices and to participate in health awareness campaigns. Community leaders ('Manjhi'/'Maji') have also been trained to support case identification and to strengthen linkages and referrals to health services.

3.2.2. Building capacity of diverse workforce to improve MHPSS: a case example

One key informant representing a U.N. agency described the training, deployment, management, and supervision of staff and volunteers engaged in an MHPSS program that highlighted several good practices.

Overview of the MHPSS program

The comprehensive MHPSS program included both community- and facility-based services. Community-based activities included cultural events, community support groups, sport and play for children. These community-based interventions were designed in close partnership with community members to promote engagement and utilization of facility-based services. In health facilities, more focused MHPSS services were provided including assessment, counseling, and training. They coordinated services with other health activities and multi-sectoral programming, such as SRH, gender-based violence and other protection services, pain management and palliative care, and also integrated MHPSS as part of the vaccine response to address stigma through awareness raising. This continuum of services and coordinated care approach necessitated a diverse health workforce including community health workers and volunteers, training non-MHPSS providers in basic principles of MHPSS, training non-specialists in MHPSS, and engaging mental health specialists to manage more complex cases.

Capacity-building

Staff, volunteers, and members of the refugee and host community were all engaged in capacity-building activities from the beginning of the emergency response. The organization worked with partners, including governmental and non-governmental organizations, to train their staff and sensitize them to the activities they were planning to promote consistency and standardization in MHPSS. They aimed to improve the standard model of brief training with limited follow-up and supervision that had characterized many of the capacity-building activities happening in the camps. Mental health specialists provided consultations in health facilities so non-specialist health providers could observe how cases were managed. These specialists also provided supportive supervision to reinforce the skills covered in this training.

To align MHPSS approaches across organizations working in the camps, this organization also worked with partners to develop standard operating procedures and minimum training packages to promote a more unified approach. However, one limitation of this is that it has not been adapted to the government curricula and protocols. The key informant perceived that the government curricula, in its current

form, was not comprehensive as enhanced protocols adapted to the emergency context are not part of the standard training available within the Bangladesh health education system. Many national staff with technical expertise are not sufficiently trained to work within the humanitarian context so, to address this gap, this organization collaborated with the Department of Clinical Psychology at Dhaka University to adapt their educational curricula to prepare students for working on MHPSS in humanitarian emergencies.

Inclusion of refugees in the health workforce

Community engagement was seen as a core element of the MHPSS response. The inclusion of refugees in the MHPSS workforce promoted trust, community connectedness, and the appropriateness and sustainability of services, particularly for community health and MHPSS. The program emphasized the inclusion of refugees as partners across all phases of a program.

> ***"[Having] refugees involved in the design is important. At the same time, involving refugees in the response should be done by all sectors, not only as basic labor, but at all stages of the project starting from consultations and taking suggestions from the design. For example, we have the Rohingya Cultural Memory Center project, which is led by the refugee community. They were the ones who advised at every step of the project, including the construction of the center, the items that should be included, the way the project evolved. There is still significant technical input from humanitarian actors, but all of that is done through the angle of the community initiative and ownership. From that perspective, maintaining refugees in response is key... Any opportunity to involve refugees in the response is essential. It influences sustainability, basic livelihoods, and cultural appropriateness."*** – U.N. Agency Representative

Existing government policies prohibit Rohingya refugees from having official employment in the camps. This policy creates many barriers in terms of livelihood opportunities for refugees. The government (RRRC and the ISCG) agreed to enable a system of volunteers that are paid through a cash-for-work scheme. Rohingya volunteers receive a daily incentive, but do not have benefits. The incentive rate is based

on a centralized system, which includes three standardized grades (i.e., rates) determining the hourly payment for refugees depending on the type of work. This incentive enables them to meet basic needs that aren't provided through humanitarian assistance, which both key informants and focus group participants agreed is not enough. There are some more specialized positions for Rohingya volunteers that can be more permanent. As part of the MHPSS response, this organization established more permanent positions that required a lot of investment in training and capacity-building, but as a result these were longer-term contracts instead of daily labor.

Investing in the training of refugee volunteers is essential for promoting sustainability. As one key informant noted, strengthening community networks and training these members with MHPSS skills can be transferable even after people leave Cox's Bazar to Bhasan Char or to return to Myanmar. In developing this MHPSS program, the organizations involved aimed to advocate for more permanent roles for refugees within the MHPSS workforce because these skills were transferable and did not go against the GoB's plans for avoiding a protracted, long-term emergency response.

3.3. What challenges and opportunities can we identify in terms of deploying health workers from within the displaced population?

The establishment of the standardized Rohingya volunteer program has enabled refugees to participate in the health response. Refugee volunteers support organizations in various roles, such as health promoters and workers, volunteers, data collectors, trainers, and focus group facilitators. Within facilities, Rohingya volunteers have worked as translators and strengthened linkages between the community and health facilities. The health sector established 'community health facility groups' for each facility that were organized by Rohingya volunteers to communicate health information and build trust and awareness. Typically, refugees earn a daily incentive for their work through short-term contracts. The COVID-19 pandemic exposed how fragile and unreliable this volunteer system is. As many organizations transitioned to remote work, the number of opportunities for refugee volunteer work, as well as incomes, declined.

A nurse who worked in a health clinic within the camps described the importance of having a respected member of the refugee community as a volunteer.

> *"We had an imam work for us who was so respected. It was helpful to have his presence. The Bangladeshi staff sometimes didn't understand the cultural things. For example, there was an old man who was coming in and needed a catheter and he was concerned about what would happen when he needed to go pray because he thought he would be contaminated. So the imam came in and explained to him that it was an acceptable exception. The old man felt that, because this information came from a religious leader, that he was okay with it."* – Nurse, NGO Clinic

However, retaining Rohingya volunteers was challenging for several reasons and required developing strategies to gain the support of the government.

> *"We had to fight to keep our Rohingya staff but honestly, I would rather shut down the clinic than get rid of the clinic staff. The Bangladesh government really appreciated the clinic and even if they got upset about things, they were ultimately happy with what was happening. We hired a Bangladeshi person who was a liaison between the clinic and the government who helped explain how things were done. There were things where the government would come to us and start asking for help. Doing them favors like this helped them to be more okay with us having Rohingya volunteers, for example. The relationships with leaders and government are important. The relationships are everything. If you build up a good reputation, then it goes a long way."* – Nurse, NGO Clinic

The government restrictions on Rohingya formally participating in the health workforce was seen as a challenge and missed opportunity by key informants and refugees. One U.N. representative noted that Cox's Bazar is 'falling into the trap of being a protracted crisis', which makes it more difficult to start new programs. In other emergencies, they reported that they could train providers, such as midwives, within the displaced community to sustain the health response as it transitions into a more protracted emergency. However, due to the policies restricting refugees' right to work in Cox's Bazar they are unable to do this, which makes it difficult to plan for the future.

Many refugees were unhappy with the low incentive rates. The government was actively aiming to standardize these payments. Despite the low wages, key informants proposed strategies such as disbursing daily payments immediately and finding other ways to increase the benefit to refugees of participating in the health workforce may promote engagement and retention in these roles.

CHAPTER 4:
HEALTH INFORMATION AND REPORTING SYSTEMS: HEALTH AND DEMOGRAPHIC DATA COLLECTION, MONITORING, AND REPORTING SYSTEMS

4.1. The health information systems in place to address the needs of the displaced population and the host population and differences between them

Information and communication technologies (ICT) are increasingly used in health centers and during household visits to improve population coverage of health systems.[36] In 2009, the GoB adopted the District Health Information System version 2 (DHIS2), which became its data collection system for gathering routine health data from government health facilities in Bangladesh. The COVID-19 pandemic also served as a catalyst for better surveillance and health information systems, particularly for infectious disease. Several of the large agencies adopted the Kobo system based on the recommendation of the health sector, which allowed them to electronically enter health facility data and monitor outputs in real time. The health sector also uses the EWARS for disease surveillance.

Key informants responsible for coordination of the COVID-19 response in Cox's Bazar explained that the increase in funding for health surveillance, as a result of COVID-19, accelerated improvements in disease surveillance systems, making them more sensitive for detecting outbreaks of a range of diseases. Prior to COVID-19, UNHCR established a new community-based surveillance system that utilized community health workers to identify and refer cases of disease within communities. This surveillance system was also instrumental in enhanced COVID-19

and other disease surveillance efforts For example, due to the improved surveillance capacity, the health sector managed to quickly identify an increase in dengue cases because of better record keeping and the additional testing and monitoring of facility-level data.

In addition to disease surveillance, the Health Sector conducts routine monitoring of health facilities and services. These include quarterly health facility assessments to monitor service provision and capacity. The Health Sector provides feedback to health partners and has produced a data dashboard that provides information on health facility monitoring. To conduct these assessments, they nominate a focal point within each camp to assess and record quality of care indicators for that camp to share with the partner agencies and the Health Sector. The Health Sector also conducts quarterly 4Ws mapping to assess which services are available for specific populations and which organizations are providing these services.

Table 3. Summary of data sources

Source	Description
Health Sector website	Includes access to Health Sector's publicly available Google drive (meeting minutes, assessment data, contact information, reports, etc.)
Early Warning, Alert, and Response System (EWARS)	Web-based/mobile application designed for disease surveillance and outbreak detection. Relies on reporting from >150 health facilities and NGOs. Covers COVID-19 (COVID-19 dashboard), acute respiratory infection, diarrheal diseases, injuries/wounds, diphtheria, measles, cholera, acute jaundice syndrome, dengue, varicella, and mortality. Includes a dashboard monitoring reporting status and weekly bulletins.
Health Facility Quarterly Monitoring Report	The Health Sector conducts quarterly assessments of health facilities in the camps in Cox's Bazar. These assessments cover inpatient services, gender-based violence services, infection prevention control, NCDs, access to health facilities, infectious disease services, laboratory services, maternity and family planning, nutrition screening services, MHPSS services, healthcare waste management, complaint response mechanism, referral services, drug storage, and general observations.
4Ws Assessments	The Health Sector conducts 4Ws assessments approximately every month. This assessment includes information on service provision and utilization by organization and population. The 4Ws dashboard is regularly updated and presents changes in basic utilization indicators over time, including disaggregation by sex, age, and population (refugee/host community). Data for the 4Ws assessments are available in the Health Sector Google drive.

4.1.1. Utilization of health information to inform programming and policymaking

Key informants representing healthcare delivery organizations working in the camps reported being familiar with and/or utilizing data from the EWARS, DHIS-2, the WHO/Health Sector dashboard, and other data provided by the GoB/MOHFW. However, key informants did not report using these interagency information systems to inform heath service provision ('I have no idea how this data is used to inform programming or policymaking' – NGO health provider, paraphrased). In contrast, internal agency data and monitoring processes were more closely linked to organizational decision-making about health service delivery. For example, one agency reported that their internal data monitoring processes, which informed the data they reported to the Health Sector, enabled more timely decision-making that allowed them to be responsive to emerging needs and health trends. For example, they were able to respond to an increase in dengue cases within two or three days of the first reported cases that were identified in their data. Whereas the Health Sector collects and reports data on a weekly basis. Most of the large U.N. agencies and international NGOs had internal capacity, such as a statistician, to manage data collection and monitoring. One key informant mentioned that these different processes for data collection and monitoring across organizations can create challenges to the accurate capture of population-level health trends. They were concerned that these disjointed processes may result in duplication of services and reporting of cases.

4.2. What data gaps (demographic and epidemiological) can we identify and is there other data needed for planning a more effective health response to forced displacement in future?

In a recent study completed by MEASURE Evaluation, health facility staff reported positive attitudes toward DHIS2 but reported some barriers to implementation, including poor internet connectivity, insufficient training, and outdated guidance that does not match the version of the platform that staff are asked to use.[61] The use of DHIS2 has begun to be implemented within the camps with 218 facilities registered in DHIS2 in November 2019; health sector partners continue to work on complete and timely reporting.[62]

4.2.1. National health information systems and data sources

Data on health systems indicators are available through the 2017 and 2014 Health Facility Surveys (SPA) and the 2012-2013 Multiple Indicator Cluster Surveys (MICS), as well as through data collected and published publicly through the Government of Bangladesh's Ministry of Health and Family Welfare Directorate General of Health Services (DGHS). DGHS operates a publicly available portal which contains data including antenatal care (ANC), skilled delivery, cesarean sections, and maternal deaths, disaggregated by division and district. DGHS also operates a facility registry, which includes the location of public and private health facilities and number of hospital beds. A publicly available DGHS Health Workforce Summary dashboard shows the number of staff at each facility and by division and district. The data collection is unknown for these publicly available portals, and it is not clear how complete this data is.

4.2.2. Humanitarian health information systems and data sources

The Health Sector undertakes quarterly monitoring assessments with camp health focal points to map available services, health workers, and essential medication supply. Facility monitoring assessment data is published online through a data dashboard.[90] Both data sources are missing information from a significant portion of health facilities. The more comprehensive mapping includes information on location and level of health facilities, number of hospital beds, and specific services available including mental health. UNHCR conducts annual balanced score card assessments on the quality of care in UNHCR-supported health facilities in the camps. It complements the Health Sector quarterly monitoring assessment and is publicly available.

Monthly Health Sector Bulletins report the number of outpatient visits per month in health facilities working with the Health Sector and the percentage of skilled deliveries from all births, which is collected by the CHWG as an indicator for the 2019 Joint Response Plan.

For EmONC indicators, the SRHWG collects monthly service data, which includes number of facilities providing 24/7 care, number of deliveries, number of cesarean sections, and number of maternal deaths.

An NCD Service Availability Assessment was undertaken in 2019 by the NCD Core Group, but these results have not been published. Publicly available drafts of the tool assess whether providers have received NCD training and assess a limited number of NCD essential medicines.

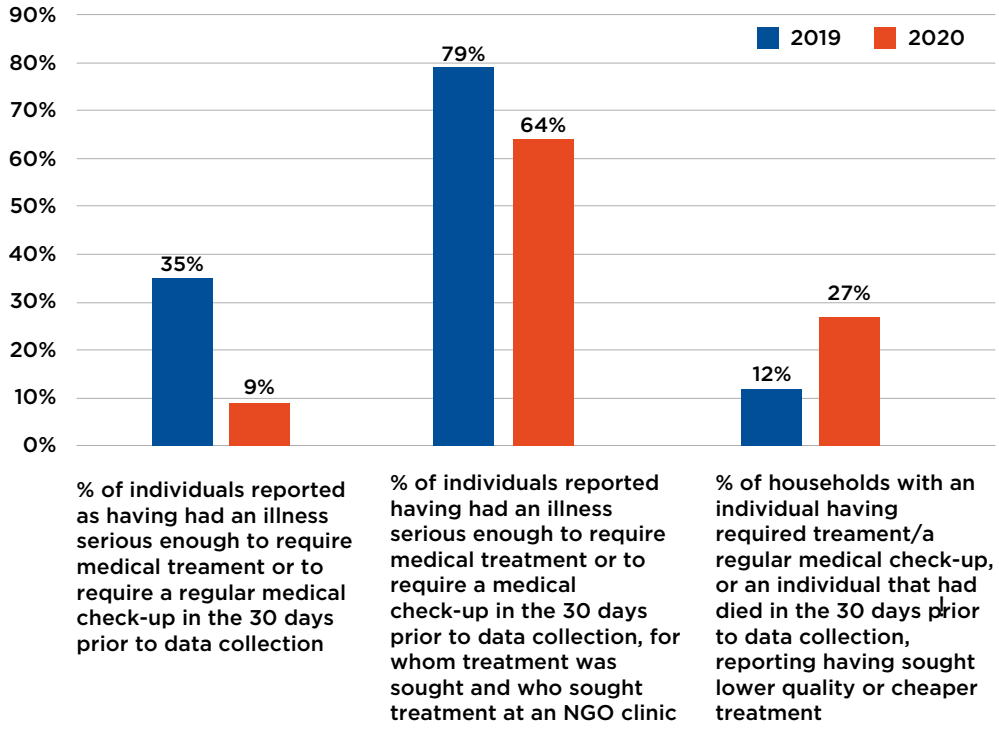
Publicly available data on measles-related indicators are particularly sparse. This data is managed by the ECMWG of the Health Sector. Data is not publicly available on the other indicators, including diagnosis and treatment protocols, providers training on outbreak response, and facilities with available EPI services.

CHAPTER 5:
HEALTHCARE UTILIZATION, COSTS, AND SPENDING

5.1. Utilization of key health services

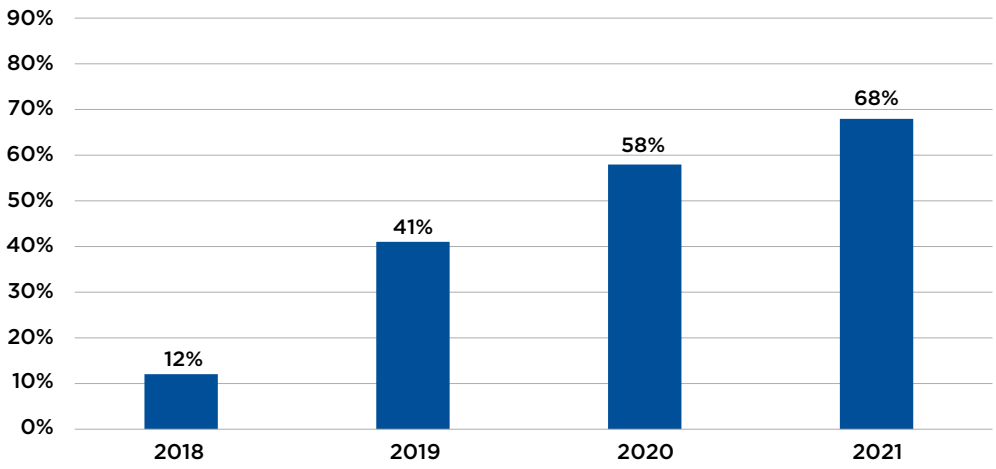
Since 2017, there has been a reduction in demand for health services among Rohingya refugees. Based on the J-MSNA,[74] there was a decline in the demand for health services overall between 2019 and 2020 (Figure 6). However, COVID-19 may have disrupted the delivery of essential health services and reduced the reporting of illness.[74,75]. The percentage of individuals needing regular medical treatment and check-ups in the previous 30 days reduced from 35 percent in 2019 to 9 percent in 2020. Among those who needed treatment and a medical check-up, the utilization of care declined from 79 percent in 2019 to 64 percent in 2020. The use of informal care and sub-optimal care increased in 2020, which compensated for the decline of use of care offered in the NGO clinics.

