



Health and
Education for All

HEALTH AND EDUCATION FOR ALL

2019-20 ANNUAL REPORT

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Dear Friends,

This past year and particularly the past several months have challenged frontline medical workers in unimaginable ways.

The COVID-19 pandemic continues to threaten populations around the world and is particularly dangerous in areas where people are vulnerable, disadvantaged, and lack access to quality health care. These are the populations that Health and Education for All works with and works to empower.

During the past months, HAEFA and its medical teams have worked with determination to train healthcare workers across Bangladesh on ‘COVID-19 Competency Training of the Trainers’ with a special focus on Infection Prevention Control (IPC), Screening, Diagnosis, Case Management, and Surge Management. HAEFA sourced and imported PPE including 10,000 KN95 masks for free distribution in national hospitals and rural health centers across 20 districts. HAEFA continues to provide essential health care for non-communicable diseases (NCD) to Rohingya refugees (FDMN) living in Cox’s Bazar and to ready-made garment factory workers in Dhaka. We have also been providing digital see-and-treat cervical cancer screenings and treatments to women in hard-to-reach areas including Kurigram. HAEFA has been strengthened through collaborations with international and national nonprofit organizations, leading educational institutions, and international agencies including Physicians for Human Rights, Project HOPE, Brown University, the WHO, and International Organization of Migration (IOM) among many others.

Through the support we receive from individual donors to large corporations, HAEFA will persevere to fight COVID-19 by training and equipping healthcare professionals and workers, by providing essential and quality healthcare to the Rohingya refugees (FDMN), by screening and treating underserved populations across Bangladesh, and by educating patients in leading healthier and happier lives.

Thank you for reading about our work and for continuing to support us.

Sincerely,

Ruhul Abid, M.D., PhD
Founder & President





EXECUTIVE SUMMARY

This report highlights the initiatives HAEFA has taken from June 2019 to July 2020 while also giving a brief history of the organization. Since being founded in 2012, HAEFA provided healthcare to ready-made garment (RMG) workers as well as reproductive health services to women in remote areas. Three years ago, HAEFA began providing healthcare to Rohingya refugees living in the Balukhali and Kutupalong camps. These undertakings were aided by NIROG, HAEFA's one-of-a-kind technological device that allows medical examiners to track patients' medical histories. NIROG has aided with efficiently retrieving medical records and proactively initiating follow-ups with patients with chronic non-communicable diseases (NCD) and infectious diseases.

From October 2019 to the first quarter of 2020, HAEFA expanded its cervical cancer screening program for RMG workers to include underserved populations in the Kurigram district. In addition, HAEFA provided funds and logistical support to aid with the creation and building of the Arunodoy School for students with special needs in Cox's Bazar. The organization provided 20 scholarships in collaboration with the M. A. Malek Foundation. More recently, with the advent of the novel coronavirus COVID-19 and Cyclone Amphan, HAEFA has turned its focus to providing healthcare to victims of these disasters. For the former, HAEFA increased its efforts on disease prevention and strengthening the Bangladeshi health system via a new Training-of-Trainers program and provision of PPE.

Progress was also made within the organization. Brown University students worked with HAEFA to initiate collaborations, research, and create an official website. Notably, through these efforts and with the help of various grants, HAEFA also sent over \$89,000 to Bangladesh to support healthcare workers and under-served patients in light of the current pandemic. In addition, HAEFA gave over \$2,000 in grants to other nonprofits.

OUR MISSION

Health and Education for All has the mission to empower global populations who are disadvantaged and displaced through health and education. HAEFA provides free, quality, and essential healthcare services to these populations, including Rohingya refugees from Myanmar, industrial workers such as garment factory workers and rickshaw pullers, and hard-to-reach people who are underserved in Bangladesh. HAEFA invests in innovative technological tools and advancements to respond to the specific medical needs of its patients and serve recipients in an efficient and accessible manner.

OUR VISION

HAEFA envisions a world where universal health coverage is accessible to populations who are underserved and vulnerable around the world. HAEFA is a leader in providing humanitarian medical care to Rohingya refugees from Myanmar, garment factory workers in Dhaka Division, and women who are underserved in Kurigram, northern Bangladesh. HAEFA provides training to medical teams, support staff, and patient populations on hygiene, nutrition, and family planning in order to foster lasting positive living conditions.