Figure 6. The use of overall care



Access to key maternal health services has improved during this period. Taking institutional delivery as an example, in 2018 the coverage of institutional delivery among the Rohingya population was only 12 percent. This number is consistent with a previous study showing that the majority of births in the Rohingya refugee community took place at home and were assisted by traditional birth attendants.[76] In 2021, the coverage of institutional delivery increased to 68 percent (Figure 7).[77] Similar improvement has been also observed in antenatal care visits among pregnant women.

Figure 7. The utilization of institutional delivery in 2018-2021



There are several reasons for the improvement of institutional delivery and maternal and child health services. Firstly, the availability of health facilities within and outside camps has significantly increased, with more NGO facilities providing essential maternal health services in the camps. Secondly, considerable effort has been devoted to improving health literacy around the need for institutional delivery and promoting essential services using CHWs. The trust of Rohingya refugees in health providers has improved.

An improvement has also been seen in the use of reproductive health services. Overall, the use of contraceptives has increased over time. For example, the number of first-time family planning (FP) visits increased from 24,853 to 35,949 between quarters one and two of 2021.[77] The SRHWG trained service providers, including doctors, midwives, and paramedics, on delivering FP services and care. However, the use of contraceptives remains low. Key reasons given for not using contraceptives include (1) infrequent sexual intercourse; (2) wanting as many children as possible; (3) husbands or partners opposed to family planning methods; and (4) religious beliefs. Many Rohingya refugees

believe, incorrectly, that the religion of Islam does not permit the use of contraceptives and that the use of contraceptives may put women at risk of developing health issues.[78]

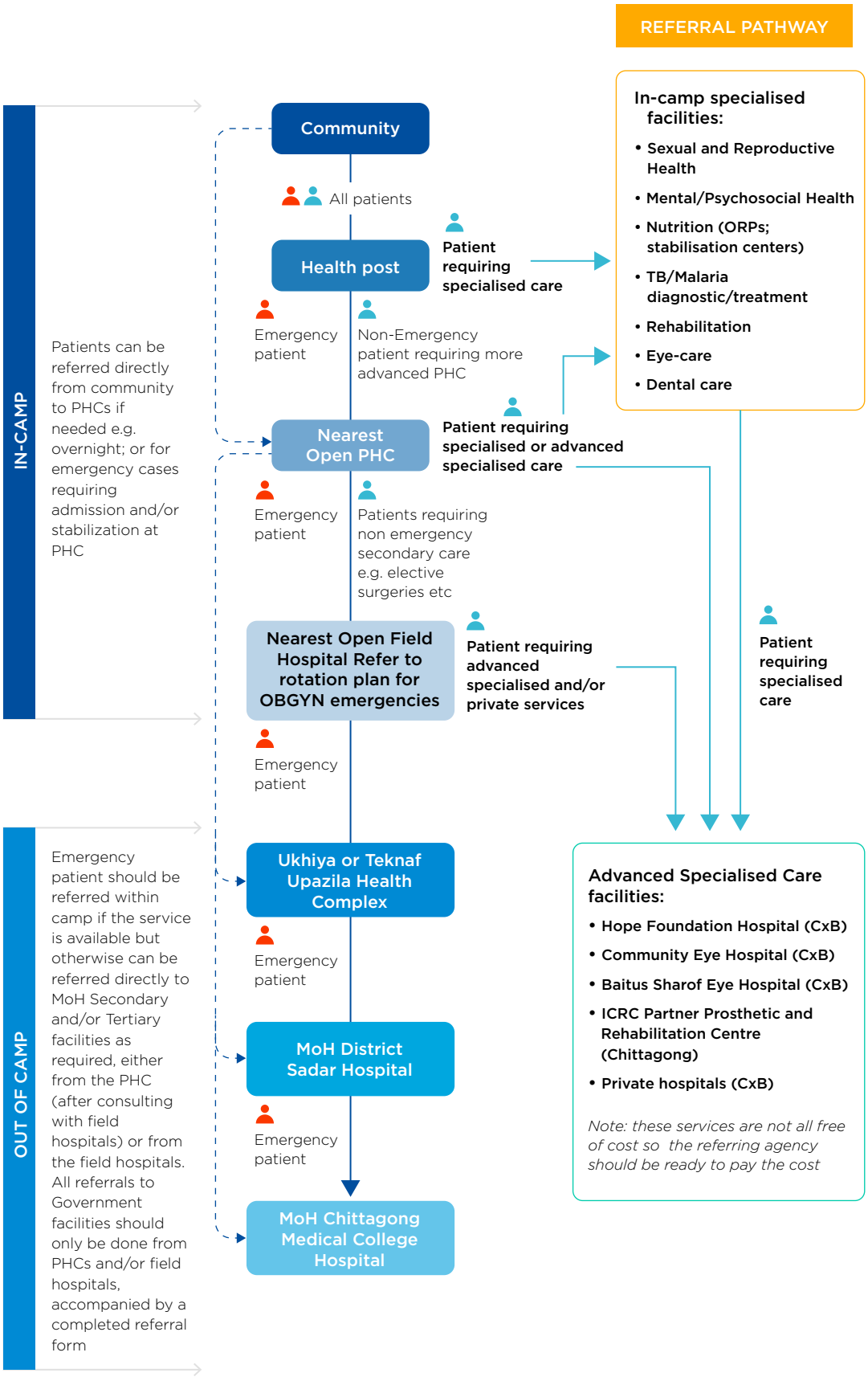
The coverage of immunization among children aged under one has improved. At the start of 2019, the coverage was 67 percent and this increased to 92 percent by October 2021. [79,80] It is now close to the target of 95 percent coverage.

The improvement in primary healthcare services is a result of the overall strengthening of the primary healthcare structure in the camp, wide use of CHWs, and positive changes to the referral system. The health infrastructure was further enhanced during the COVID-19 pandemic. For example, Health Sector partners increased the number of Severe Acute Respiratory Infection Isolation and Treatment Centers in the refugee camps. The number of active beds also increased to a total of 641 by September 2021.[81]

Despite improvements in providing primary healthcare services, there are issues where healthcare services are persistently lagging behind the population's needs. For example, mental health services and the management of NCDs, as well as referral to hospitals to manage emergency cases have encountered great challenges. Although this care is part of the essential healthcare services package, the shortages of specialists in these fields mean some primary health facilities are unable to offer services. Capacity for NCD management and laboratory diagnostics; MHPSS services, including inpatient/psychiatric care; and specialized services (such as eye-care and geriatric care) are not adequate to meet the needs of the population.[79]

The lack of secondary healthcare services in camps is another key issue. NGO facilities in the camps mostly provide primary healthcare services, so few secondary and emergency health services are available within the camps. When patients need to consult for secondary care, they must be referred to hospitals outside the camp. This was more challenging during the COVID-19 period when travel approval was harder to obtain. Figure 8 shows the referral pathway for Rohingya refugees.[82] As most referral hospitals are outside the camps, travel is often cited as one of the barriers preventing patients from seeking care.

Figure 8. The referral pathway



5.2. Barriers to seeking healthcare

According to the J-MSNA, most refugees sought care in NGO clinics (64 percent), which is free of charge. However, 26 percent of households sought care in private clinics and 21 percent in informal settings (pharmacies or traditional healers), despite often having to pay.. Reasons cited for seeking healthcare outside of NGO in-camp provision were the unavailability of treatment (or medicine), the fear of contracting COVID-19, cost of health services, and poor quality of care.

5.2.1. Unavailability of health services and medication

The lack of health services, for example emergency care, and limited supply of medication in the formal NGO facilities is one of the major reasons why refugees seek care outside camps or in private health facilities. For example, some patients reported receiving a consultation but without medicine, which leaves them frustrated and without the care needed.

> ***"We don't get major illness treatment from the health posts in the camp, and even if we visit there, they just give us paracetamol for any sickness and say they don't have any other medicine, so we have to buy the other medicine from a local shop with our pocket money***." – Male Focus Group Discussion, Camp 4

> ***"When an emergency happens at night, we call a Rohingya local doctor. He provides saline and medicines, and we have to pay him about 1,000 BDT which is very difficult for us."*** – Female Focus Group Discussion, Camp 20

> ***"For minor diseases, we do not have to pay for medicines. However, for serious diseases such as hepatitis C, we have to pay money. Hospitals that provide free treatment do not have treatments for serious diseases such as hepatitis C."***- Male Focus Group Discussion, Camp 20

> ***"The lack of health facilities in the camp is affecting people in our community. As we have no income sources here, we cannot afford to access medical treatment from the hospitals outside the camp, as a result, we face difficulties accessing medical treatment for our children when they are sick. So, it will be very helpful to us if***

healthcare facilities are provided in every block of the camp so that we can access them in times of emergency. In terms of health needs, having access to medicine is the most important thing for us." – Female Focus Group Discussion, Camp 4 Extension

5.2.2. Cost of seeking care outside the formal system

Cost is a prevalent barrier cited by the interviewees to accessing care, despite healthcare in the camp, primarily provided by NGOs, being provided for free. In fact, 55 percent of Rohingya refugee households are reportedly taking on debt to cover healthcare costs.[79]

Sometimes, the illness takes place outside the normal schedule of NGO facilities and, as emergency services are often lacking in camps, patients have to use private facilities or call local doctors to get immediate care. The charge to patients from the informal doctors varies from 500 -1000 BDT.

"When someone gets sick in our family, we borrow money from neighbors to pay the local doctor. If someone goes to a local Rohingya doctor, they have to pay a fee. Local Rohingya doctors may not take fees from relatives and friends but take from others like us." – Female Focus Group Discussion, Camp 20

"Even after selling rations, we cannot afford medical expenses for serious diseases. Therefore, we cannot complete the treatment course and suffer from diseases. Thus, all the treatments should be provided for free as we have no income." – Male Focus Group Discussion, Camp 20

The use of private health facilities could be costly. If patients cannot afford the charges, they may use traditional healers or local pharmacies for self-treatment.

"The wealthy could afford to pay for healthcare, while the poor either would get medicine from traditional healer[s] or buy from the local shop[s] as much as they can afford." – Female Focus Group Discussion, Camp 20 Extension

Even if patients receive care from informal providers, the quality of care from them is often questionable.

> ***"Local Rohingya doctors charge fees as they also need to support their families, and some other local doctors can just help us to go to the health post, they cannot help us if something happens because they lack the necessary equipment, and we feel bad for them when they cannot do anything besides knowing how to treat***." – Female Focus Group Discussion, Camp 20 Extension

5.2.3. Quality of care and dissatisfaction with healthcare in the NGO facilities

Refugees' dissatisfaction with the quality of care in camp facilities means patients may resort to seeking outside care. In several camps, focus group discussion (FGD) participants described seeking care from Rohingya doctors and local shops when they did not receive satisfactory treatment or medication from health facilities, incurring additional health costs.

> ***"We are sent back from health facilities without medicines, we have to go to other healthcare providers, such as Rohingya doctors. And when we receive treatment from them, we have to pay some money or some items from our rations."*** – Female Focus Group Discussion, Camp 4 Extension

Sometimes, Rohingya may perceive that the services provided in NGO facilities or government hospitals are not safe without evidence, which deters them from seeking care. The perceived quality of care concerns should also be addressed.

> ***"Most of the time, hospitals do an operation for delivery, and we do not think the operation is safe in these hospitals. Sometimes, the mother or the baby or both die as a result of an unsafe operation. Therefore, we fear going to the hospitals for delivery."*** – Male Focus Group Discussion, Camp 20

5.2.4. Location of NGO health facilities and the cost of the referral

Some FGD participants mentioned that the referral hospitals offering care unavailable nearby are too far away and hard to access. Refugees do not have financial support to pay the transportation costs to get to hospitals. Thus, they seek care from private providers, local pharmacies, or traditional healers close by.

> ***"Other hospitals are too far from us and we don't have transportation costs to go there. There are no good hospitals in our area. So, we go to the witch doctors, and some get better because of them."*** – Male Focus Group Discussion, Camp 20 Extension

Even when services were free, such as at some NGO facilities, transport could pose a cost barrier. Although the ambulance service is free of charge for referrals, refugees were sometimes unaware of this and paid out-of-pocket to seek care in hospitals. Transport to hospitals in Cox's Bazar was especially expensive.

> ***"It will be good if we get a hospital in our block. As the existing hospital is far away, we need transportation costs of around 200-400 BDT. We cannot afford them as we have no income... having a hospital in our block will ease our difficulties."*** – Male Focus Group Discussion, Camp 20

5.2.5. Referral cycle

Based on standard practice, referrals for healthcare should be free of charge. However, there were cases where referrals could create a variety of indirect costs, including paying for a caregiver to accompany a patient to a distant appointment, paying for food and accommodation , and paying for tests, as patients were not aware of the policy. In some cases, referrals were ineffective as people became caught in a "cycle" of referrals.

> ***"When we are referred to a private hospital for treatment or for a medical test, we have to bear all the costs, from transportations to medical treatment***." – Male Focus Group Discussion, Camp 26

> *"We do not get proper treatment here. When a patient with a serious disease goes to a hospital, hospital staff say that they do not have medicines for serious diseases and tell the patient to go to another hospital and that hospital refers to another hospital. We are suffering like this. We do not have money to go to Cox's Bazar for treatment and getting permission from CIC is also a problem for us. Many people died in this circle of getting permission and being referred to other hospitals."* – Male Focus Group Discussion, Camp 20

5.2.6. Discrimination

Some FGD participants expressed dissatisfaction with many NGO facilities due to rude treatment by the staff. The negative experience that they had before in some health facilities makes them switch health providers.

> *"We don't like going to NGO-supported health facilities because the staff treat us rudely and makes us wait in the sun for long periods of time, that is why, we prefer going to health facilities far from us even if the traveling cost is expensive because there we are treated with respect and receive better healthcare"* – Male Focus Group Discussion, Camp 4

5.3. Recommendations

5.3.1. Leverage the strength of CHWs

Bangladesh has a tradition to deploy CHWs to deliver health services. CHWs have been used intensively in refugee camps for a wide range of activities, including home visits, community-based surveillance and reporting, and risk communication. 100 percent of households were reported to have received a visit from a CHW in the 14 days prior to data collection in 2020.[83] Continuing training CHWs for service provision to connect the community to health providers would build the trust of Rohingya refugees and address some cultural and religious concerns to improve healthcare provision.

5.3.2. Strengthen health services for NCDs, mental health, and the supply of essential drugs

The shortage of qualified staff to manage NCDs and mental health, as well as the shortage of medicines, are common complaints from the population. The sector is aware of these issues and has been working on improving them, for example by conducting training for healthcare providers, conducting NCD supervision visits to monitor the implementation of national protocols on management of NCDs, and procuring essential commodities to treat NCDs.[8] It is critical to continue training health providers on NCDs and mental health to fill these service gaps. It is also important to generate demand for such services by raising awareness among refugees about mental health and non-pharmaceutical interventions to manage NCDs.

5.3.3. Improve the (perceived) quality of care in NGO facilities

Some Rohingya refugees believe that the quality of health services in NGO facilities is low, perhaps because of the unavailability of some services and medicines. The recommendations outlined in section 5.3.2 may partially address these quality concerns. However, perceptions of quality of care may also be associated with whether health providers treat patients with respect. Advising and supporting health providers on professional ethics and improving the overall health facility responsiveness to the needs of refugees could also improve the quality of care.

5.3.4. Better plan health facilities and address concerns about referrals

Rohingya refugees reported that some referral health facilities are too far away and that they cannot afford the travel and treatment costs of attending consultations. Given that UNHCR and IOM provide financial support to refugees for necessary referral services, including for costs such as transportation, diagnosis, treatment, and meals, it would be helpful to better understand why the cost for referrals remains a concern to refugees. This is perhaps due to a lack of awareness and, if that is the case, then there is a need for strengthened and targeted communication to refugees about this support. To minimize potential referral cycles, it is also critical for the Health Sector and its providers to streamline the referral process and provide clear guidelines to referral hospitals about making further referrals when needed. We understand that some organizations provide shuttle services for referral cases to reduce travel costs. Raising awareness of the availability of such a service among the Rohingya population and avoiding duplication of similar support in the same area would improve the efficiency of using the service.[84]

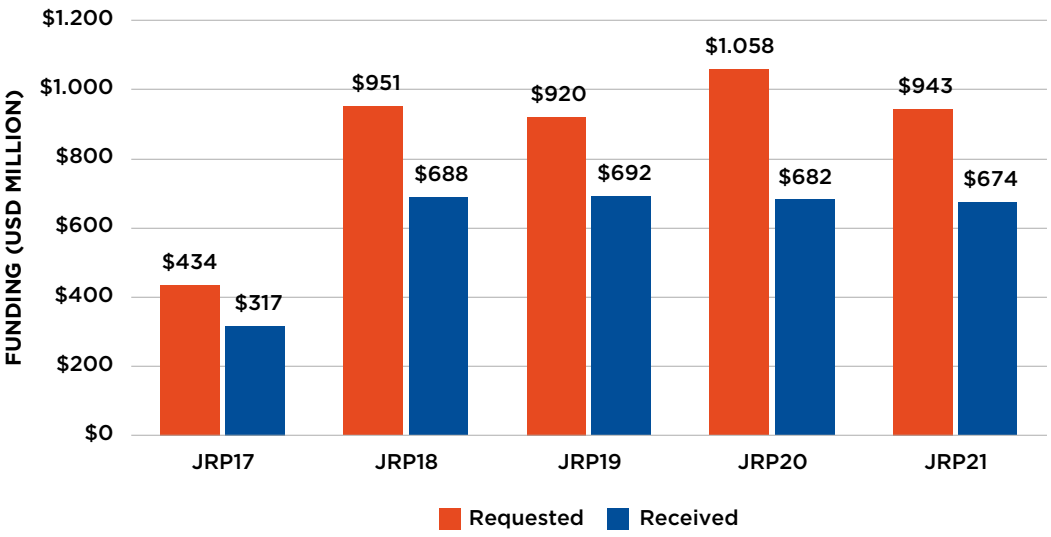
CHAPTER 6:
HEALTH FINANCING SYSTEM RESPONSE FOR THE DISPLACED POPULATION

6.1. How has the health response to the needs of displaced populations and vulnerable host populations been structured? How has it evolved over time? How predictable and consistent has this financing been? What innovative models have been developed to finance the health response and how replicable are these?