HISTORY



ABOVE: Map of the Bangladesh and Myanmar border highlighting Bangladesh's Cox's Bazar district and Myanmar's Rakhine State. AJLabs. 2017. *Aljazeera, Rohingya crisis explained in maps.* [Link](#)

RIGHT: Map of Cox's Bazar district with the locations of HAEFA's medical teams in Kutupalong and Balukhali refugee camps. Adapted by Ren, Ingrid and Ren, Isaac from Sadh, Khan MNM a.k.a. nafSadh. 2015. *Wikipedia Commons.* [Link](#)

Health and Education for All (HAEFA) is a US-based, 501(c)(3) non-profit organization founded by Dr. Ruhul Abid in partnership with Dr. Rosemary Duda in 2012 to address the health care needs of ready-made garment (RMG) factory workers across Bangladesh. HAEFA has implemented efficient, seven-minute health screenings for noncommunicable diseases (NCDs) for this population and has provided **over 30,000 screenings and treatments** for workers since 2012. In response to the mass exodus of Rohingya Muslims by Myanmar in 2017, HAEFA has turned its focus to supporting the Rohingya refugees from the Myanmar Rakhine State currently residing in the Bangladesh district of Cox's Bazar. HAEFA operates two free medical clinics for Rohingya refugees, one in Kutupalong (the world's largest refugee camp) and one in Balukhali. With the escalation of the crisis, the Rohingya refugee population has surpassed 1.1 million people.¹ HAEFA has provided health care for **145,000 Rohingya refugees** since 2017 with 42,000 visits occurring between June 1, 2019 and July 15, 2020.

¹ Pennington, Matthew. 2018. Fox News, Bangladesh point finger at Myanmar for 'genocide.' [Link](#)



PAST INITIATIVES

Technological Innovation of NIROG

HAEFA's health care provision is based on effective, modern, and innovative technology. Recognizing the situation and resources available in Bangladesh, Dr. Ruhul Abid, with the support of Brown University Global Health Initiative and software development company Aprosoft, designed and developed **an original Electronic Medical Record (EMR) system named NIROG**, based on the Bangla word *niroga*, meaning "absence of disease" or "good health." NIROG is an entirely paperless and digitized record-keeping software uploaded onto tablets using fingerprint identification and bar-coded photo ID cards for patients. This HIPAA compliant system tracks and records encrypted patient data under unique identifiers that give doctors a high technology resource to provide accurate follow-up care. By mastering technological tools, **HAEFA has increased the number of patients treated by four or five times**, compared to using handwritten notes that need to be later transcribed.²

NIROG is also capable of two-way communication between medical personnel and patients. After RMG workers are screened at their worksites, medical professionals send texts to the patients informing them of diagnosis results and of when the medical team will return to the factory for follow-up care. Patients can also update basic health measures such as blood pressure by sending in a text with their most recent information. This update is programmed to be included in their NIROG profile.

On the EMR tablets, the NIROG software uses the WHO's current medical classification, the Tenth Revision of the Internal Classification of Diseases (ICD-10), to diagnose and standardize treatment and management protocols for non-communicable diseases. In particular, HAEFA focuses on treating patients suffering from hypertension, diabetes, malnutrition, chronic obstructive pulmonary disease, high-risk pregnancy, anemia, infectious diseases, and cancer.

While NIROG is currently used exclusively by HAEFA, several organizations including the Coordination Cell, a group of organizations working in the refugee camps, and the International Organization for Migration (IOM) have expressed interest in using the technology in their health centers as well. Lifespan reported,

“Abid was was recently approached by other nonprofit and government organizations that provide care in remote regions, and he is collaborating to share the technology free of charge, viewing it as a public health tool rather than an enterprise.”

NIROG Adapted for Refugee Camps

NIROG was originally created to track and improve the health of Bangladesh factory garment workers, but with the escalation of the Rohingya refugee crisis in 2017, the tablets have been further optimized to use solar powered batteries and to function without constant internet connection. This makes NIROG **accessible in remote and rural locations** like the Rohingya refugee camps, where the tablets are used offline to collect patient information and are then brought to a nearby town to upload data onto a secure and password protected database that authorized healthcare providers can reference. From the health care centers in the Rohingya refugee camps and in the mobile clinics of the garment factories, NIROG securely sends their patients' medical data to the databases of the Directorate General of Health Services, a division of Bangladesh's Ministry of Health and Family Welfare.

With the outbreak of the COVID-19 pandemic, NIROG has continued to prove itself essential through its usage to track the spread of COVID-19 in the refugee camps.

The data collection powered by NIROG is particularly significant for the Rohingya population, as their health data collection ended in 1982 when Myanmar stripped the ethnic group of citizenship and legal identity. Since the government of Bangladesh is not a signatory to the 1951 Geneva Convention on the Status of Refugees, they do not recognize the Rohingya people as refugees but rather Forcibly Displaced Myanmar Nationals (FDMN). Due to strained resources in an already impoverished country, Bangladesh hopes for the Rohingya not “to settle and integrate, but rather [wants] them to eventually be repatriated to Myanmar, as happened in the early 2000s,”³ despite Myanmar stating a refusal to “take back Rohingya living in refugee camps since 2005.”⁴

Since the UNHCR cannot determine how asylum cases are treated by individual countries, Bangladesh has not been required to grant the Rohingya population official refugee status, preventing the Rohingya people from accessing certain protections that would otherwise be provided under international law. Rohingya children born in Bangladesh are not registered at birth,⁵ and the Rohingya people are “denied freedom of movement, the right to work and the right to education.”⁶ However, the Bangladeshi government has welcomed the FDMN through the provision of land, food, and shelter through close collaborations with international organizations and NGOs like HAEFA. In recognition of the severe humanitarian crisis that has been occurring at the Bangladesh and Myanmar border, HAEFA strives to provide **mindful and attentive health care** to the Rohingya refugees.