6.1.1. Funding for Joint Response Plan (JRP) and for health

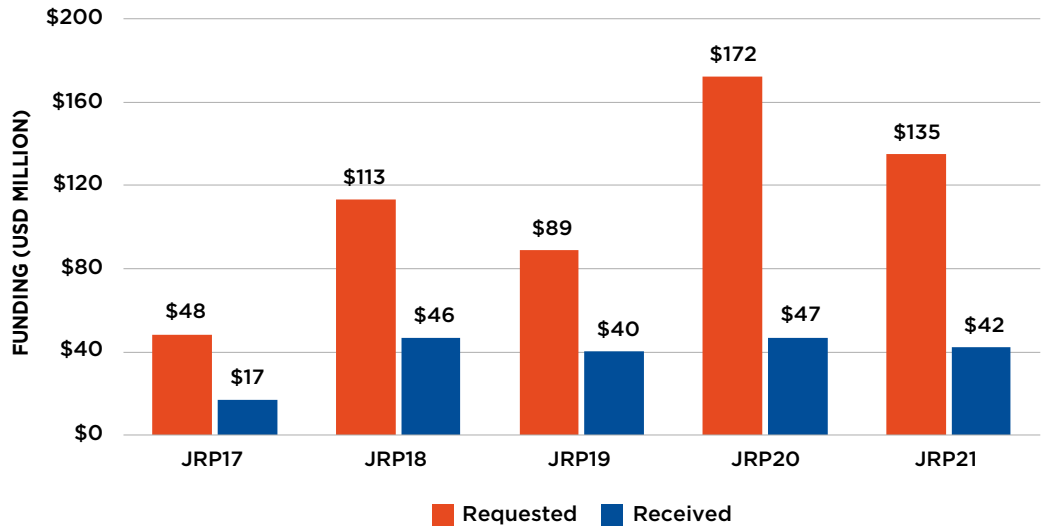
The health response for the Rohingya crisis is an integrated part of the JRP, which includes sectors such as health, education, food security, nutrition, protection, and WASH. There are many actors involved in the design and implementation of the JRP. In 2021, the JRP had 185 projects with nine U.N. agencies, 56 INGOs, and 68 Bangladeshi NGOs involved.[85] Since 2017, the resources to support the Rohingya crisis have been mobilized quickly and the requested funding for the overall response increased from US$434 million in 2017 to US$943 million in 2021. (Figure 9). In 2020, the requested funding reached the highest amount of US$1.05 billion, primarily due to the COVID-19 pandemic. However, the received funding stabilized at between US$674-$692 million since 2018, with a slight downward trend. The percentage of funding fulfilled ranged from 64.5 percent in 2020 to 72.9 percent in 2017.

Figure 9. Requested and received funding for the JRP 2017-2021



In the health sector, the requested funding often accounts for 10-15 percent of the total requested funding in the JRP. However, the received funding often accounts for 5-7 percent of the total received funding for JRP, with the highest share being 6.9 percent in 2020. Figure 10 shows the requested and received funding in the health sector under JRP. The funding for health has been stabilized since 2018, ranging from US$40 million in 2019 to US$47 million in 2020, and there is a significant financial gap between the committed funding and the requested funding over the years.

Figure 10. Requested and received funding for health in the JRP 2017-2021



6.1.2. Sources and recipients of funding in the health sector

From the health financing perspective, it is important to examine the structure of the source of funding and the recipients of funding, as well as how the funding is spent if possible. Due to the lack of detailed spending information regarding committed funding, we are not able to investigate the spending categories of the funding. Instead, we focused on the structure of funding sources and funding recipients from financial tracking services (FTS) compiled by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA).

On the sources of funding, Table 4 shows the top five funders for JRPs in 2019-2020. The U.S and U.K. governments are consistently on the list of the top five funders in 2019-2021. However, the amount of funding fluctuated substantially. For example, the U.K. government contributed US$16 million in 2019, and this number shrunk to US$2.5 million in 2021. The U.S. government committed US$4.3 million in 2019, this number raised to US$13.4 million in 2020, but reduced to US$4.4 million in 2021. The European Union (E.U.) humanitarian aid and civil protection department consistently contributed a relatively high amount of funding for Rohingya refugee health, which was US$9.0 million in 2020 and US$6.9 million in 2021. In 2021, the Government of Bangladesh contributed US$4.9 million to support Rohingya health services.

Table 4. Sources of funding for the JRP 2019-2021

Funder	Funding (USD)	Share
2019		
United Kingdom, Government of	$16,322,765	40.94%
Japan, Government of	$5,469,119	13.72%
United States of America, Government of	$4,352,667	10.92%
World Bank	$2,701,783	6.78%
United Nations Children's Fund	$2,415,981	6.06%
2020		
United States of America, Government of	$13,414,144	21.2%
European Commission's Humanitarian Aid and Civil Protection Department	$9,047,253	14.3%
United Kingdom, Government of	$8,766,425	13.9%
World Bank	$8,054,747	12.7%
Japan, Government of	$3,865,305	6.1%
2021		
European Commission's Humanitarian Aid and Civil Protection Department	$6,870,483	17.7%
Canada, Government of	$5,669,557	14.6%
Bangladesh, Government of	$4,954,237	12.7%
United States of America, Government of	$4,438,518	11.4%
United Kingdom, Government of	$2,571,478	6.6%

Based on FTS estimates, UNICEF, WHO, and IOM are consistently in the top five receiving agencies for JRP health sector funding in Bangladesh, playing an important role in supporting refugee health (Table 5). However, some funding is not reflected by FTS. In 2021, UNHCR spent over US$18.7 million of unearmarked, country-level, and situation-level funding on health, including sexual and reproductive health in Bangladesh for the refugee operation. The unearmarked funding was categorized as multisectoral and was not included in the expenditure for health. Taking into consideration the unearmarked funding, UNHCR spent a total of US$14.5, US$31.0, US$22.0 million on health for Rohingya in 2019, 2020, and 2021, respectively. As with the source of funding, the amount of funding received by these agencies is not stable. Taking the WHO as an example, WHO funding was about US$1.6 million in 2019. Due to COVID-19, the funding for WHO increased substantially to US$14.4 million in 2020, and this number became US$5.9 million in 2021. The wide variation in the funding of recipient agencies makes it harder for agencies to plan long-term projects.

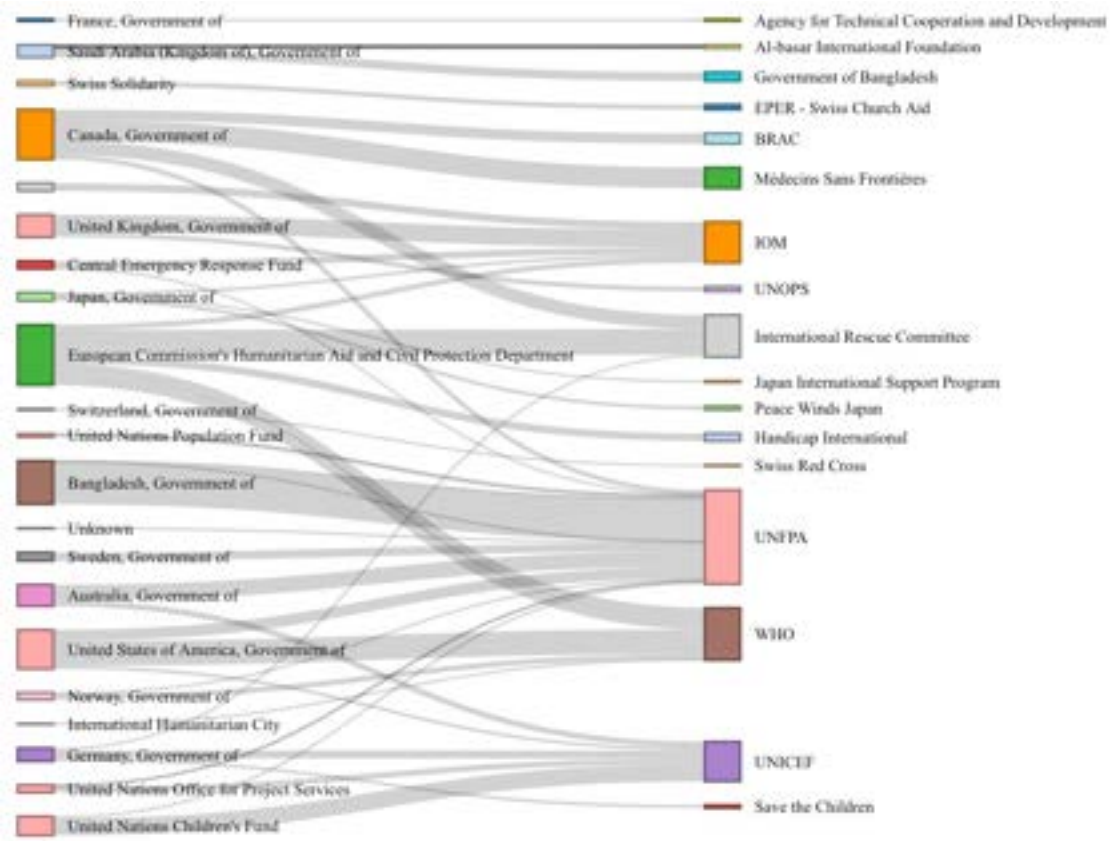
Table 5. Recipient agencies of funding for the JRP 2019-2021

Recipient agencies	Funding (USD)	Share
2019		
United Nations Children's Fund	$14,151,154	35.5%
Action Against Hunger	$9,852,217	24.7%
UNFPA	$4,830,159	12.1%
IOM	$3,389,365	8.5%
WHO	$1,645,544	4.1%
2020		
WHO	$14,465,445	22.9%
IOM	$12,749,093	20.2%
Save the Children	$5,891,899	9.3%
UNICEF	$5,856,931	9.3%
Handicap International	$5,126,229	8.1%
2021		
UNFPA	$10,705,134	27.5%
WHO	$5,966,432	15.3%
International Rescue Committee	$4,769,585	12.3%
IOM	$4,668,710	12.0%
UNICEF	$4,518,383	11.6%

Note: In 2021, UNHCR spent over US$18.7 million of unearmarked, country-level and situation-level funding on health and reproductive health in Bangladesh thanks to the flexibility of its donor contributions.

Figure 11 shows the funding flow from sources to recipients in 2021. It shows that besides major U.N. agencies receiving funding from various governments, international NGOs that receive a significant amount of funding include MSF and IRC. MSF provides medical services both in and outside of camps and IRC focuses on the protection of vulnerable women and children by setting up primary health centers, SRH facilities, and referral hubs. The funding for IRC was mostly from the Canadian government and the E.U. Humanitarian Aid and Civil Protection Department, while the funding for MSF was from the Canadian government only.

Figure 11. The funding flow in the health sector in 2021



Note: Data from FTS may not present a completely accurate picture of the funding for health received by individual agencies. UNOPS denotes the United Nations Office for Project Services.

6.1.3. Strength of the existing financing system

Good governance structure

Since the start of the Rohingya crisis in 2017, the international community has been mobilized to address the health issues among the population. Led by the WHO and the MHFW, the Health Sector has been established. Several working groups, including on community health, sexual and reproductive health, mental health and psychosocial support, and epidemiology and case management were set up. The working groups provide strategical direction in enhancing health systems for Rohingya refugees. Monthly meetings are held to discuss challenges and opportunities for delivering health services to meet the demand from the Rohingya and host populations.

Multi-sector engagement and a large network of providers

It is understandable that health financing and service delivery require multi-sector engagement, from the health, education, and social protection sectors. A multi-sector engagement platform was established

and the efforts have been coordinated by ISCG. Additionally, a large network of international and local NGOs was established to deliver health services. There were 31 INGOs and 21 local NGOs working in the camps in 2021. The INGOs include MSF, IRC, Food and the Hungry International, and Save the Children.

Financing mechanisms

Currently, the financing of refugee health is mainly dependent on donor funding. For various reasons, purely relying on donor funding to provide health services is not sustainable and many Rohingya refugees do not think they will stay in Bangladesh forever and hope to return to Myanmar.

Many donors remain committed to addressing the health needs of the Rohingya population. As of September 2021, the World Bank has committed US$590 million for Bangladesh to address a wide range of issues for Rohingya and host communities, including health. All the funding is from grants. Particularly, in 2020, the World Bank approved a US$350 million grant to support three projects for Rohingya refugees, of which US$150 million was for health and gender support. The funding is used to renovate and upgrade health facilities, strengthen human resources for health, procure medical support, as well as psychosocial support, immunization, and nutrition services.

6.1.4. Challenges of health financing systems for refugees

However, there are some concerns about the long-term financing for providing health services to Rohingya refugees.

Political complexity

Due to political reasons, Rohingya are not labeled as "refugees" in Bangladesh, instead they are FDMNs, which means that, among other things, they cannot work legally, and they have fewer protections under international law. Sometimes, politicians use the anti-Rohingya sentiment to gain popularity. This creates challenges to engaging refugees in income generation activities alongside the population in the host community.

> ***"Some local politicians are using this crisis as a low-hanging fruit.... if you are pro Bangladesh, you should be anti-Rohingya or if you are pro-Rohingya, you [are] automatically anti-Bangladesh. So ... we need to be very careful about the language and about the solutions that we offer"*** – Key informant interview

Potential reduction in funding for health

INGOs are often supported through central or core funding via different donor agencies (e.g., various governments, World Bank, and other U.N. agencies). Government organizations (e.g. hospitals) are also supported, in part, by NGOs or donors directly. COVID-19 boosted the overall funding for health and INGOs reported increases in funding during the pandemic to support COVID-related programming (e.g., vaccine program). Government facilities did not report changes in funding, although commitments were made to increase the budget during COVID-19 they often didn't translate to increased resources.

Overall, there is concern about the reduction in future funding among refugees. The reduction may be due to the protracted nature of the Rohingya refugee crisis or donors' prioritizing other refugee crises, such as those in Ukraine and Afghanistan).

> ***"... look at Afghanistan, look at Ethiopia, [and] look at Yemen. We are competing with some high-profile crises...what is affecting Cox's Bazar will be a tough sell..."*** – Key informant interview

> ***"The donor countries are reshuffling their priorities and looking at the domestic needs and how they're going to be assisting their own citizens, we knew that the money is going to be shrinking"*** – Key informant interview

Short-term contracts with, and procurement capacity of, service providers

When contracted by funders, most NGOs receive contracts on an annual basis with the possibility of renewal. Most NGO staff receive project-based contracts for between 3-12 months. There are also informal payment mechanisms for short-term staff (e.g., volunteers, including Rohingya) who are paid daily or monthly. Job insecurity among staff, particularly in small NGOs, has been a concern. The nature of the short-term funding contract with service providers makes it difficult for them to make a long-term plan to better serve the population.

> ***"In terms of emergency support ... At the same time, this funding is mainly short-term (for one year). It tends to extend every year, which makes***

> ***predictability difficult even if it is usually renewed each year... sometimes there is no clear picture as to whether there will be a continuation of services. This is complicated for operations and developing strategies."*** – Key informant interview

The unpredictability of future funding due to the short contract model may also prevent health providers from procuring equipment and medication or delay the procurement, which affects the timely delivery of health services.

Other reasons for the difficulty in procuring equipment and medication could be due to lengthy purchasing procedures, inconsistent financial forecasting, poor infrastructure and transportation to the camps, and disproportionate financing for areas with a large Rohingya population.

Redundancy of health providers

Regarding the efficiency of service delivery, key informants mentioned the potential redundancy of health service providers. Key services are provided by different organizations and some stakeholders believe that providers could be consolidated to enhance the efficiency of funding.

> ***"So, if you're looking at the health aspect, do we need seven primary healthcare centers being run by seven different agencies or are we going to choose to find one agency? For health that will have these facilities, but it will only be paying one management cost and one administrative cost in the strategic overhead***." – Key informant interview

6.1.5. Suggestions

Although the ultimate solution to the Rohingya crisis is to solve the conflicts in Myanmar and to allow Rohingya to return to their homeland, it is critical to ensure sustained support for them to access essential health services.

> ***"The first solution is to remind everybody, including the donor countries and the international community [that] we need to focus on trying to solve the crisis on the other side of the border, this will not be resolved***." – Key informant interview

Continued advocacy

With the potential shrinking of donor funding for Rohingya refugees in Bangladesh, strong advocacy with potential donors is needed. Stakeholders may need to develop a detailed advocacy plan to identify potential funders for Rohingya health services or for Rohingya's overall well-being. Some organizations have started working on this and more voices are needed.

> *"... we also continue to advocate with donors to provide this funding which is earmarked at the country level, rather than to specific sectors, so that we can allocate it according to the emergency and ongoing priorities, including for health, because that flexibility makes it easier for us to allocate the funds to where they are most needed*."
> – Key informant interview

Engage private donors and other financing mechanisms

Current financing is primarily funded by donor government and international agencies. There is little funding from private donors and this is currently unlikely to change. Some effort has been taken to explore the possibility of engaging private donors in financing health services for Rohingya refugees.

> *"The trend is definitely going down so one thing we've been doing is engaging the private sector, and there are some private donors who are already working on health within their own activities, and so they have an interest in seeing how they can partner with [us]*."

The interviewees mentioned concern about the cost of referrals and transportation. There have been programs in many countries to finance both service and transportation costs and considering designing vouchers and cash transfers would help reduce the financial burden on households.

Capacity-building and inclusion of Rohingya refugees in financing health

Currently, Rohingya are not allowed to be employed in and outside camps, and there are few income generation activities for Rohingya. Some programs used Rohingya as health volunteers and pay them on a daily/monthly basis. It is critical to view financing health within the bigger picture of how to build self-reliance among the Rohingya refugees. Interventions to boost the capacity of refugees to produce commodities for exchange and to provide temporary income opportunities should be designed and encouraged. This would enable refugees to earn resources that could be pooled for health services and reduce the financial burden on donors and host communities. It would also enhance food security and improve health outcomes by diversifying food commodities.