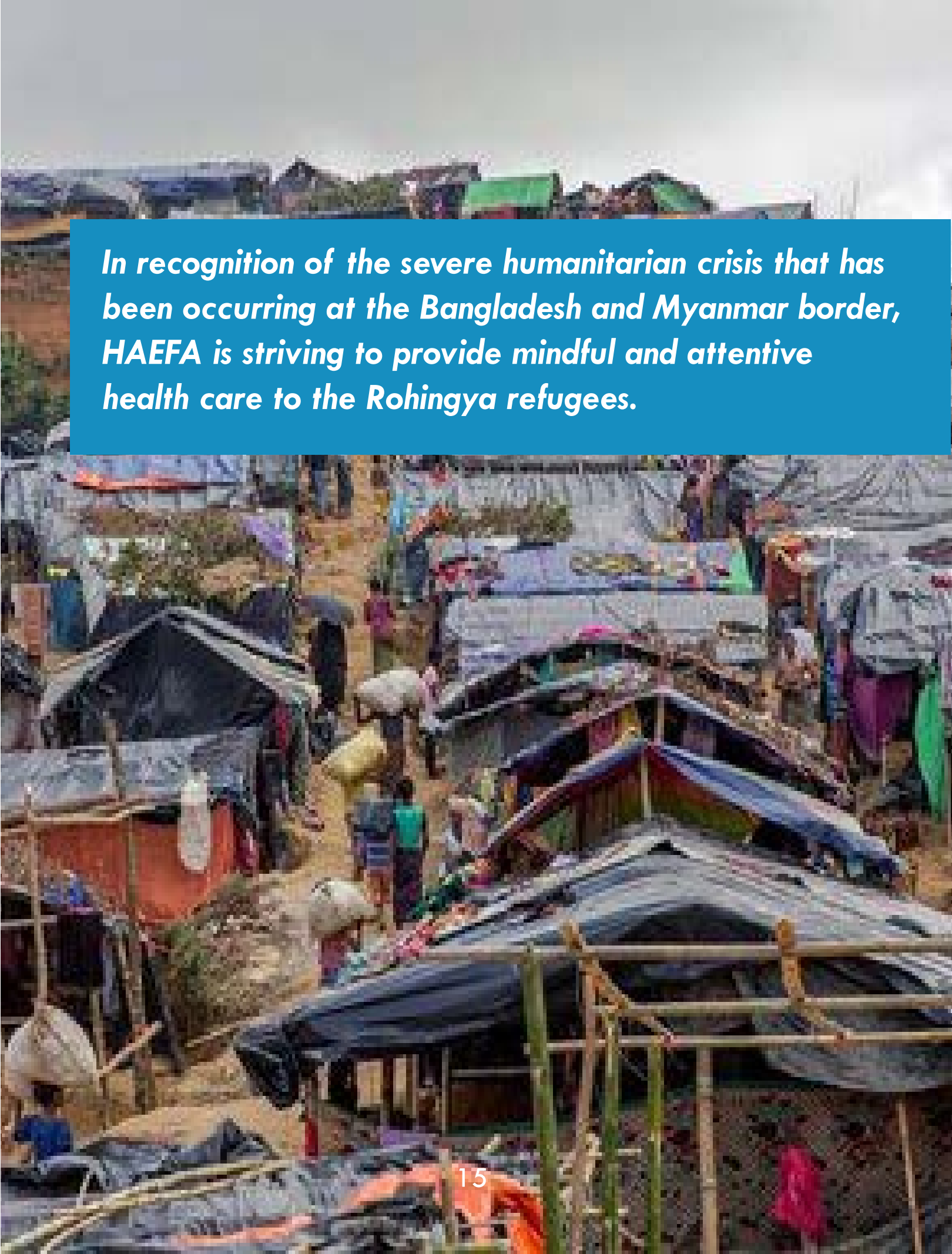
² Lifespan. n.d. Refugee Medical Aid with Immediate, Lifelong Impact. [Link](#)

³ UNICEF. 2019. 18 months after exodus from Myanmar, Rohingya children at a crossroads. [Link](#)

⁴ O’Driscoll, Dylan. 2017. Bangladesh Rohingya crisis – Managing risks in securitisation of refugees. [Link](#)

⁵ Zaman, Sheikh Shahariar. Dhaka Tribune. 2017. Bangladesh govt reluctant to grant refugee status to Rohingya. [Link](#)

⁶ Prytz Phiri, Pia. Forced Migration Review. 2008 Rohingyas and refugee status in Bangladesh. [Link](#)



In recognition of the severe humanitarian crisis that has been occurring at the Bangladesh and Myanmar border, HAEFA is striving to provide mindful and attentive health care to the Rohingya refugees.

EMERGENCY RESPONSES

HAEFA's Response to the Covid-19 Pandemic

Pre-Existing Vulnerabilities
Medical Care
Sourcing PPE
Training of Trainers

Amphan Cyclone





HAEFA'S RESPONSE TO THE CORONAVIRUS PANDEMIC

Rohingya Refugees' Pre-existing Vulnerabilities to COVID-19 Infection and Mortality

Rohingya refugees' pre-existing health issues, in addition to the **crowded living conditions** they are subject to in the camps, significantly **increase their vulnerability to COVID-19** infection and mortality. Recognizing the unique set of complications which exist within the camps is critical to effectively carrying out HAEFA's efforts to treat as many Rohingya patients as possible whilst keeping doctors and healthcare professionals safe.

1. Rohingya refugees experience **high rates of non-communicable and chronic diseases** such as hypertension, diabetes, and respiratory infection. These pre-existing health factors increase their risk of COVID-19 severe infection, hospitalization and mortality. In fact, 22.8% of the Rohingya refugee population in the Cox's Bazar refugee camps is considered "at-risk," translating to nearly 200,000 "at-risk" people living in under 13 square kilometers (5 square miles.)⁷

2. The **extremely crowded** nature of the camps has left the Rohingya people extremely vulnerable to the spread of COVID-19. "(Space) is the most important issue," said Anika Khan, Chief Operating Officer of HAEFA and who is overseeing these efforts. "Isolation in the camps is very hard," Khan continued. "There are four to five people living in a small tiny room. Even if someone is getting sick, you can't really isolate them in a separate room... it is a very critical situation."

CONTINUED

3. **Unhygienic conditions and poor nutrition** have made containing an outbreak and isolating positive cases extremely difficult.

4. Also unique to the camps has been the **prevalence of rumors and distrust** surrounding medical care. The IOM reported in May 2020 that a widespread rumor circulating the camps claimed that anyone entering a camp health facility displaying COVID-19 symptoms would be killed in order to contain the virus.⁸ Rumors and myths such as these have made establishing trust between patients and medical professionals a persistent obstacle in the camps.

5. The **local health infrastructure** has already been weak in the region, magnifying the pre-existing vulnerabilities Rohingya refugees have faced within the camps. The current medical capacity of Cox's Bazar, Bangladesh (including MSF, Turkish hospital, and Malaysian hospitals in the camps) included 47 beds for temporary isolation, 340 standby beds, and 0 ventilators and 0 ICU. As such, an outbreak has threatened to disrupt an already fragile situation, and HAEFA's response to the pandemic has been particularly critical.

According to a Johns Hopkins University study focused on projecting COVID-19's impact in the Rohingya refugee camps, a large scale outbreak was determined highly likely following a single introduction of the virus into the camp; 51% of the study's simulations led to an outbreak of at least 1,000 cases and increased to 75% and 93% in moderate and high transmission scenarios, respectively.⁹ Regardless of the scenario, the study projected that the hospitalization needs, in terms of beds alone, would **significantly exceed existing capacities**.

A study carried out by Yale University exploring the risk factors and prevalence of COVID-19 in refugee communities in Cox's Bazar discovered that **a quarter of camp inhabitants displayed coronavirus symptoms** in April, but the first formal case was not discovered until early May—further emphasizing the effects of a lack of testing capacity and the widespread rumors in combating the virus' spread.¹⁰