> ***"We need to start talking about skills development, we need to start talking about livelihoods, we need to start talking about some kind of self-reliance programming … and make sure that they live happily ever after in here"*** – Key informant interview

> ***"We do have health volunteers, but moving forward, the government is also realizing the needs of skills development and education and also… to avoid having idle people engaging in criminality and so on***." – Key informant interview

Strengthen government capacity for service provision

There are government health facilities operating in and outside the camps. The facilities include health posts, community clinics, primary health centers, and hospitals. With COVID-19, donors have been working with the MoHFW to build new hospitals and upgrade existing hospitals to meet the increasing demand for health services by refugees. It is critical to continue to improve the service delivery capacity of the Government of Bangladesh and align the support to Rohingya refugees to that of host communities.

> ***"...make sure that we are viewing the government as an ally, not as somebody who is competing with us, even though their priorities will always be different because they need to make the Bangladesh citizens believe that they are the first priority"*** – Key informant interview

Consider long-term projects under certain circumstances

For projects, particularly those to build health service infrastructure, that take time to take effect, donors may need to consider a multi-year contract with providers to improve the funding predictability and reduce staff turnover. As it is expected the Rohingya population will return to their homeland, the projects should also consider the potential benefits for the host communities. Working closely with the Government of Bangladesh and building the capacity of both the national health system and refugee health system would help the transition when the Rohingya population return to Myanmar.

Build the capacity of health providers to procure needed equipment and supplies

As delays to the procurement of equipment and suppliers hamper the timely delivery of health services, interventions to strengthen health providers' procurement capacities and to revise procurement policies are needed to enhance the efficiency of existing funding. The intervention may include, but not be limited to: (1) providing training on procurement and budgeting; and (2) recruiting qualified staff through a transparent process.

CHAPTER 7: CONCLUSIONS AND LESSONS LEARNED

A number of promising opportunities, good practices, and innovations emerged from our research on the national health system and humanitarian response.

7.1. Structural innovations and recommendations (macro-system)

Innovations and lessons learned

- **Strengthen the capacity of both the national and humanitarian health systems:** This research revealed efforts to build the capacity of both national and humanitarian health actors through coordinated training. The health system is structured to enable the national and humanitarian health system to reinforce one another and to support both the refugee and host community. Resources should continue to support upgrades to national health infrastructure to meet the increasing demand for health services by refugees as well as ensuring access to, and the sustainability of, health services within camp settings.

Recommendations

- **Advocate for continued and diverse sources of funding:** The declining funding allocated to the emergency response in Bangladesh has necessitated creative strategies to continue financing the health response. Suggestions include identifying different (e.g., private) donors and advocating for the continued financing of the emergency response.
- **Promote funding and policies that support sustainable programming:** Much of the existing financing of healthcare in Cox's Bazar is project-based. There is a need for multi-year contracts that enable health actors to build sustainable infrastructure and capacity to support a longer-term health response for both the refugee and host community. These efforts are hampered by the resistance to considering the Rohingya emergency as a protracted situation. As a

result, the financing and programming remain within an emergency framework that precludes opportunities to develop a sustainable health system and workforce.

7.2. Inter-institutional innovations and recommendations (exo-system)

Innovations and lessons learned

- **Inter-agency and cross-system coordination:** The GoB's strong role in coordination of the response has facilitated a complementary approach that has encouraged the inclusion of local and national NGOs, at times challenging the international humanitarian system.[71] Local and national humanitarian actors have organized through the Cox's Bazar Civil Society Organizations Forum and have pushed for localization to be central to the response, building on international commitments such as the Grand Bargain.[71] However, our findings revealed additional coordination and service delivery challenges associated with this complex system of distinct, yet aligned national and humanitarian health systems. Improvements to coordination across organizations and systems are needed to ensure continuity of care and equitable access to care for displaced and host populations.
- **Investments in health information systems:** Improvements in surveillance and health information systems within health organizations and across the health sector, particularly in response to the COVID-19 pandemic, revealed opportunities to improve the timeliness of public health responses to emerging health needs. Several health organizations reported that the adoption of health technologies has accelerated the efficiency of data collection and monitoring systems. The establishment of a community-based disease surveillance system that leveraged CHWs and volunteers strengthened disease surveillance for COVID-19 and other diseases.
- **Standardized healthcare protocols and guidelines:** The Health Sector, co-led by the GoB and WHO, has coordinated efforts to align humanitarian and national health protocols and develop a minimum essential services package to promote consistency.

Recommendations

- **Minimize direct and indirect costs of healthcare utilization:** Although health services within the camps were available without any charge, refugees noted numerous costs associated with seeking healthcare. These costs were related to the lack of availability of certain (often specialized) services in the camps, barriers to accessing healthcare

(e.g., transportation costs), and seeking services outside of the formal health system due to perceptions that available services were of poor quality. Several strategies for reducing these costs emerged in our research, including covering transportation costs for self-referrals, building trust and rapport with the community to improve perceptions of healthcare services available within the formal health system, and improving the cultural appropriateness of healthcare (e.g., having a translator on-site, adolescent- and women-friendly spaces/services).

- **Improve referral processes:** There were many barriers to referrals for more specialized services. Costs associated with seeking services through the national health system, perceived discrimination, and difficulty obtaining the permissions required to leave the camp presented barriers to completing these referrals, particularly for self-referrals. Few recommendations emerged from this research. However, many key informants and focus group participants identified this as a central obstacle to receiving essential care for more severe and chronic health conditions.

7.3. Intra-institutional innovations and recommendations (meso-system)

Innovations and lessons learned

- **Implementing effective capacity-building models:** Key informants acknowledged the limitations of the training provided to many health providers working in the camps. Providing on-the-job training, clinical consultation by specialists, and ongoing supervision were strategies that were perceived to strengthen capacity and promote sustained changes to clinical practice. Additionally, we identified examples of U.N. agencies partnering with local health professional schools in Bangladesh to integrate humanitarian response training into their curriculum and prepare national health staff for working in a humanitarian context.
- **Inclusion of refugees in the health response:** Most stakeholders described the importance of including refugees in health decision-making and service delivery. Despite policies restricting refugees' right to work, several organizations found innovative ways of engaging refugees in healthcare delivery. Community members perceived health services that had refugee volunteers involved as more acceptable and appropriate. Engagement of refugees should exist across all levels of the health response, including at the community level, as well as in health financing and decision-making.

Recommendations

- **Improve community perceptions of quality of care to promote utilization of health services in the camps:** Poor (perceived) quality of care was a major reason that refugees did not seek health services from facilities within the camps. Health facilities should adopt the factors that were reportedly related to perceptions of quality including having Rohingya volunteers to accompany and/or translate for patients, having staff who treated the refugee patients with respect and took time to understand their health needs, and better community/patient education around appropriate treatments and medication for certain health conditions.
- **Recruit and retain a diverse and qualified health workforce:** Many of the challenges to healthcare delivery related to high rates of staff turnover and difficulty recruiting staff with the necessary qualifications to provide high-quality health services. Key informants recommended improving the incentives and benefits for potential health staff, as well as anticipating future staffing needs to provide sufficient time to recruit health professionals.
- **Provide services for diverse and prevalent health needs:** Refugees and key informants noted emerging health needs that weren't sufficiently addressed within existing health services. These health needs included non-communicable diseases, mental health problems, and emergency care. Often health facilities within the camps didn't have appropriate medication or training to manage these conditions. Patients who were referred to secondary health facilities out of the camps to address these problems often faced significant barriers to receiving this care and thus many of these conditions were left untreated. Improving the capacity of camp-based facilities and providers to respond to prevalent health conditions that can be safely and adequately managed within primary care settings (e.g., some NCD management and mental health conditions) should be prioritized.

7.4. Sociocultural and community context innovations and recommendations (micro-system)

Innovations and lessons learned

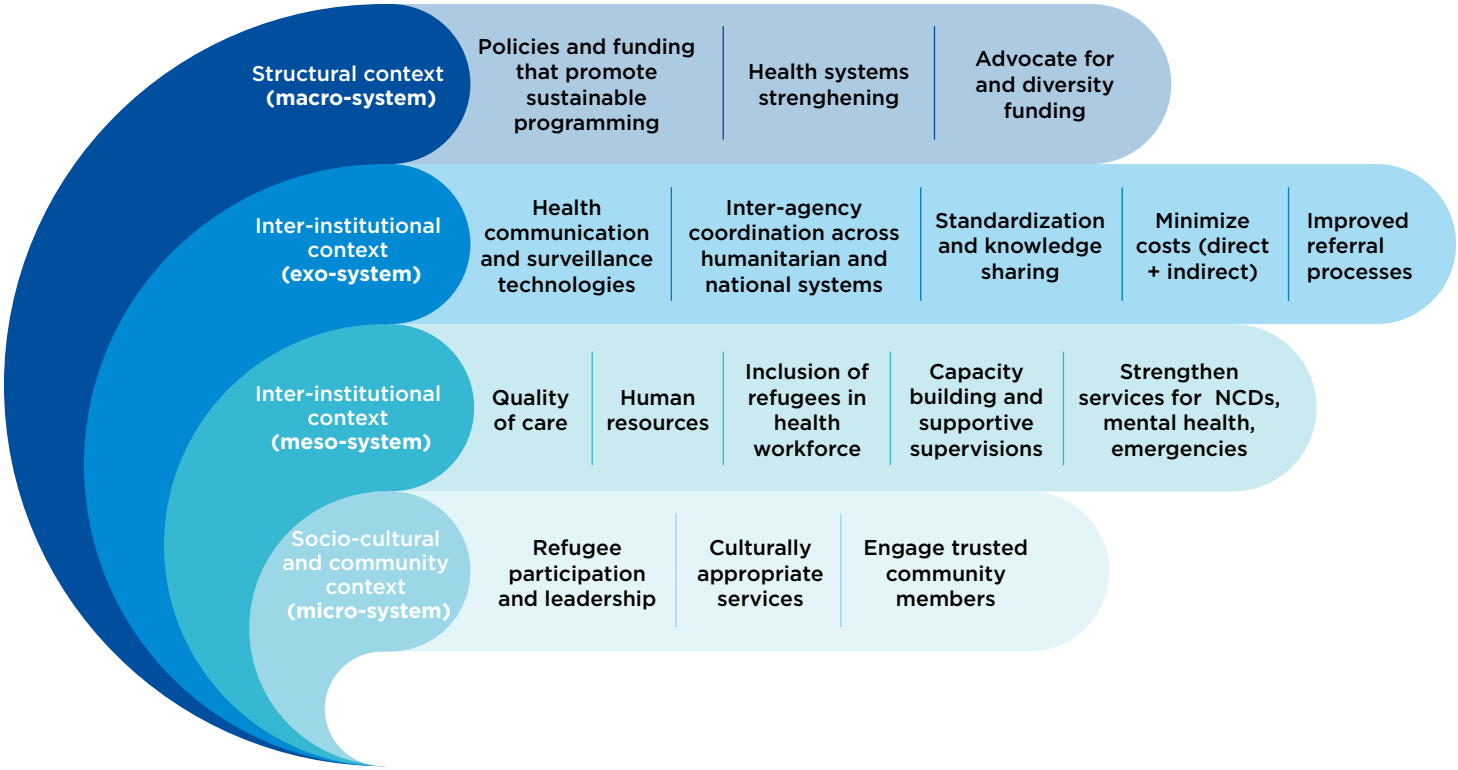
- **Community engagement:** Engaging trusted members of the community – community leaders, traditional healers, Rohingya health volunteers – was seen as an essential strategy to promote trust in the health system and utilization of services. We identified several examples of organizations training and partnering with these

community stakeholders who served as liaisons, disseminated health information, conducted health surveillance, facilitated dialogue between the community and health actors, and promoted healthcare utilization for community members when they were ill.

Recommendations

I. **Enhance cultural competency of health providers and the cultural appropriateness of service delivery:** Many of the barriers to health seeking related to service provision that wasn't culturally appropriate. A common example mentioned by focus group discussion participants and key informants was that women and girls often don't feel comfortable receiving healthcare from a male provider. Recommended strategies for addressing these problems include allowing a female accompanier for women and girls seeking healthcare, ensuring that a translator is available to enable communication between the patient and provider, and training providers in culturally appropriate healthcare and respecting Rohingya cultural values.

Figure 12. Multilevel innovations and recommendations for improving the health response in Cox's Bazar



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APPENDICES

1. Data sources and availability

2. Costing data sources

3. Secondary data analysis by source

4. Summary of primary data collection

1. Data sources and availability

Table S1. Demography, epidemiology, and health systems data sources (organized alphabetically)

Source	Description	Population	Date	Data Collection	Geographic Coverage	Disaggregation	Raw Data	Indicators Collected
2019 Host Community and Rohingya Joint Multi-Sector Needs Assessment (J-MSNA)	Contains information about demographics, individuals requiring assistance to perform basic functions, care-seeking, barriers and cost (includes (% of households reporting paying money for health expenditures; % of households reporting going into debt to pay for health/medical expenses in past 30 days)	Host community and refugee	Data collected 7 August to 9 September, 2019	Household survey using simple random sampling of Open Street Map shelter footprints, n=1,321 households comprised of 7,832 individuals, 95% CI	Host: 11 Unions within Teknaf and Ukhiya Upazilas; Refugee: 34 refugee sites in Ukhiya and Teknaf	Age, gender, location	Yes	Average household size per camp/union; % of households by period of arrival in Bangladesh (before 2016, Jan 2016-July 2017, August 2017 or after); % of households by highest level of education obtained, % of individuals reported as requiring assistance to complete daily activities by gender and age; % of households with at least one member reported as having illness serious enough to require medical treatment in the last 30 days by camp/union, gender, age; of those who had serious illness, % who sought treatment; of those who had serious illness and sought treatment, % by treatment location; of those who had serious illness and sought treatment, coping mechanism; % of households reporting paying money for health expenditures by camp/union, % of households reporting going into debt for medical expenditures; % of households reporting being visited by CHW in past two weeks; % of households reporting a pregnant woman; % of households reporting on who decides where a pregnant woman gives birth.
2019 Joint Response Plan for Rohingya Humanitarian Crisis			2019					

Source	Description	Population	Date	Data Collection	Geographic Coverage	Disaggregation	Raw Data	Indicators Collected
Bangladesh Bureau of Statistics (BBS) Sample Vital Registration System (SVRS) 2018	The SVRS is a continuous data collection system by the BBS for generating reliable demographic data to monitor the progress of the indicators of Seventh Five Year Plan and Sustainable Development Goals (SDGs), Human Resource Development, Socioeconomic development and sectoral plans relating to Population and Health. SVRS collects data on births, deaths, marriages, migration, disability and other key demographic indicators on a regular basis and publish reports annually.		2018	A local registrar for each primary sampling unit , collects data about vital events as they occur and records then sends the pre-designed schedules to HQ. Another set of enumerators from the Upazila Statistical Offices visit the PSUs on a quarterly basis and collect retrospective data on all events. The completed schedules obtained from both systems are matched and re-investigated as needed.				Includes Crude Birth Rate (CBR), Crude Death Rate (CDR), Total Fertility Rate (TFR), Infant Mortality Rate , Under Five Mortality Rate (U5MR), Maternal Mortality Ratio (MMR)
Bangladesh Health Facility Survey- Service Provision Availability			2014, 2017	Data collected from randomized sample of 1,548 health facilities throughout Bangladesh. 40 data collection teams with two interviewers. Used facility inventory questionnaires and interviewed healthcare providers. Observations completed where appropriate.		Location (District and Division)		
DHS			**2017-2018**					
GOB/ DGHS Bangladesh EPI Coverage Evaluation Survey 2016		Host Community-Families interviewed with children between ages 12 and 29 months	Data collected Nov 2016 to April 2017	Five questionnaires on different aspects of EPI-household survey with cluster sampling				
GOB/DGHS Health Bulletin 2018	Published yearly by the Management Information System of DGHS		Published yearly, most recently from 2017					
GOB/DGHS Health Facility Registry	Facility registry maintained by DGHS of private and government health facilities		Ongoing	*Data collection method is unknown				
GOB/DGHS Health Information Dashboard	Online dashboard administered by the GOB/DGHS reporting key indicators, divided by month/year and division/district		Ongoing	*Data entry into the online dashboard is unknown. Completeness of data unknown.				

Source	Description	Population	Date	Data Collection	Geographic Coverage	Disaggregation	Raw Data	Indicators Collected
GOB/DGHS Reproductive, Maternal, Newborn and Child Health Scorecard	Online scorecard administered by the GOB/DGHS		Ongoing	*Data collection for the scorecard is unknown				ANC 4
Health Sector Bulletins	Report published periodically by Health Sector with information on outpatient visits, surveillance, % of facility deliveries		Ongoing	% of deliveries in health facilities is collected by the Health Sector CHWG			No	Number of outpatient consultations
Health Sector Mapping of Health Facilities in Camps			May 2022					
Health Sector Minimum Package of Essential Health Services for Primary Healthcare Facilities in the FDMN Camps			January 2019					
Health Sector Quarterly Monitoring Assessment	Quarterly monitoring of camp health facilities *Do not have access to data yet	Health Sector field coordinators and camp health focal points visit all PHCs and health posts in camps for quarterly monitoring assessments	Ongoing-Quarterly					
icddr,b: Demographic Profiling and Needs Assessment of Maternal and Child Health Care	Includes population pyramid, age distribution, education, number of children of married women who have ever been pregnant, rate of pregnancy, age distribution of pregnant women, care-seeking for ANC and delivery		Published July 2018; data from early 2018	Cross-sectional quantitative design, tools included household listing form, structured questionnaire for women of reproductive age (13-49) (n=3050 households). Data collectors from Cox's Bazar host community. Multistage sampling using probability proportional to size, spinning pen method	11 camps in Cox's Bazar, located in Ukhia and Teknaf Upazilas		No	

Source	Description	Population	Date	Data Collection	Geographic Coverage	Disaggregation	Raw Data	Indicators Collected
IOM Needs and Population Monitoring- Site Assessment	Core information collected is population size by location, geographic information, presence of vulnerable groups	Refugee	Conducted quarterly- most recent has data from collection period 21 Aug to 10 Oct 2019	Data collectors conduct approximately 2,000 interviews with key informants	Camps and refugees in host community		Yes	Total individuals and households by camp; average family size by camp; Nearest health facility (≤15 min walk; 16-30 min walk; 31 min-1 hr walk; >1 hr walk); Health access problems (aware of health services Y/N, insufficient types of health services, waiting times, physical access, accessible time, services not working, health facility staff, staff behavior, lack of female healthcare staff, no medicines); who faces additional problems (elderly persons, men, women, persons with disabilities, pregnant and lactating women, children); problems accessing health facilities during night
ISCG Health Facility and Service Availability Mapping/ ISCG Health Facility Registry	Extensive health facility mapping in March 2018 (limited information about beds); limited registry reporting in November 2018 that includes more comprehensive information about facility beds	*Unclear how data was collected	March 2018, November 2018					
MICS			**2012-2013**					
National Institute of Population Research and Training, icddr,b, and MEASURE Evaluation Bangladesh Maternal Mortality and Health Care Survey 2016		Host community	August 2016- February 2017	Household based surveys were disseminated n=298,284 households, 321,214 women. Additional surveys were also disseminated - Women's, Subset A, Subset B, Verbal autopsy, and community questionnaire.		Location (by Division)		
NCD Core Group- NCD Service Availability Assessment	90 of the 569 health facilities in Cox's Bazar to put together a comprehensive picture of human resources, training status, health services, essential medicines, tools and technologies, referral system for emergency and palliative conditions. Based on the WHO Package of Essential Noncommunicable Diseases Interventions		2019					*Do not yet have access to data

Source	Description	Population	Date	Data Collection	Geographic Coverage	Disaggregation	Raw Data	Indicators Collected
Prevalence of Diabetes and Prediabetes and their Risk Factors about Bangladeshi Adults: A Nationwide Survey- 2014 WHO Bulletin	Analysis by Akter et al. in March 2014 WHO Bulletin	Host community	Data from 2011 DHS	Two-stage, stratified cluster sample of households, sampled from census enumeration areas. Data used from DHS 2011				
SRH Working Group Service Data	Data collected by submission from SRH service providers through SRH Working Group		Ongoing-Monthly	Routine service provider reporting				Includes number of SRH facilities, number of 24/7 SRH facilities, number of facility-based deliveries, number of c-sections, number of maternal deaths
UNHCR/RRRC Family Counting	Data from the joint UNHCR and GoB "family counting exercise". Contains demographic information on age, time of arrival, and special groups by geographic area	Refugee	Data collected up until 30 Sept 2019			Age, gender, location	Yes	# of individuals and families living in each block by age and gender; # of individuals and families living in each block by arrival date (before 9 Oct, 2016, 09 Oct, 2016-24 Aug, 2017, 25 Aug, 2017-31 Dec, 2017, 01 Jan, 2018-31 Dec, 2018, 01 Jan, 2019 to 30 Sept, 2019; # of families with a person with a disability by block; # of families with people with a serious medical condition by block
WHO Public Health Situation Analysis	Contains health status (morbidity) data from EWARS and provider mapping		August 2017-May 2018	Summary data based on EWARS, health facility mapping, results from nutritional assessments/ vaccination coverage estimates	Cox's Bazar	No disaggregation for morbidity data	No	Causes of disease, demographic data
WHO Weekly Epidemiological Highlights	Weekly reporting from the MOH, WHO, and Health Sector with information from EWARS	Refugee	Published weekly and includes from that calendar year- most recent is 21-27 Oct 2019	Data entered in EWARS Bulletins report on the number of facilities entering so we can get a sense. For example, for the week of 21-27 Oct, 2019, 139 of 187 health facilities reported data	Cox's Bazar- All camps	Age, gender, location		Mortality: # of deaths per location (community/public place, health facility, home); # of deaths per cause of death; # of deaths by sex; # of deaths by camp; Morbidity: # of cases by disease; time trend in consultations for key diseases; % of cases by location, sex, and age (under five or over five)
Myanmar Data Sources								
DHS 2015-2016 Survey Myanmar		No evidence that this includes Rohingya populations						
Myanmar 2019 Humanitarian Response Plan (Jan-Dec 2019)	United Nations and partners	People in need, defined as: IDPs, IDP returnees/ resettled/ locally integrated; non-displaced stateless people in Rakhine, other vulnerable crisis affected	Dec 2018	Monitoring data from 2018	Kachin, Shan, Rakhine (Northern, Central, Total), Kayin	Sex Age group (children, adult, elderly)		Limited demographic data
MICS Myanmar 2009-2010		No evidence that this includes Rohingya populations						

Source	Description	Population	Date	Data Collection	Geographic Coverage	Disaggregation	Raw Data	Indicators Collected
2014 Myanmar Population and Housing Census		Rohingya populations were excluded from this census						

2. Costing Data Sources

Name of first author	Setting	Services	Unit cost (USD)
Jo Y, 2019	NGO and government, outpatient	Antenatal care	0.84-3.41
Zeng, 2017	NGO, mostly outpatient	13 health services, ANC, PNC, diarrheal, ARI, integrated management of childhood illness, sexually transmitted infections, respiratory tract infections, TB, limited curative care, immunization, FP, normal delivery, and C-section	7.03, 4.57, 1.53, 2.02, 4.70, 3.56, 41.65, 4.30, 3.56, 41.65, 4.30, 2.23, 0.72, 29.4 and 114.83
Sultana 2017	Government facilities, outpatient	Group PNC	59.52
Alam 2010	NGO	Inpatient: C-section, dilation & curettage, menstrual regulation, normal delivery. Overall inpatient per case Overall outpatient	108, 43, 14, 14. 66.96 9.83

For health services in NGO facilities, there is some data on the cost of providing maternal and child health services **in the host communities**. Table 3 below lists some costing data found from the literature. However, there is **little information** on the cost of health services in refugee camps.

3. Secondary Data Analysis by Source

Demographic and Disease Profile of the Host Population

Demographic Indicators	Definition	The Bangladeshi host community	Source	Date
Age	**median age**			
Household Size	Continuous total number	4.2	Bangladesh Sample Vital Statistics	2018
Education	Gender by highest level completed.	68.8% of women and 72.5% of males over the age of 5 are literate	Bangladesh Sample Vital Statistics	2018
Religion	Categorical	88.4% are Muslims, remaining 11.6% belong to Hinduism , Buddhism, and Christianity	Bangladesh Sample Vital Statistics	2018
Crude Birth Rate	Annual number of births per 1,000 population	21.9	DHS	2015-2017
		18.3 95%CI (17.97, 18.63)	Bangladesh Sample Vital Statistics	2018
Marital status				
Age Specific Fertility Rates	Annual number of births to women of a specified age or age group per 1,000 women in that age group.	check notes	DHS	2015-2017
Total Fertility Rate	The number of children that would be born per woman if she were to live to the end of her childbearing years and bear children at each age in accordance with prevailing Age Specific Fertility Rates	2.3	DHS	2015-2017
		2.05	Bangladesh Sample Vital Statistics	2018
Age at first marriage	Women and men who were first married or lived with a spouse or consensual partner			
Age at first birth	The median age at first birth among women age 25-49			
Urbanicity	Percentage of total population living in urban areas			
Population Pyramid	Sex and Age disaggregated	Graph	Bangladesh Sample Vital Statistics	2018
Epidemiologic Indicators	**Definition**	**The Bangladeshi host community**	**Source**	**Date**

Crude mortality rate	Crude death rate per 1,000 population	5	Bangladesh Sample Vital Statistics	2018
Infant mortality	Deaths per 1,000 live births	22 95% CI (21.63, 22.37)	Bangladesh Sample Vital Statistics	2018
Under-five mortality	Deaths per 1,000 live births	29 95% CI (28.59, 29.41)	Bangladesh Sample Vital Statistics	2018

Demographic and Health Survey (DHS) 2014

Demographic and epidemiologic indicators

Table S2.1 Demographic and epidemiologic indicators for Bangladesh and Chittagong, 2008 - 2013

	Bangladesh	Chittagong
Age in Years weighted mean (95 CI)	27 (26.7 - 27.3)	25.6 (25 – 26.2)
Highest Educational Level Attained weighted proportion		
No Education or Preschool	34%	32%
Primary	32%	33%
Secondary	26%	27%
Higher	8%	7%
Total	100%	100%
Religion** weighted column proportion		
Muslim	90%	86%
Hinduism	8.3%	6%
Buddhism	1.3%	7%
Christian	0.2%	0.3%
Total	100%	100%
Household Size weighted mean	5.6 (5.5- 5.7)	6.1 (5.9- 6.3)
Urbanicity percent urban	27% (25-30)	31% (25-36)
Age Specific Fertility Rates Per 1000 Women		
15 - 19	117	130
20 - 24	142	177
25 - 29	110	117
30 - 34	59	60
35 - 39	22	27

	Bangladesh	Chittagong
40 - 44	4	8
45 - 49	5	12
Crude Birth Rate (total number of births 2013 - 2008)	8,092 (7,508 – 8,675)	1,747 (1550 - 1,945)
Mean Age At First Marriage*	15.8 (15.7 – 15.9)	16.3 (16.1 - 16.6)
Mean Age At First Birth	17.9 (17.7 – 18)	18 (17.9 - 18.4)
Mean Age At Childbearing	24.9 (24.7 - 25.1)	25.2 (24.7 – 25.7)
Total Fertility Rate	2.3 (2.25 - 2.36)	2.7 (2.5 – 2.8)
Infant Mortality	38 (33- 43)	36 (28 - 45)
Under-Five Mortality	46 (41 - 51)	50 (38 - 62)
** only women religion		

Table S2.2 Demographic and epidemiologic disaggregated by gender for Bangladesh and Chittagong, 2008 - 2013

	Bangladesh		Chittagong	
	Male	**Female**	**Male**	**Female**
Age In Years Weighted Mean (95 CI)	27.4 (27.1- 27.7)	26.6 (26.3- 26.9)	25.7 (25.1- 26.4)	25.4 (24.8- 26.1)
Highest Educational Level Attained Weighted Proportion				
No Education	32%	35%	31%	34%
Primary	33%	31%	35%	31%
Secondary	24%	27%	25%	30%
Higher	11%	7%	9%	6%
Total	100%	100%	100%	100%
Infant Mortality	36 (30 - 44)	39 (31 - 48)	33 (20 - 46)	40 (23 - 56)
Under-Five Mortality	44 (37 - 52)	48 (39 - 57)	47 (28 - 66)	52 (37 - 69)