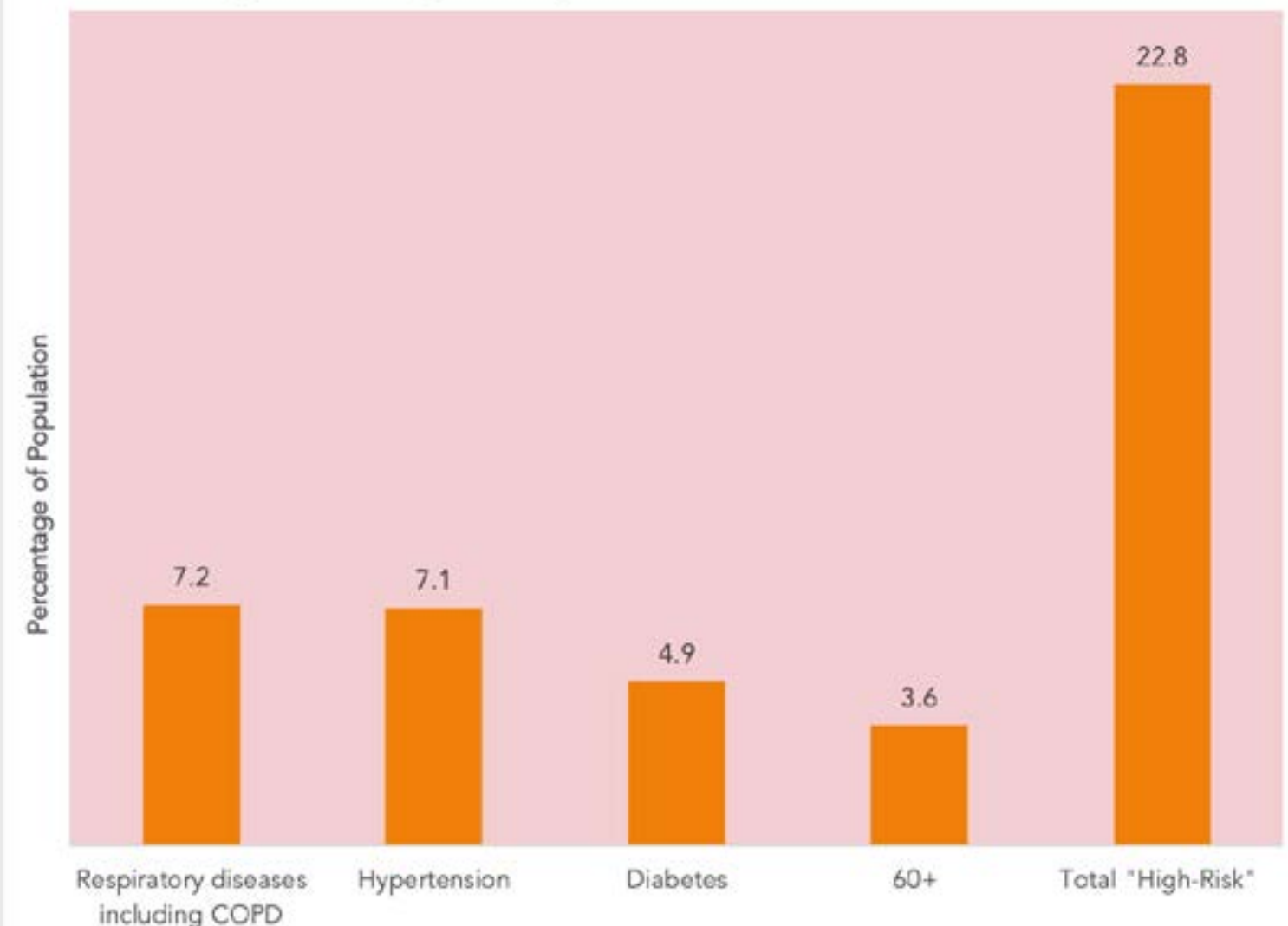
What Shapes Perceptions on Health Care

A Summary of IOM Report Findings

These findings have been extremely informative in helping HAEFA continue to navigate relationships between healthcare providers and the Rohingya people in the camps.

1. Staff behavior and use of respectful language
2. Perceived quality of the consultation: whether the patient had been provided with basic care, such as temperature check, blood pressure, and physical examination
3. Rohingya People's ability to communicate effectively with healthcare staff in language they understand
4. The explanation of systems and rules of the medical facility to patients
5. Clear communication about where to fill prescriptions

Percentage of Rohingya Refugees "At-Risk" for COVID-19 Severe Illness



Graphics by Students for HAEFA
Data from HAEFA report (Ramsdell 2019) and Operational Portal (UNHCR 2020)

⁷ Ramsdell, Emma. 2020. HAEFA, Vulnerability of Rohingya refugees to COVID-19. [Link](#)

⁸ 2020. IOM UN Migration, COVID-19 Explained

⁹ Truelove, Abraham, Altare, Azman, Spiegel. 2020. Johns Hopkins, Novel Coronavirus: Projecting the impact in Rohingya refugee camps and beyond

¹⁰ Lopez-Pena, Davis, Mobarak, Raihan. 2020. Yale Macmillan Center, Prevalence of COVID-19 symptoms, risk factors, and health behaviors in host and refugee communities in Cox's Bazar: a representative panel study.

HAEFA'S Medical Care Response

The aforementioned conditions in the camps make curbing a massive outbreak **nearly impossible**, but HAEFA and other aid agencies have taken a series of concerted efforts to address the crisis as effectively as possible. HAEFA's healthcare professionals have worked to reduce transmission of COVID-19 within the Rohingya refugee camps and to screen, test, and refer patients who are symptomatic.