Figure S2.1a Population Pyramid, Bangladesh

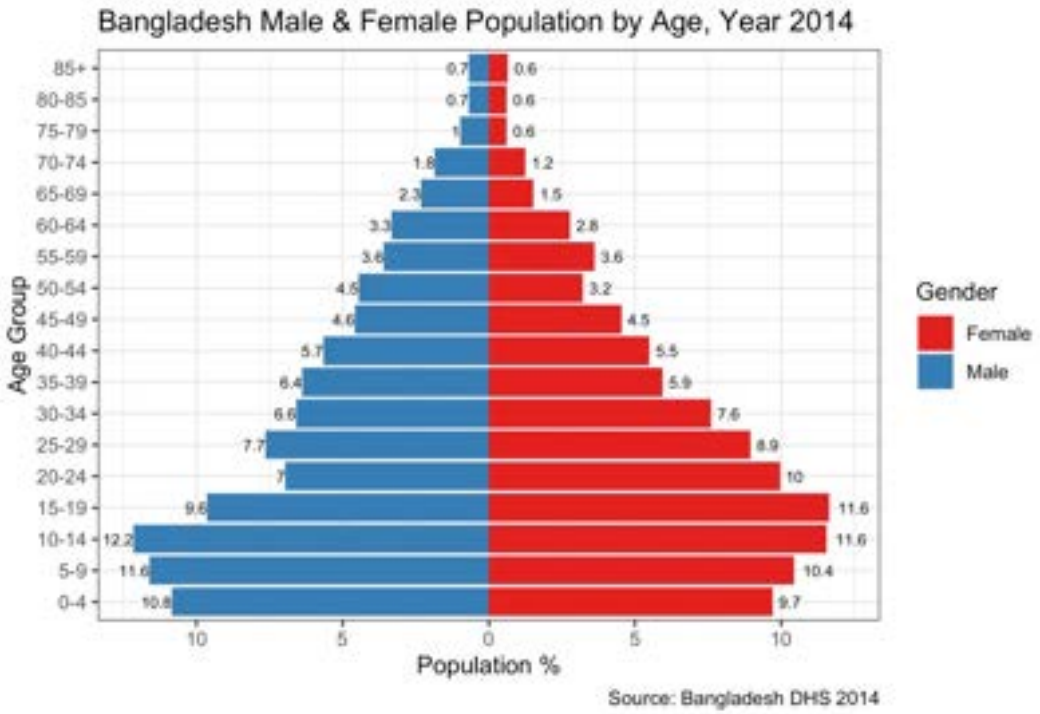


Figure S2.1b Population Pyramid, Chittagong

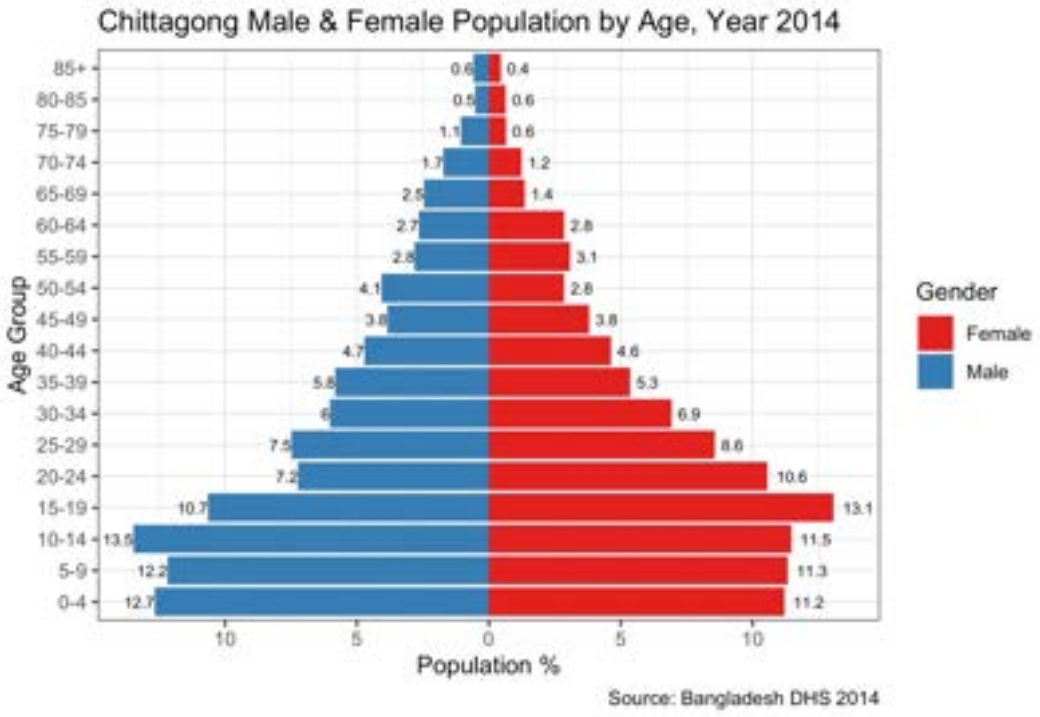


Figure S2.2a Age-specific fertility rates, Bangladesh

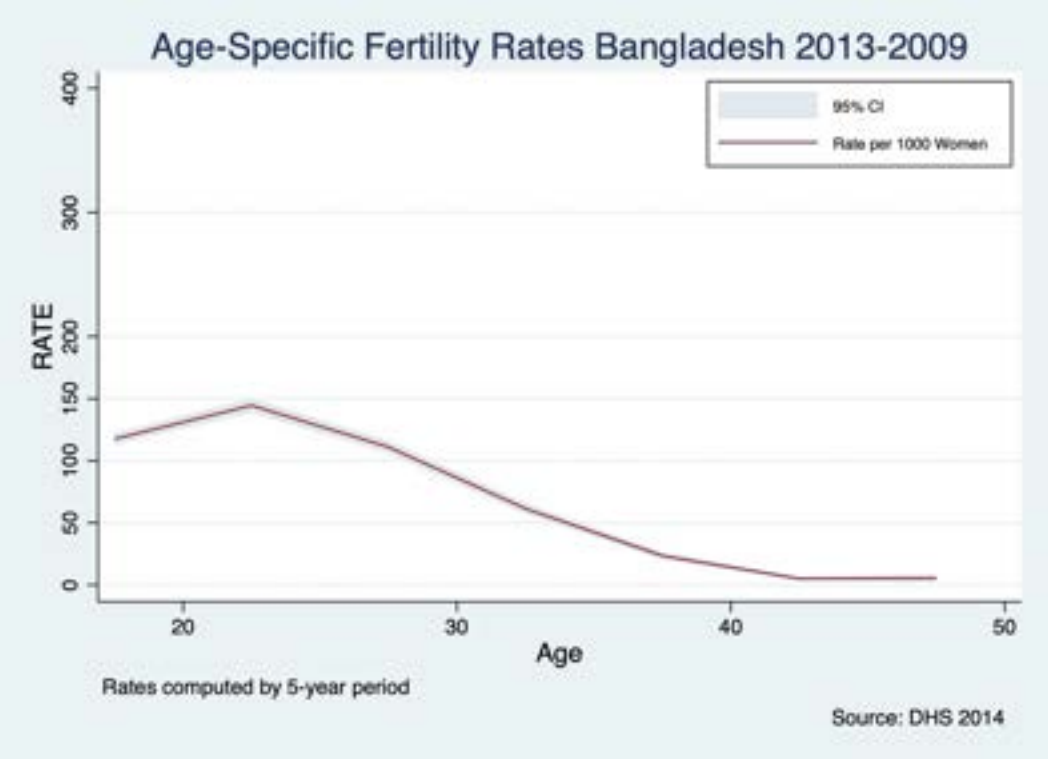


Figure S2.2b Age-specific fertility rates, Chittagong

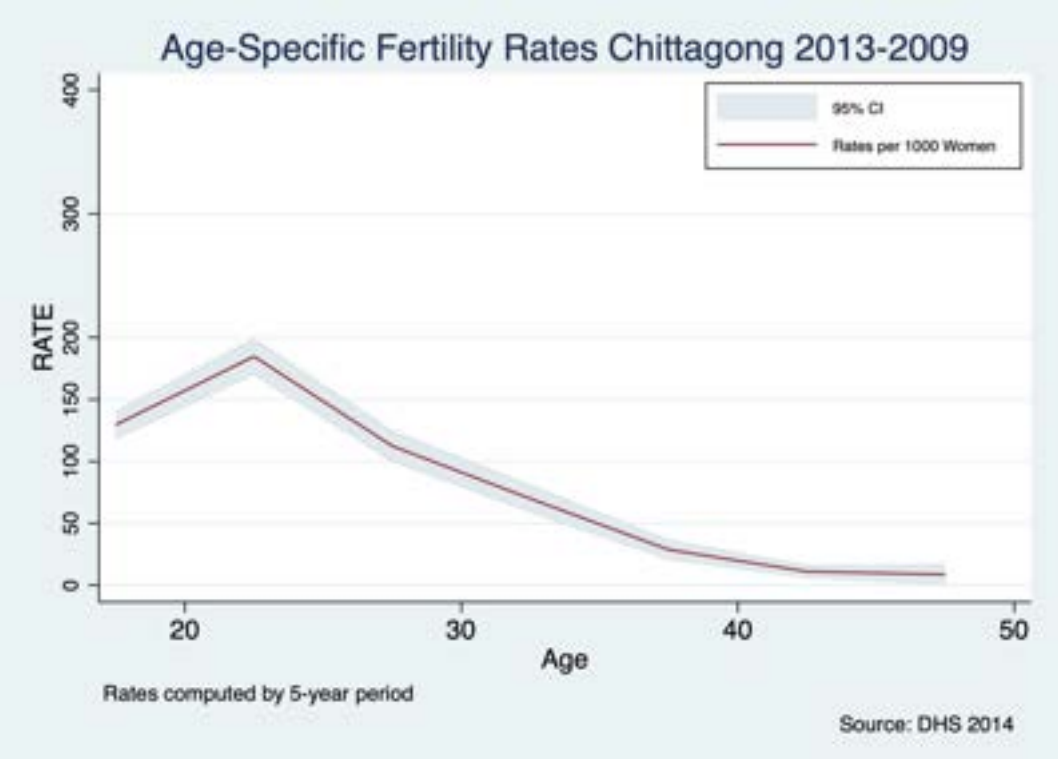


Figure S2.3a Total fertility rates, Bangladesh

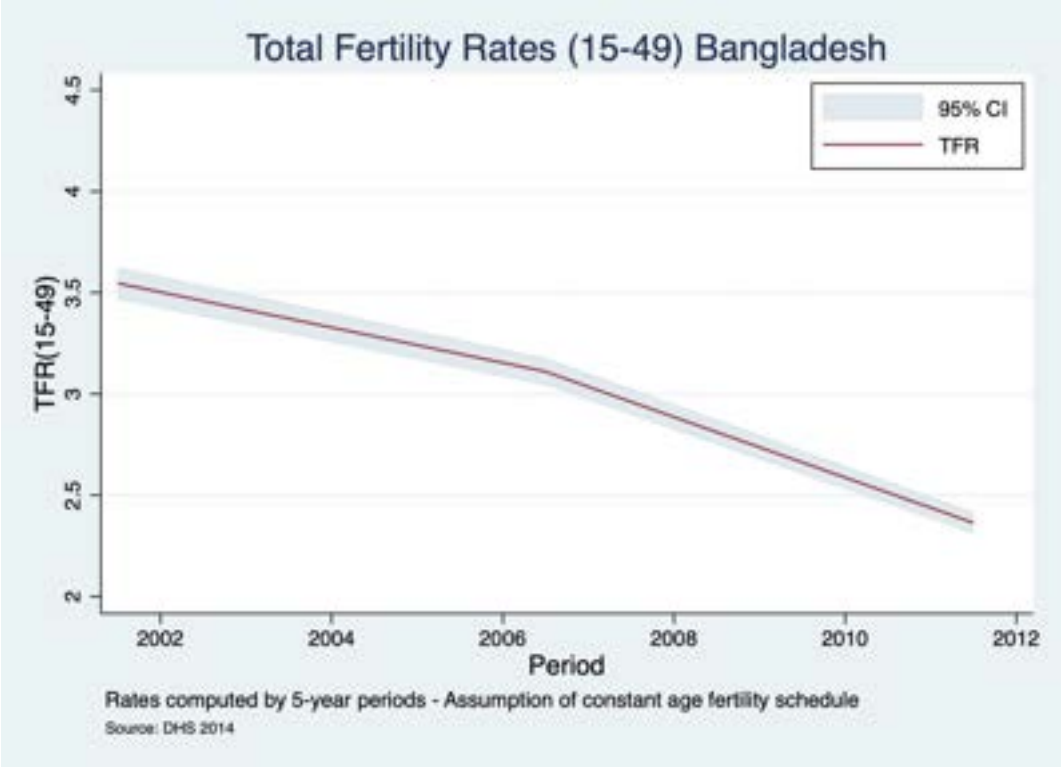


Figure S2.3b Total fertility rates, Chittagong

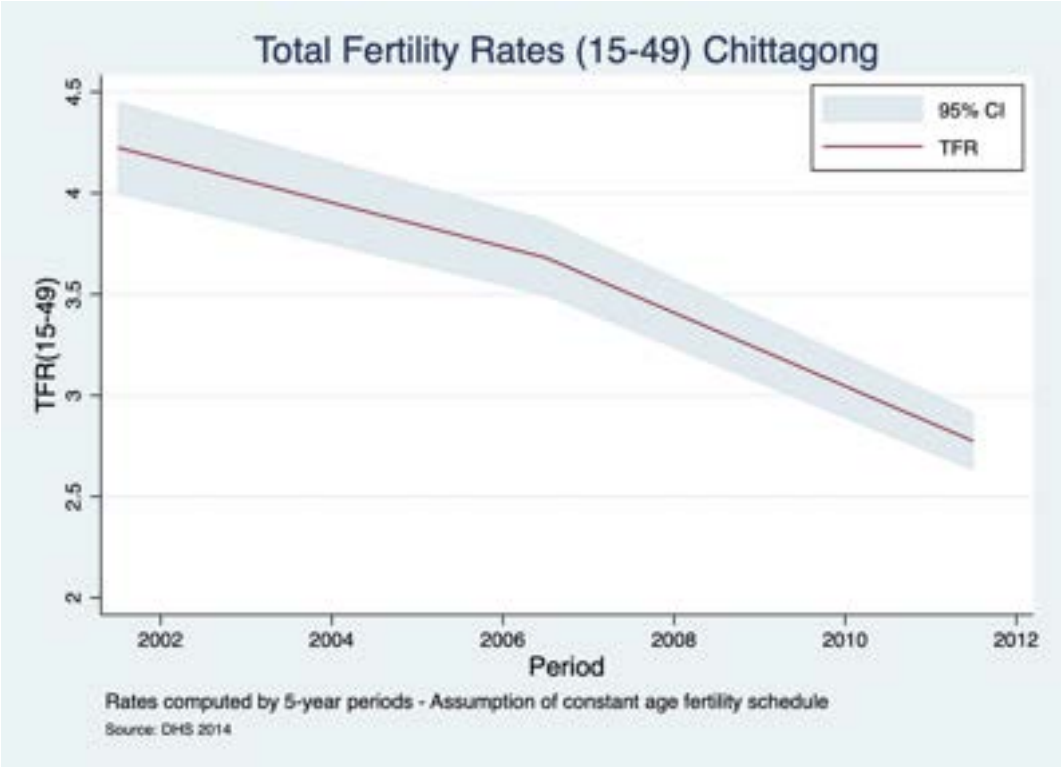


Figure S2.4b Under-five mortality rate, Bangladesh

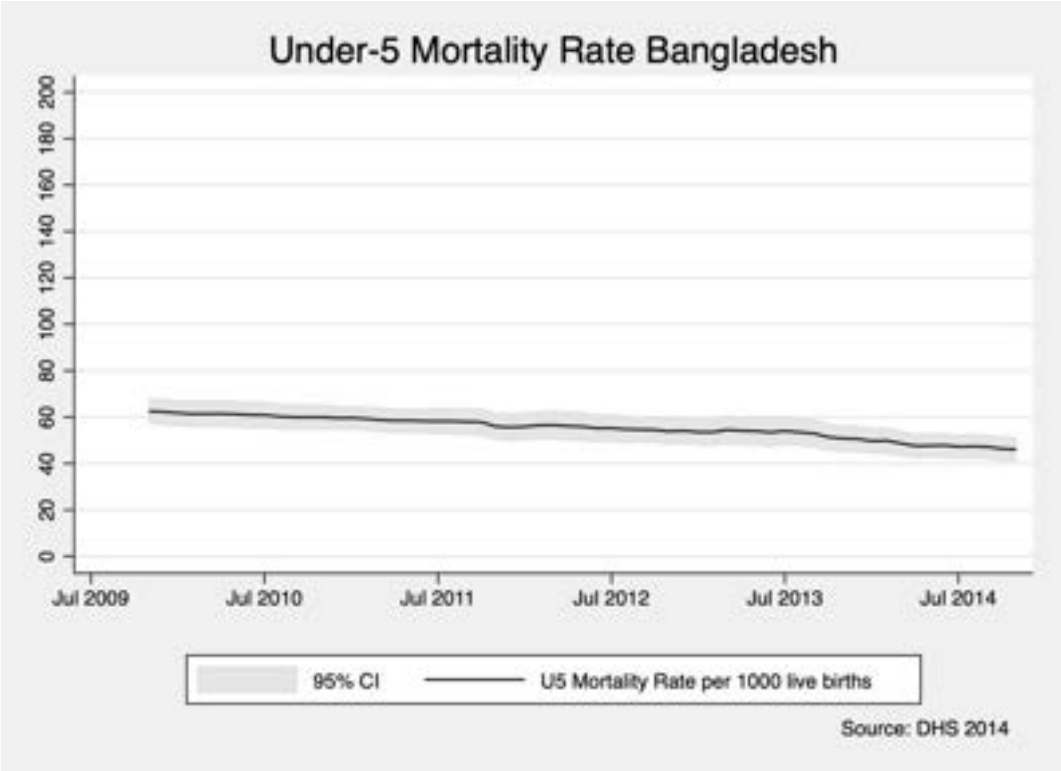


Figure S2.4b Under-five mortality rate, Chittagong

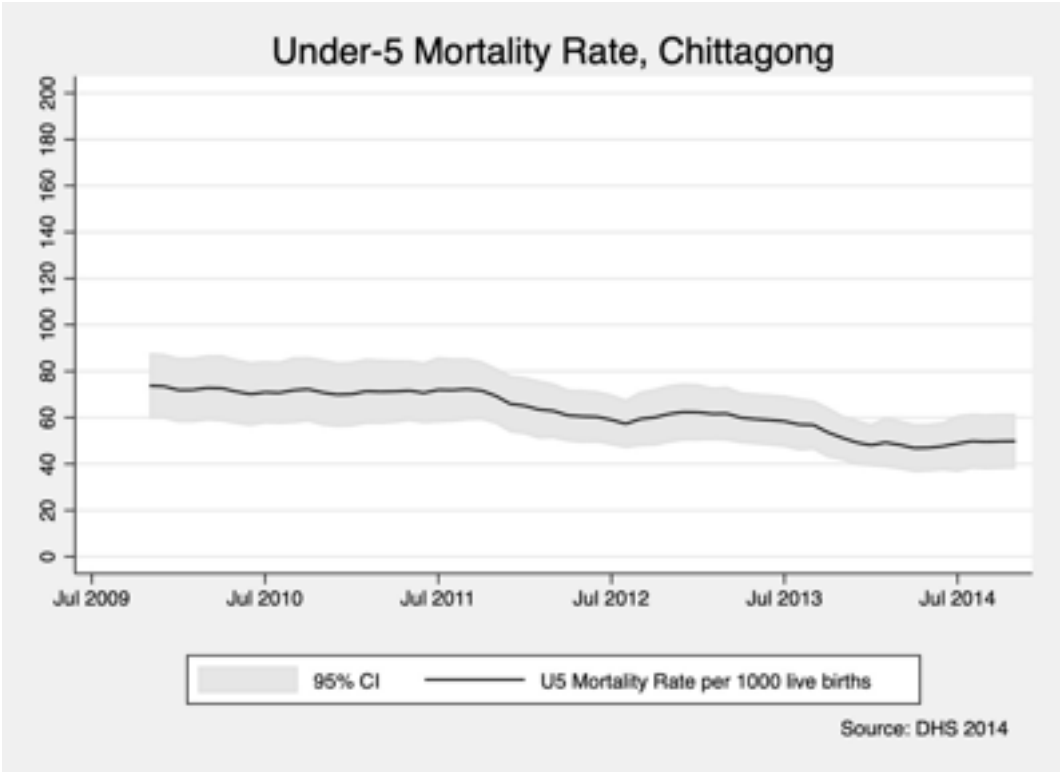


Figure S2.5a Infant mortality rate, Bangladesh

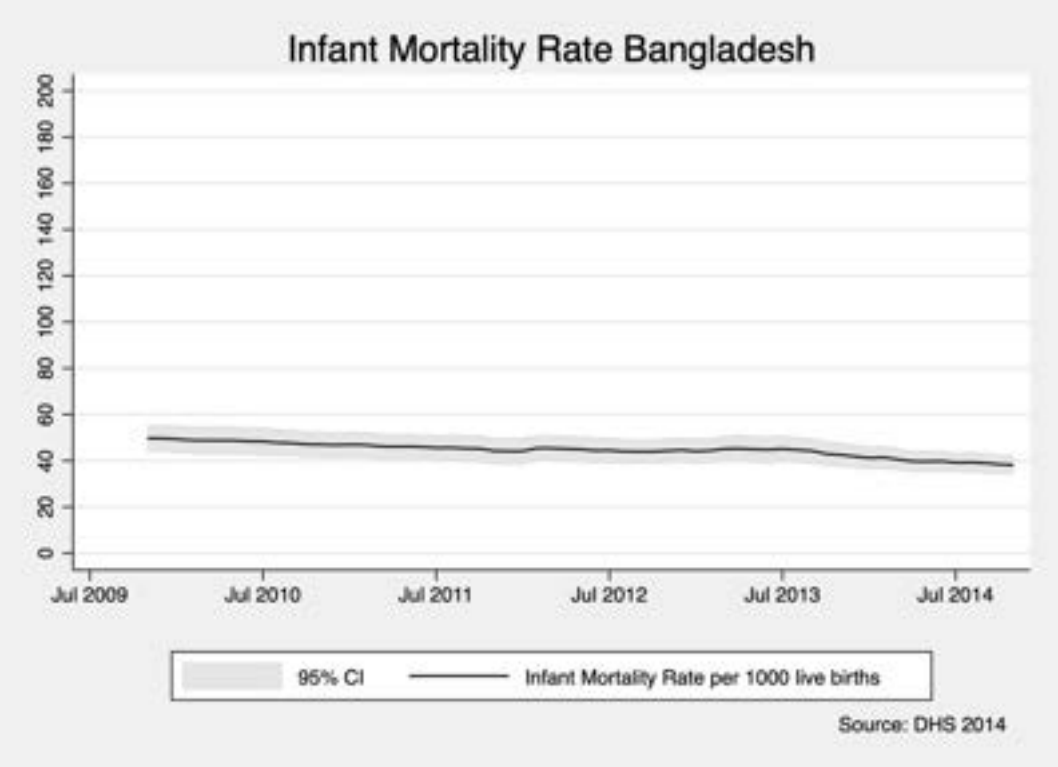
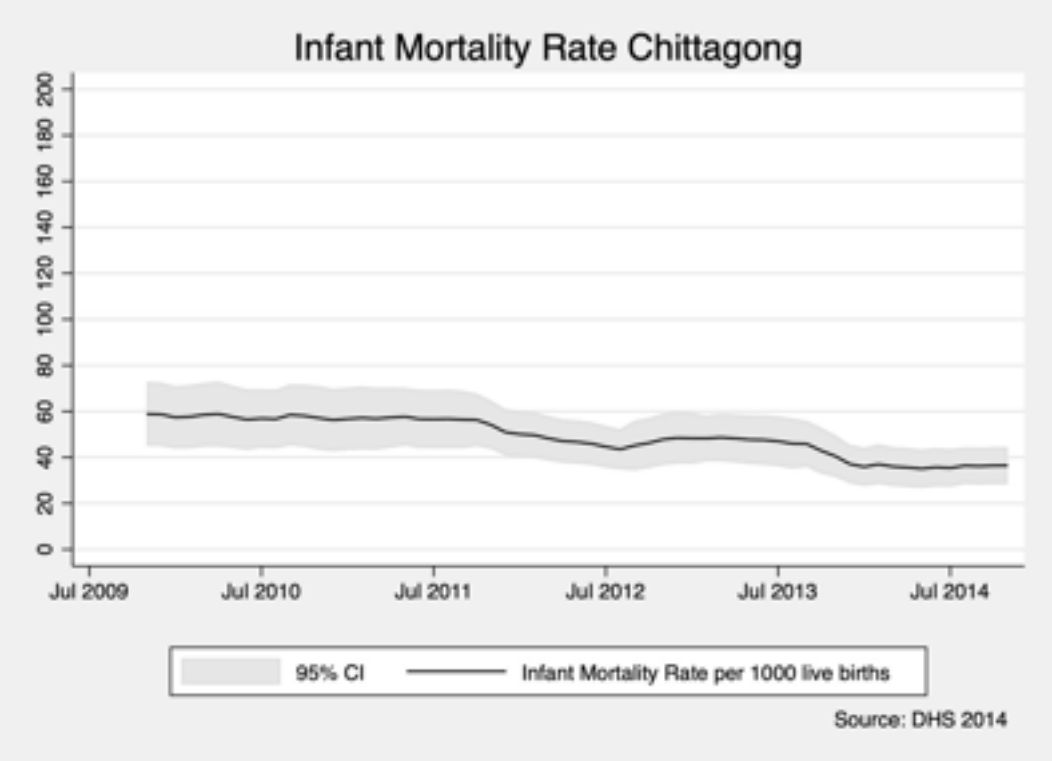


Figure S2.5b Infant mortality rate, Chittagong



Multiple Indicator Cluster Surveys (MICS) 2019

Demographic and epidemiologic indicators

Table S2.3: Demographic and epidemiologic indicators for Bangladesh and Chittagong, 2014 - 2019