On May 15th, 2020, two cases of COVID-19 were confirmed in the Rohingya camps in Cox's Bazar, and 1,900 Rohingya refugees were isolated for testing. As of June 29, 2020, there were 50 confirmed cases of COVID-19 out of 536 tests conducted among the Rohingya refugee population. This is a positive test rate of 9.3%, while the WHO only recommends easing social distancing guidelines when “less than 5% of those tests come back positive for at least two consecutive weeks.”¹¹ It is important to note that the number of positive cases may have been underestimated due to lack of testing.

Due to limited resources and supplies, **testing is extremely limited** in the Rohingya refugee camps and thus reserved for the most severe cases. Most presumptive COVID-19 cases, based on known symptoms of fevers and coughs, go untested. These suspected COVID-19 patients are instead put into quarantine and given basic medications by HAEFA's medical team, which itself has decreased in size to 18-20 people due to the monitoring of their own COVID-19 symptoms. With 3.2 million people living in the camps, the medical team lacks the manpower to track and check up on each of the Rohingya patients with suspected infections. Thus, HAEFA has initiated a partnership with BRAC University's Center for Peace and Justice to organize a remote, supporting team of 30 volunteers. These volunteers will be expected to call the patients with presumptive COVID-19 cases to track changes in the progress of their symptoms and hopefully their recovery.

¹¹ Sonnemaker, Tyler. 2020. Business Insider, One chart shows what percentage of COVID-19 tests are coming back positive in the US compared to 12 other countries. [Link](#)