	Bangladesh	Chittagong	Cox's Bazar
Age in Years weighted mean (95 CI)	28.9 (28.8 - 29)	27.2 (26.9 – 27.4)	25 (24.3 -25.7)
Highest Educational Level Attained* weighted proportion			
No Education or Preschool	35%	33%	48%
Primary	27%	27%	25%
Secondary	26%	29%	20%
Higher	12%	12%	7%
Total	100%	100%	100%
Religion weighted column proportion			
Muslim	90%	88%	93%
Hinduism	8.5%	7%	4.5%
Buddhism	0.7%	4%	2.3%
Christian	0.4%	1%	0.2
Total	100%	100%	100%
Household Size weighted mean	4.3 (4.2- 4.3)	4.7 (4.6- 4.8)	5.3 (5.1 – 5.4)
Urbanicity percent urban	21.7%	22.5%	21%
Age Specific Fertility Rates Per 1000 Women			
15 - 19	91	89	97
20 - 24	148	166	207
25 - 29	120	142	140
30 - 34	69	80	89
35 - 39	29	35	53
40 - 44	9	8	4
45 - 49	3	3	0

	Bangladesh	Chittagong	Cox's Bazar
Crude Birth Rate (total number of births 2013 - 2008)			
Mean Age At First Marriage	16.9 (16.8 – 16.9)	17.2 (17.1 - 17.3)	17.5 (17.2 – 17.8)
Mean Age At First Birth			
Mean Age At Childbearing	25.7 (25.6 - 25.8)	26 (25.8 – 26.2)	
Total Fertility Rate	2.3 (2.28 - 2.34)	2.57 (2.5 – 2.65)	
Infant Mortality	34 (31- 46)	33 (27 - 39)	35 (17 – 53)
Under-Five Mortality	40 (37 - 42)	40 (34 - 48)	46 (25 – 64)

* household head

Table S2.4: Demographic and epidemiologic disaggregated by gender for Bangladesh, Chittagong, and Cox's Bazar 2014 - 2019

	Bangladesh (Pop size = 260,959)		Chittagong (Pop size = 50,729)		Cox's Bazar (Pop size = 3,948)	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Age In Years Weighted Mean (95 CI)	29 (28.9- 29.1)	28.8 (28.7- 29)	27.1 (26.9- 27.4)	27.2 (27- 27.5)	25.1 (24.2- 25.9)	24.9 (24.1- 25.7)
Highest Educational Level Attained * Weighted Proportion						
No Education	34%	41%	33%	31%	45%	61%
Primary	28%	23%	28%	22%	26%	18%
Secondary	25%	28%	27%	39%	20%	18%
Higher	13%	7%	13%	8%	8%	3%
Total	100%	100%	100%	100%	100%	100%
Religion * Weighted Column Proportion						
Muslim	89.7%	94.0%	86.5%	94.2%	93%	90.2%
Hinduism	9.1%	4.8%	7.7%	3.3%	5%	3.8%
Buddhism	0.8%	0.6%	4.8%	2.3%	2%	6.0%
Christian	0.4%	0.6%	1%	0.2%	0%	0.0%
Total	100%	100%	100%	100%	100%	100%
Infant Mortality	37 (33 - 41)	30 (27 - 33)	38 (30 - 46)	27 (18 - 35)	48 (19 - 77)	22 (5 - 48)
Under-Five Mortality	43 (39 - 47)	36 (33 - 38)	47 (38 - 56)	34 (25 - 43)	57 (27 - 86)	32 (4 - 60)