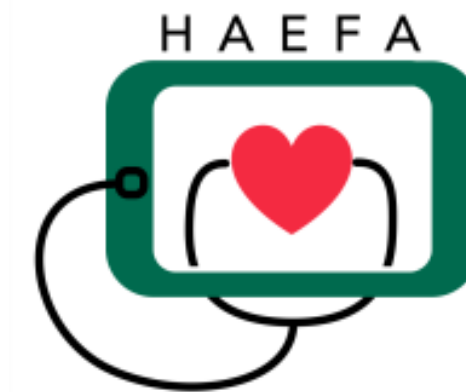


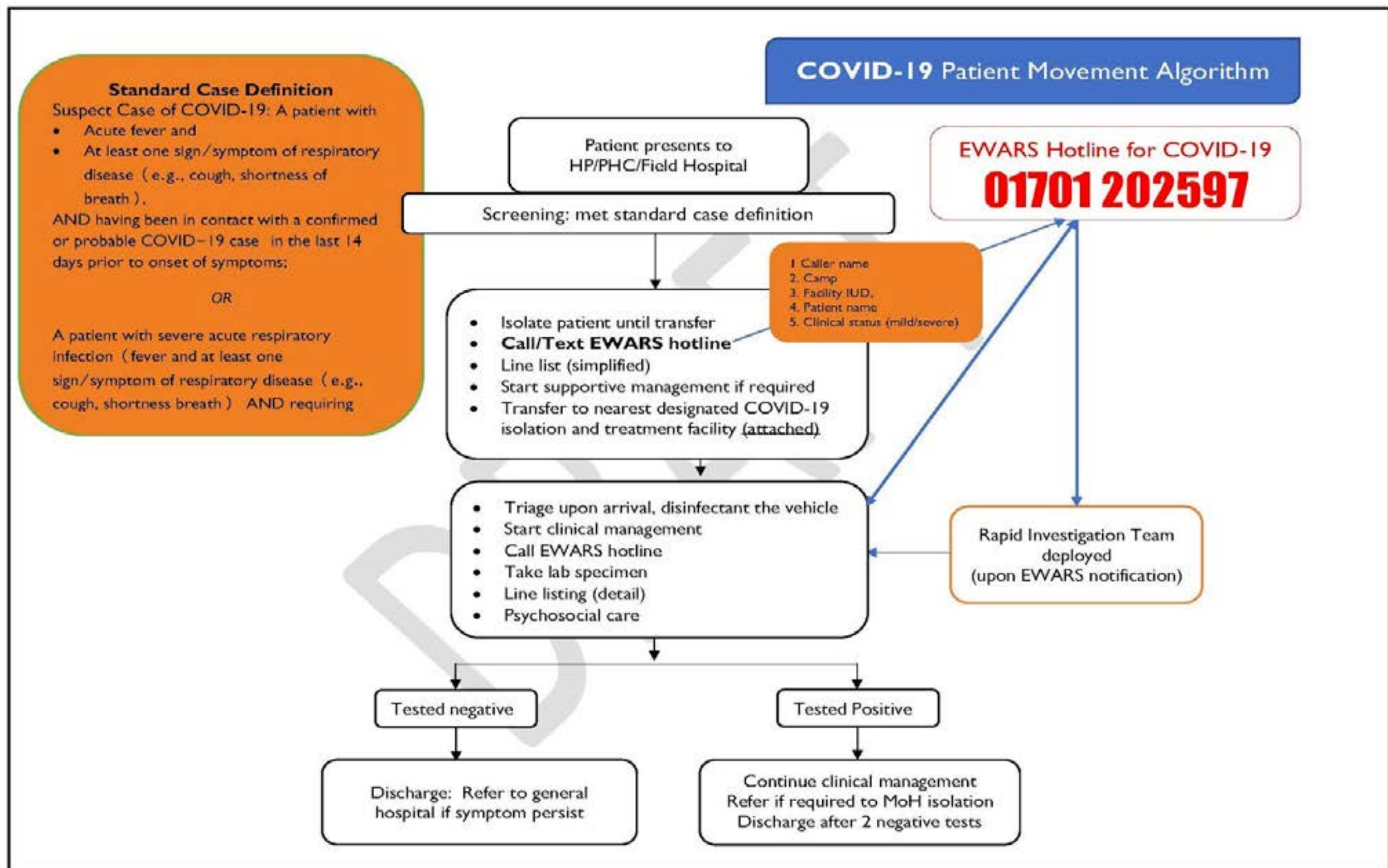


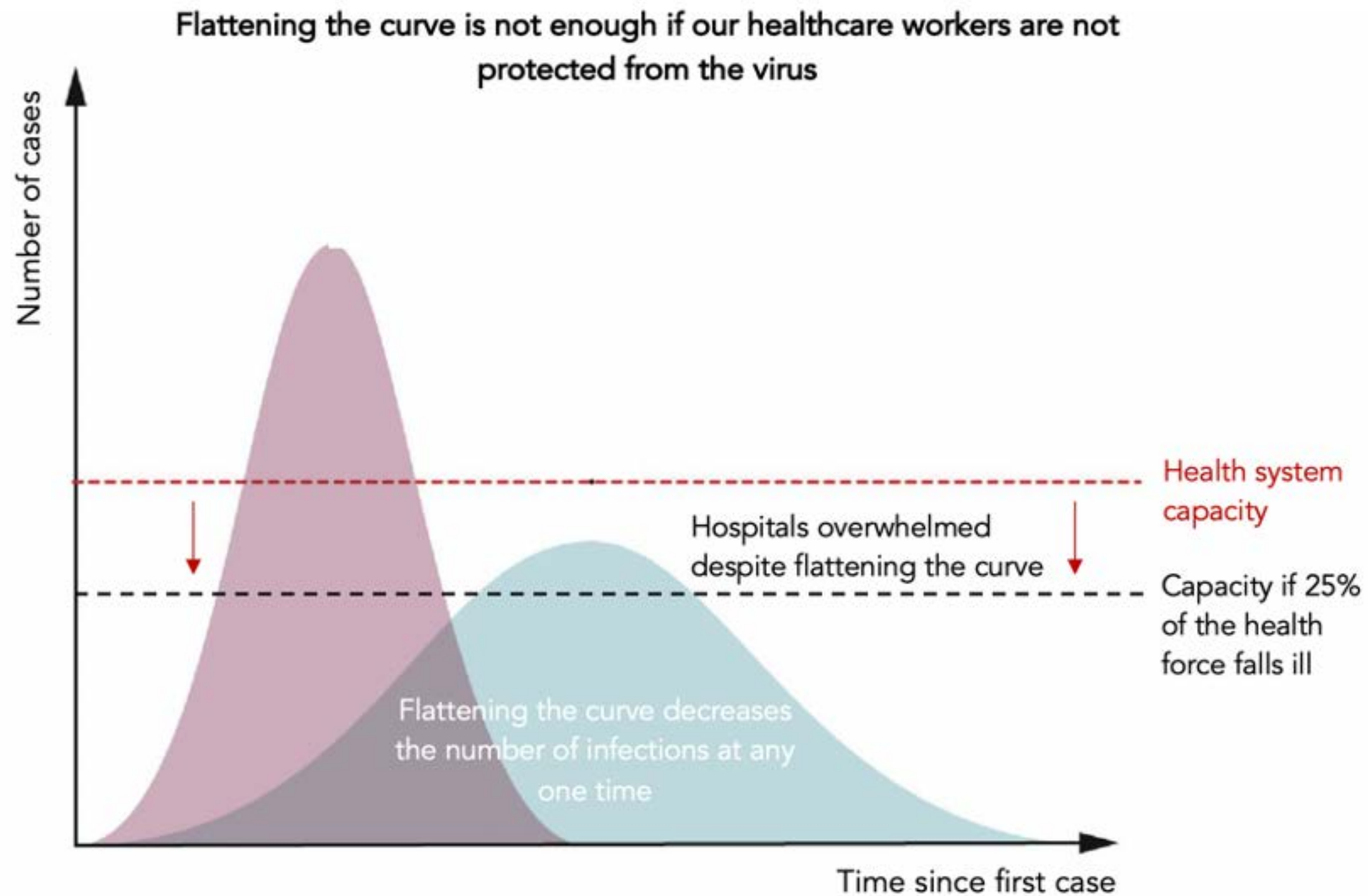
Sourcing PPE

HAEFA has fundraised effectively to **source PPE** for the medical professionals who are taking care of the ICU and Quarantine Patients, as well as **N95 masks** for the regular medical professions (including doctors, nurses, medical assistants, and ward boys) who are taking care of the admitted and outpatients in the hospitals, clinics, and the Rohingya refugees (FDMN) camps.