* household head

Figure S2.6a Population pyramid, Bangladesh

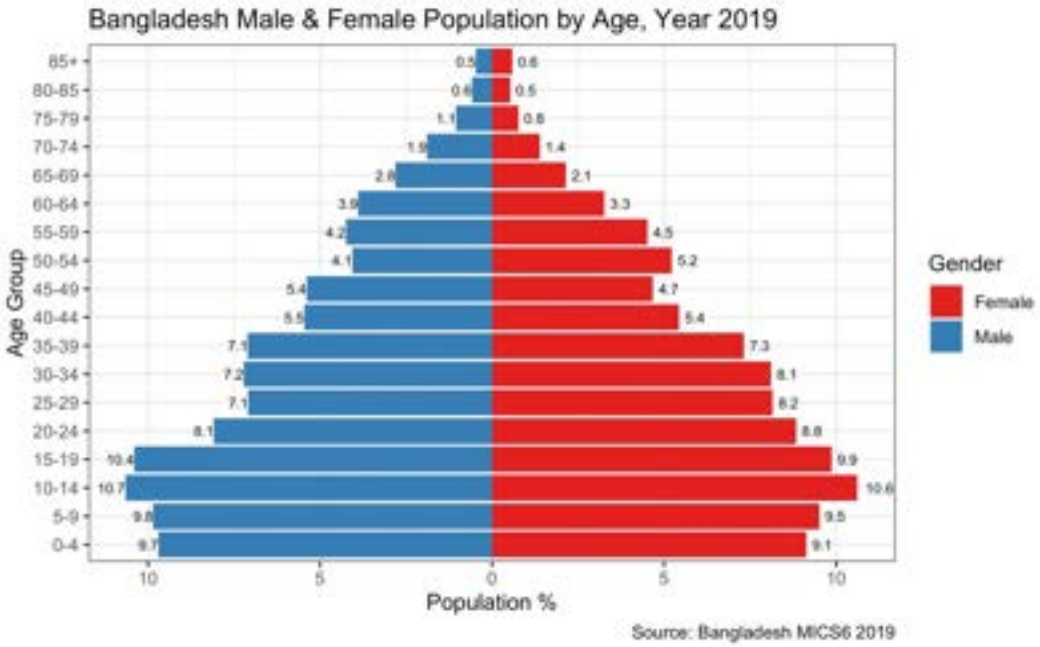


Figure S2.6b Population pyramid, Chittagong

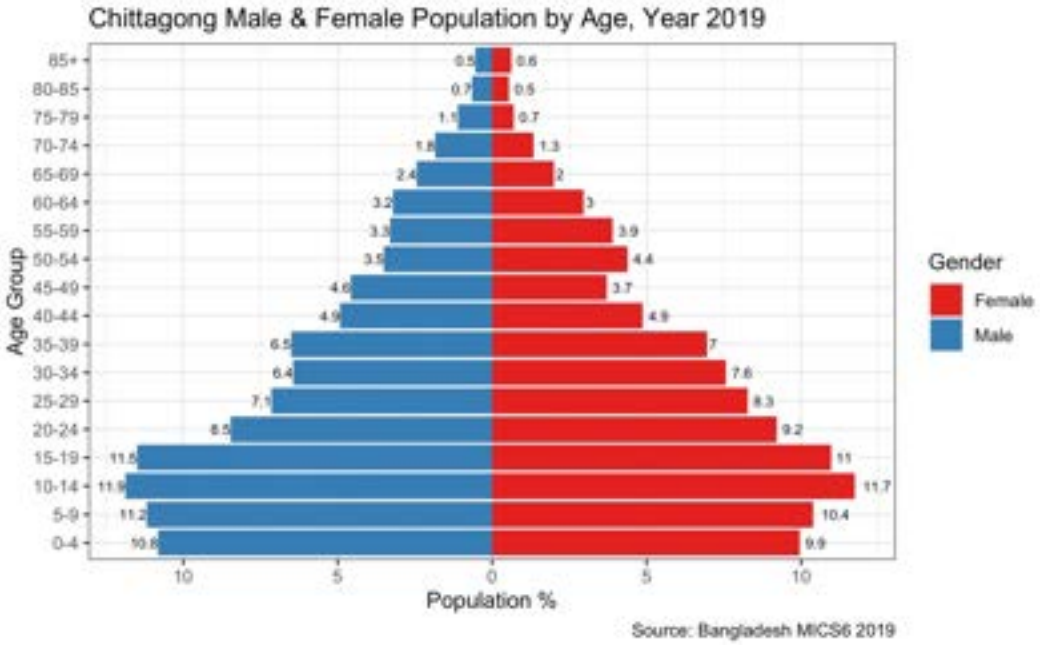


Figure S2.7a. Age-specific fertility rates, Bangladesh

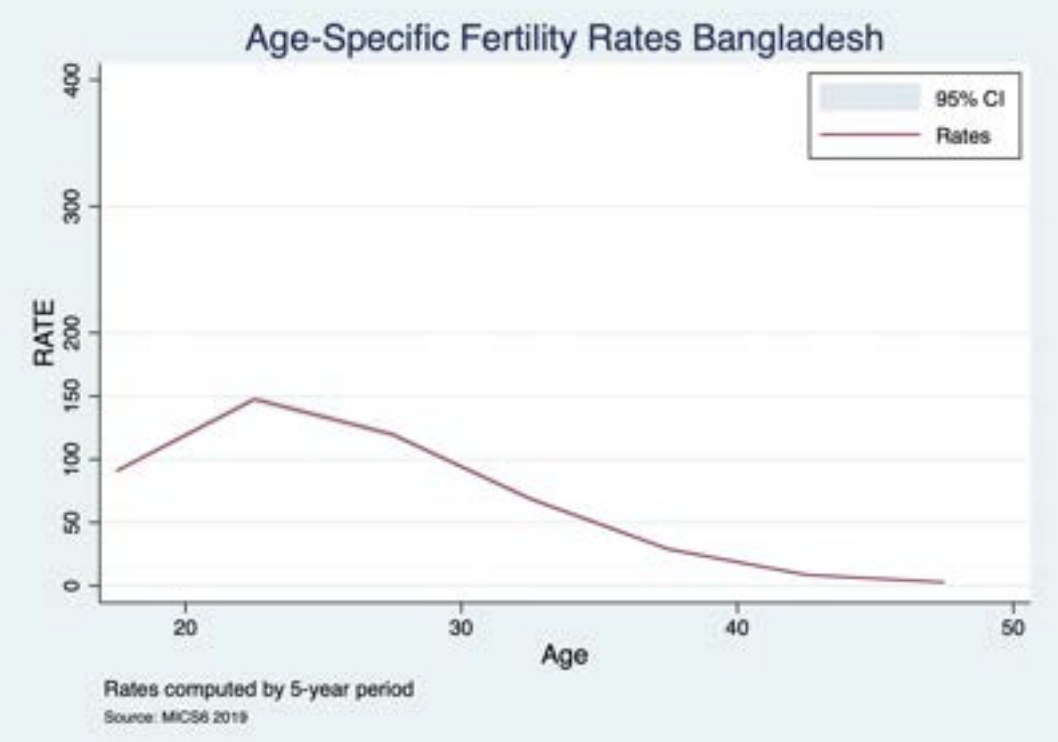


Figure S2.7b Age-specific fertility rates, Chittagong

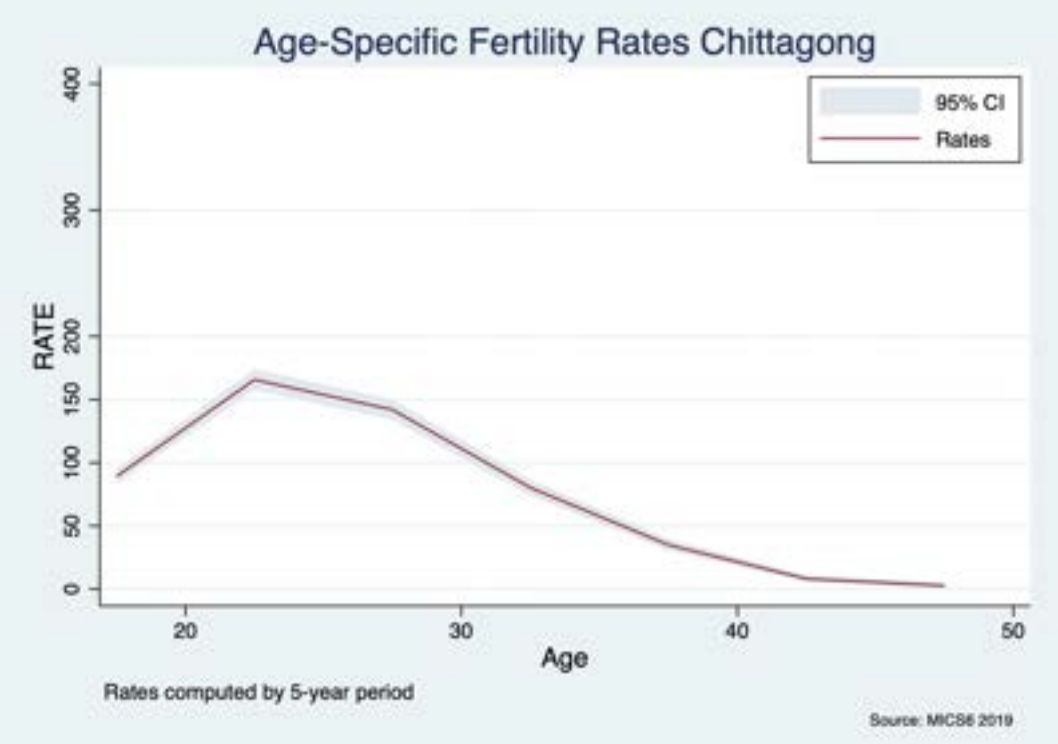


Figure S2.7c Age-specific fertility rates, Cox's Bazar

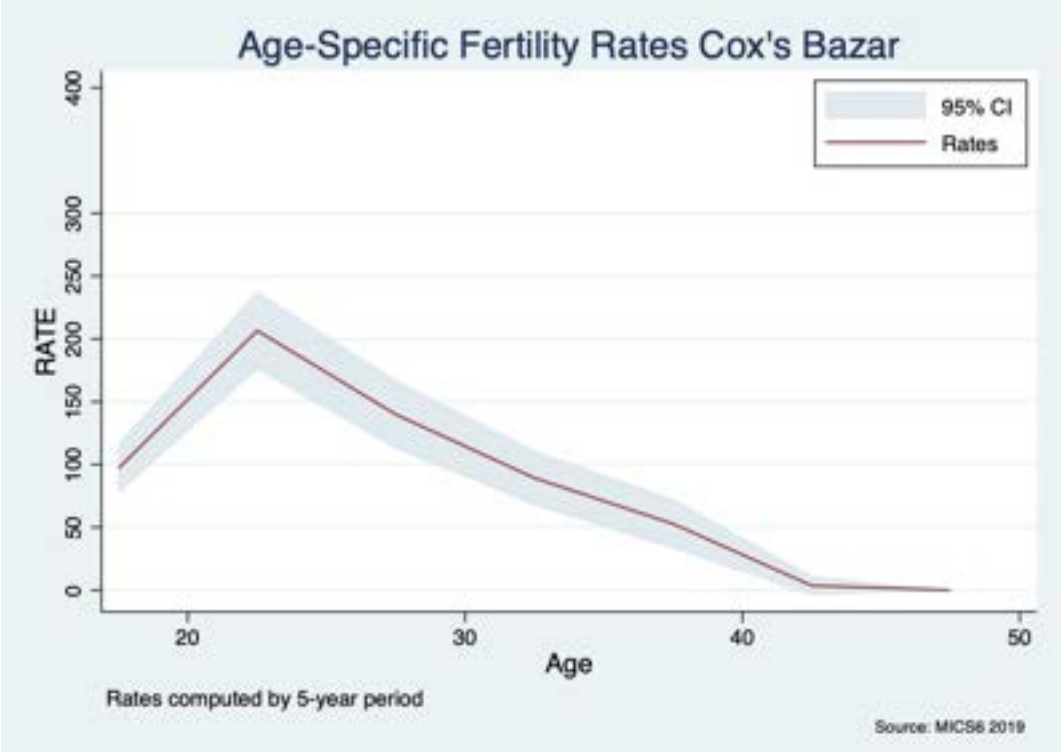


Figure S2.8a Total fertility rates, Bangladesh

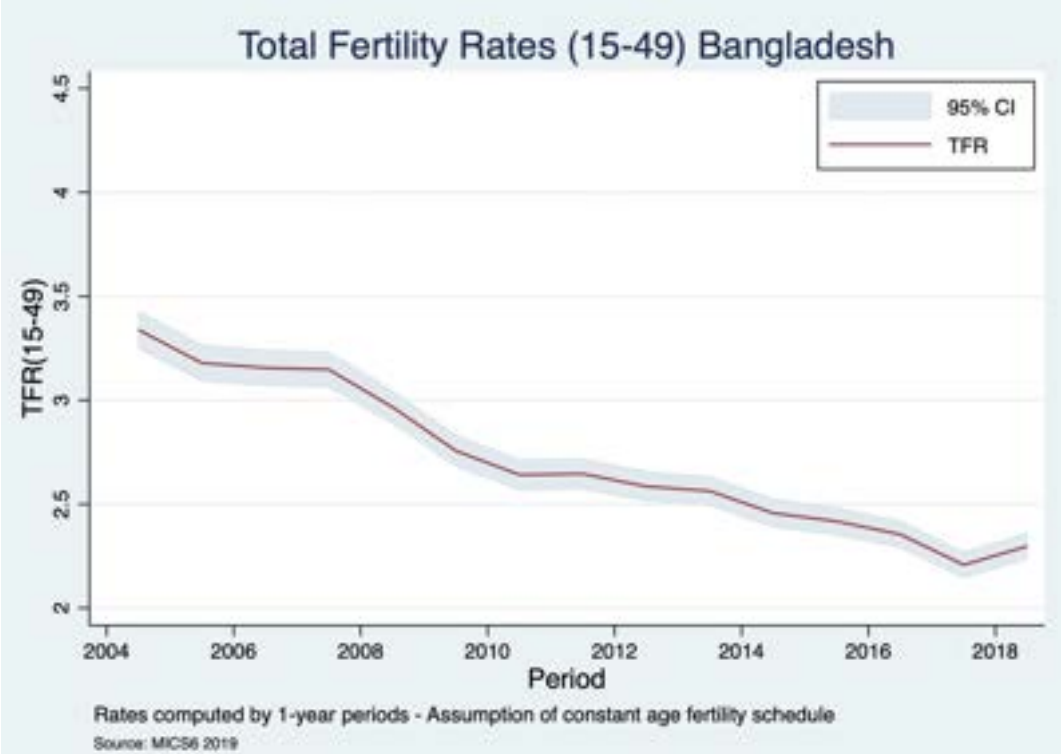


Figure S2.8b Total fertility rates, Chittagong

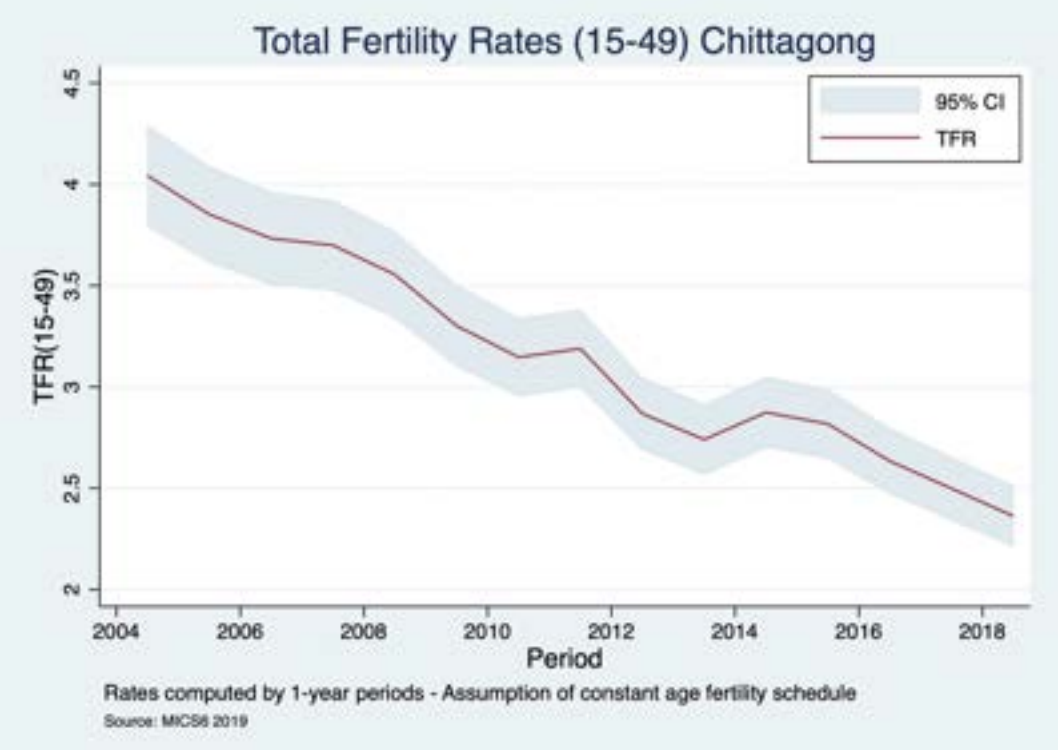


Figure S2.8c Total fertility rates, Cox's Bazar

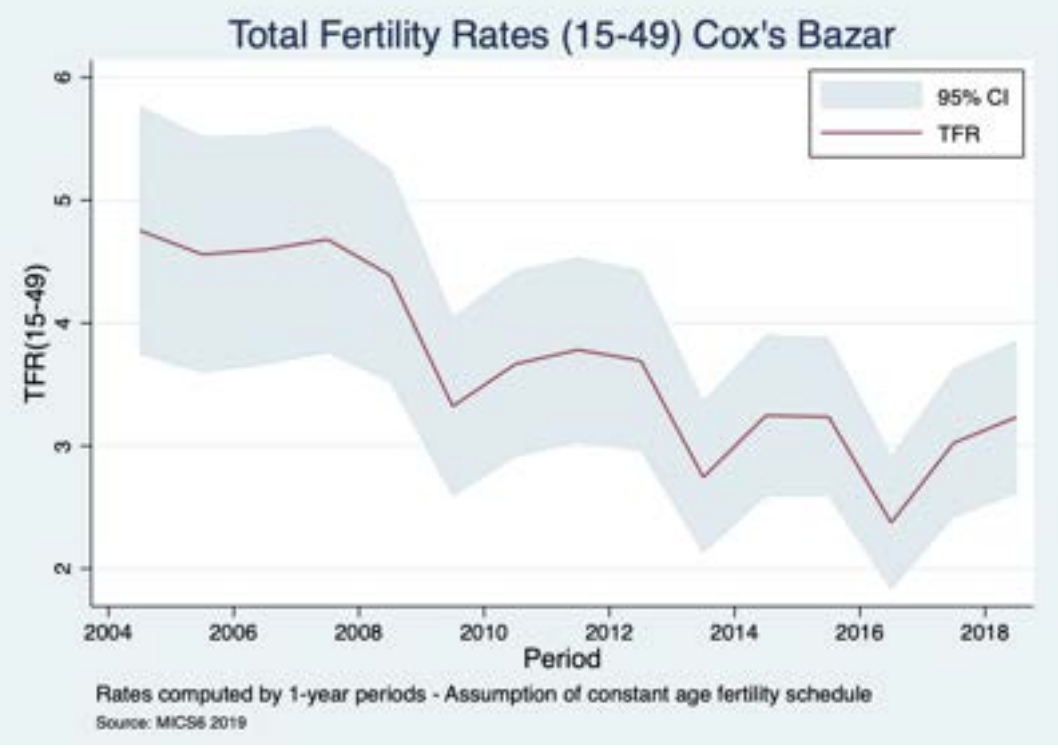


Figure 2.9a Under-five mortality rate, Bangladesh

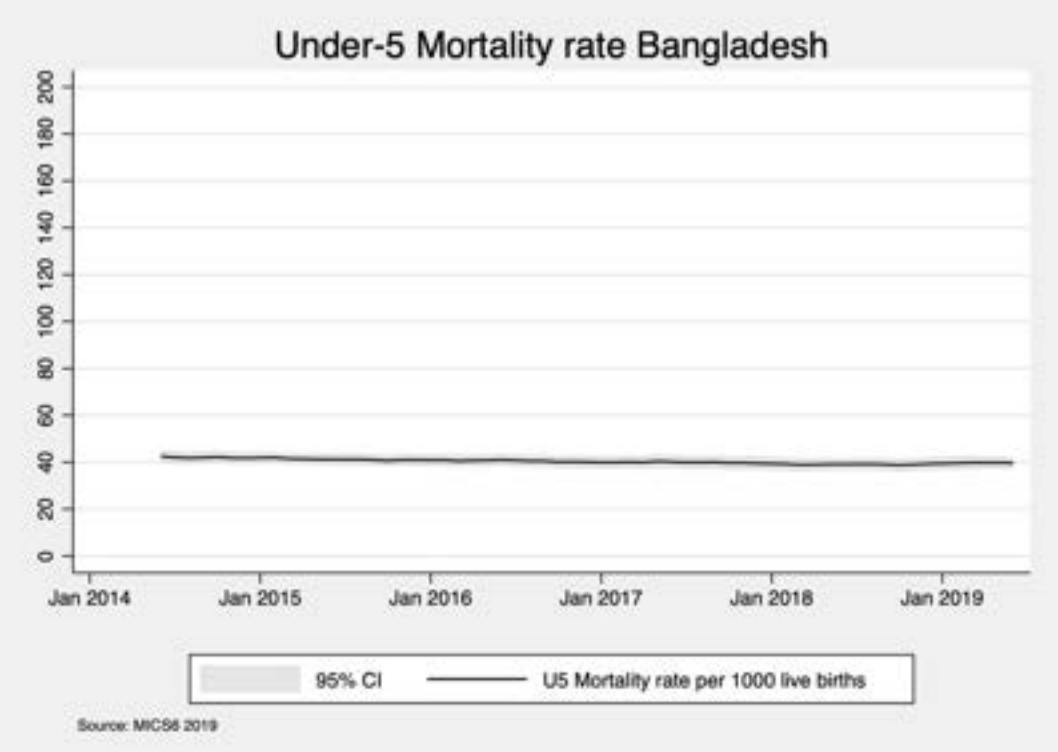


Figure 2.9b Under-five mortality rate, Chittagong

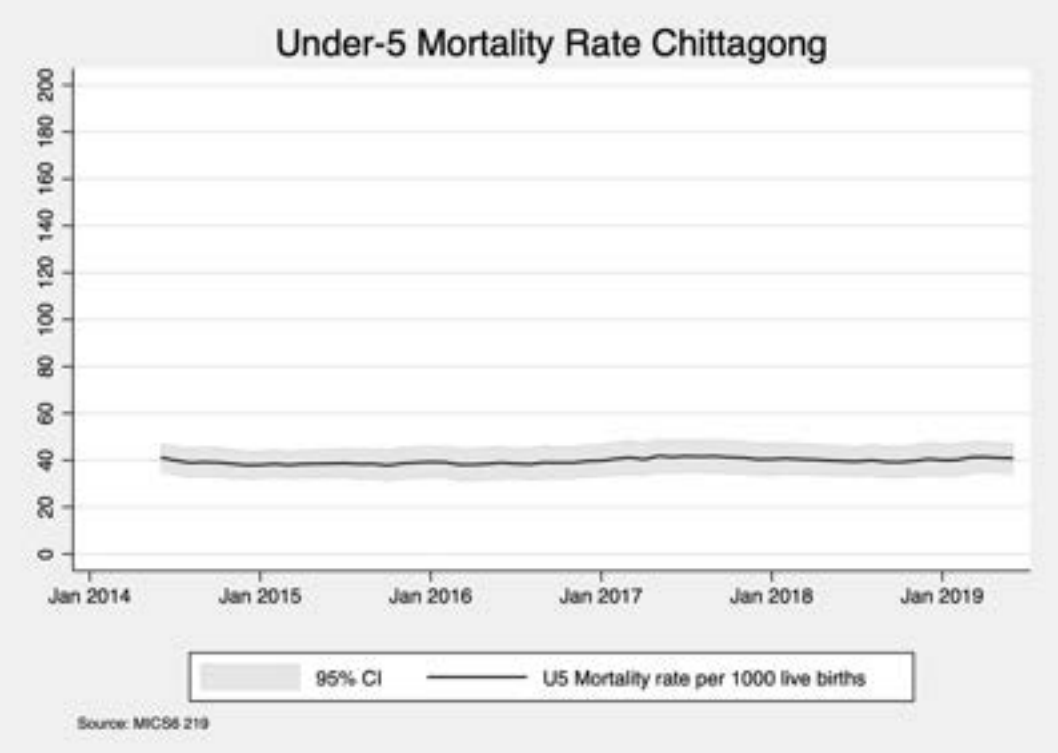


Figure 2.9a Under-five mortality rate, Cox's Bazar

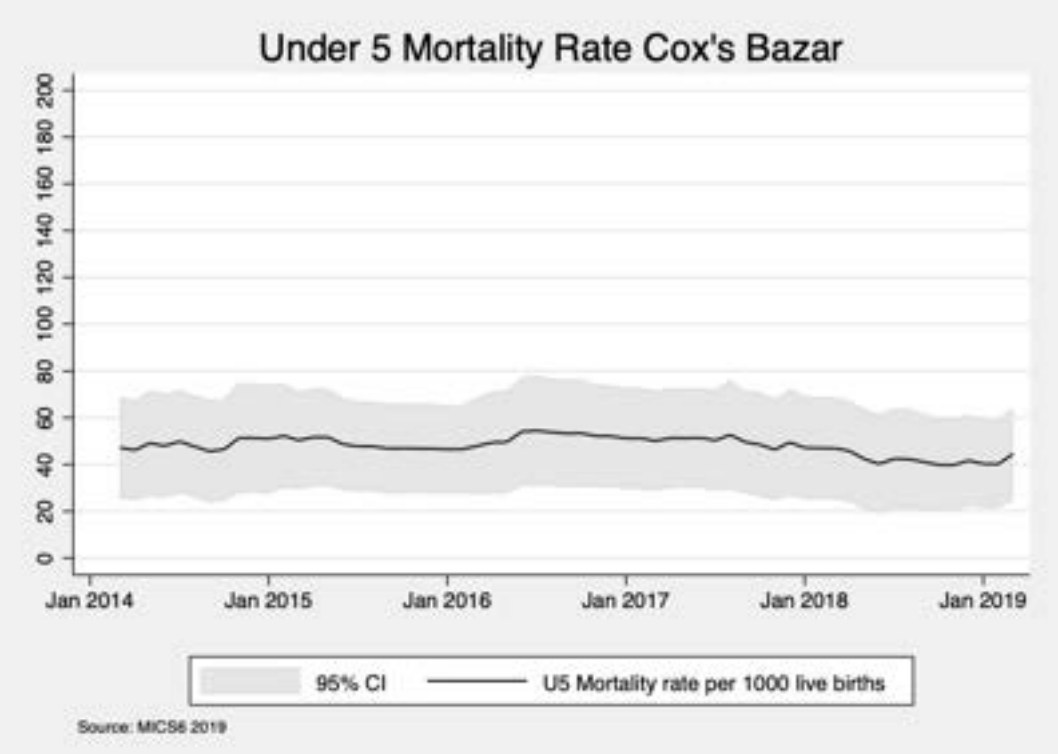


Figure 2.10a Infant mortality rate, Bangladesh

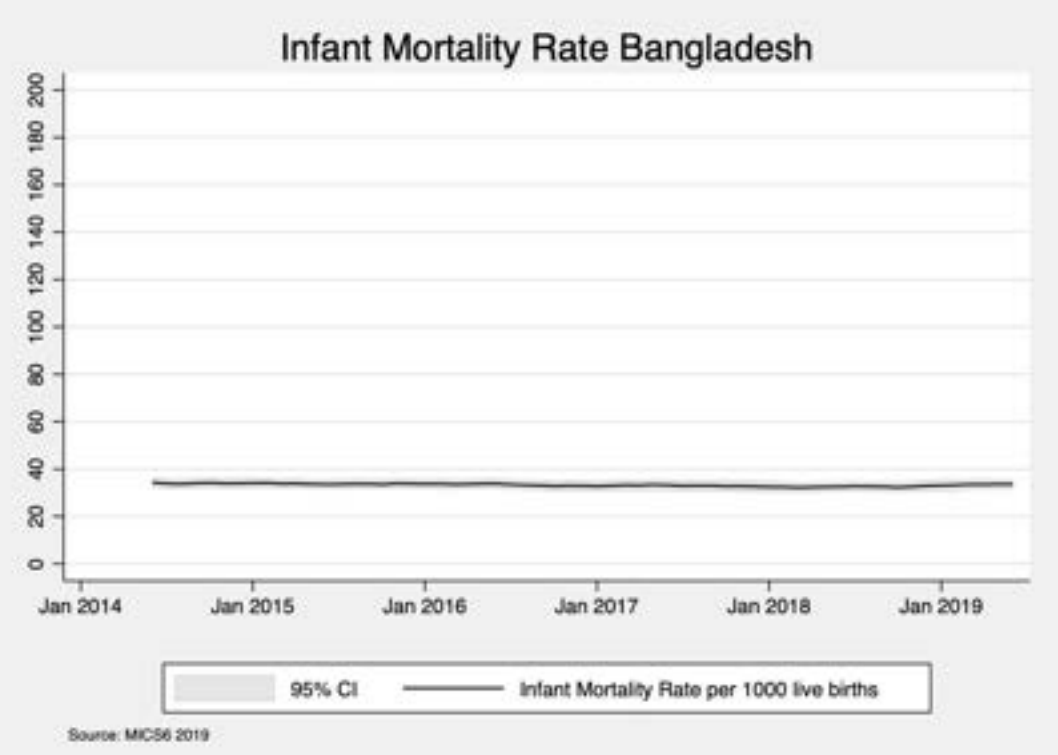


Figure 2.10b Infant mortality rate, Chittagong

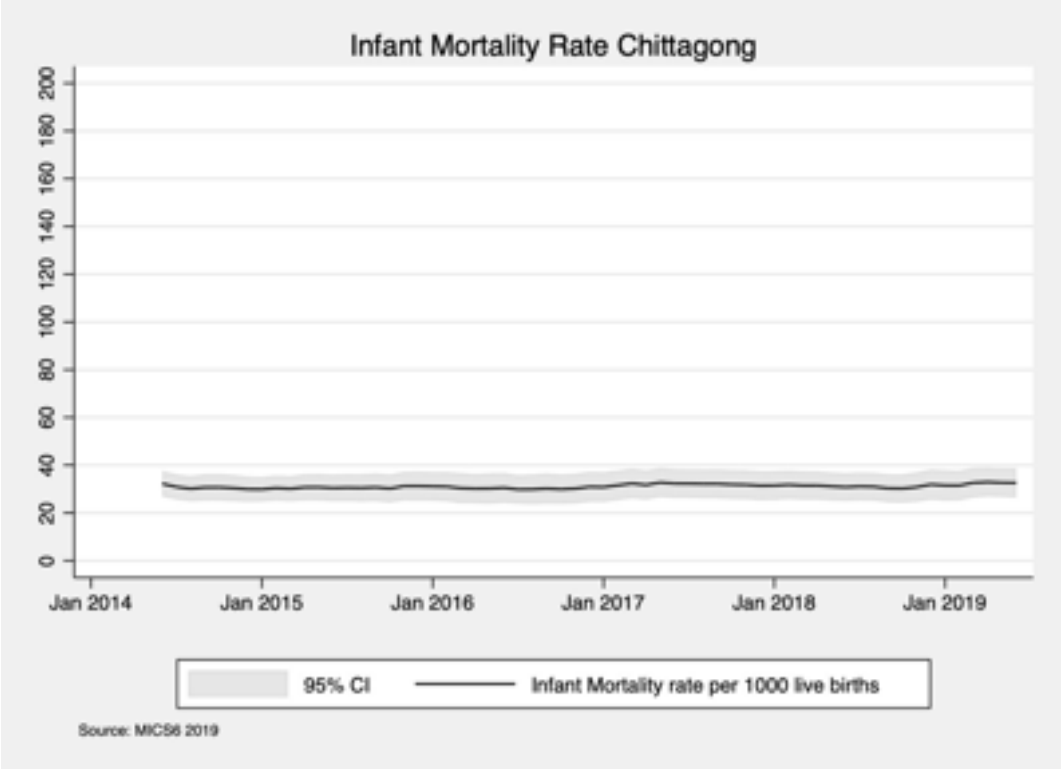


Figure 2.10c Infant mortality rate, Cox's Bazar

4. Word cloud highlighting focus group discussion themes

5. Summary of primary data collection

Camps where FGDs were conducted

- Camp 20 (n=2 FGDs)
  - » Male FGD: six participants
  - » Female FGD: six participants
- Camp 20 Extension (n=2 FGDs)
  - » Male FGD: six participants
  - » Female FGD: six participants
- Camp 4 (n=1 FGD)
  - » Male FGD: seven participants
- Camp 4 Extension (n=1 FGD)
  - » Female FGD: six participants
- Camp 26 (n=2 FGDs)
  - » Male FGD: seven participants
  - » Female FGD: seven participants

Note: All focus group participants were adult (18+ year) Rohingya refugees

Key informant interviews

- Inter-sectoral coordination group representative: one
- Government representatives:
  - » Policymaker: one
  - » Health provider: one
- U.N. representatives: seven
- NGOs:
  - » Management: four
  - » Health providers: five

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