Moreover, the organization has sourced infrared (contactless) thermometers and essential medicines, including Ventolin inhalers and fever reducers, to treat COVID symptoms in the camps. HAEFA has also undertaken preventative measures, such as installing hand-washing stations throughout the camps and providing hygiene packs. Aside from these essential preparations, HAEFA has also spearheaded a **Training-of-Trainers (TOT)** effort. As the pandemic continues, HAEFA is working in partnership with other organizations to anticipate the possibility of isolation centers filling up in the near future by beginning to implement home-based treatments. “Thinking ahead to the next two to four months, if it gets worse and they don’t have space in isolation centers, we need to come up with something else to treat patients who are getting sick,” said Anika Khan, COO of HAEFA. “That’s why they’re more focusing on home-based treatment.”







Graphics adapted from The Globe and Mail by Students for HAEFA

Graph of the health system's capacity and importance of flattening the curve; acquiring sufficient PPE and taking necessary precautions to protect the camp's healthcare workers, while simultaneously attempting to flatten the curve, is essential to maximizing the existing health system capacity.

Resources Sourced to Combat COVID-19 in Bangladesh

10,000 KN95 imported masks were sent to Bangladesh civil districts, **1,000** to Rohingya camps

50 masks were sent to physicians and nurses in each of the 20 Districts in Bangladesh

1,000 KN95 masks were sent to physicians and nurses of COVID-19 wards at Dhaka Medical College Hospital

600 KN95 masks were sent to BSMMU (Bangabandhu Sheikh Mujib Medical University) in Dhaka

100 masks were sent to Director General of Health Services (DGHS) office

Several hundred KN95 masks were sent to healthcare professionals serving the COVID-19 patients in Dhaka and other districts of Bangladesh.





COVID-19 Training-of-Trainers for Healthcare Professionals

In response to the COVID-19 pandemic, Brown University undergraduate Jenna Mullen initiated a highly effective **collaboration between HAEFA, Brown, and Project HOPE** to promote medical safety. Trainers from Brown who developed the training curriculum were first-respondents for Ebola and were previously named **TIME’s 2014 Person of the Year** for their efforts. This collaboration resulted in a three to four day **“COVID-19 Competency Training-of-Trainers (ToT) Program”** in Bangladesh. Brown University and Project HOPE administered the initial training for healthcare workers from April 20-23, 2020. This first training trained 65 Bangladeshi healthcare workers from over twenty different organizations, including HAEFA’s permanent clinic staff,¹² using the Training-of-Trainers model.

The training program was developed in response to the **high mortality rate among Bangladesh’s healthcare workers**. Since March 24, 2020, nearly 4,500 healthcare workers have been infected with the COVID-19 virus. The mortality rate among Bangladeshi healthcare workers was 5.3% in April and May, **one of the highest in the world**. Healthcare experts had named lack of infection prevention and control measures, monitoring, proper management of hospitals, inappropriate use and disposal of safety gears, and lack of training for dealing with patients as causes for the high mortality and infection rates.¹³ Given the gravity of the situation, it was imperative that these healthcare workers receive proper training in order to address the impacts of this virus.

HAEFA's physicians, midwives, lab technicians, health workers, IT professionals, project coordinators, and the chief operating officer (COO) have participated in this program. The training was conducted online for Bangabandhu Sheikh Mujib Medical University Hospital (BSMMU), International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR), National Institute of Cardiovascular Diseases (NICVD), National Heart Foundation (NHF), Chest Hospital, and Ukhiya and Cox's Bazar's government and non-governmental physicians, nurses, and other health workers.¹⁴

The first ToT training consisted of a four day program with three hours of programming per day, administered via Zoom. Subsequent trainings consisted of three day programs lasting four hours per day. The initial training curriculum following the Training-of-Trainers model was administered to 65 Bangladeshi healthcare workers, including HAEFA's staff. These trainers, now known as the primary trainers, have done weekly rounds of secondary training in which they have administered the training curriculum to more healthcare workers. Through this secondary training program, **an additional 377 workers have been trained thus far.**

This training was extremely well received by the primary group of healthcare workers. Due to this positive response, HAEFA expanded its program and held a second training from July 8-10, 2020 with 39 trainees who successfully completed the program and accompanying assessments. HAEFA has a third session planned for August 4-7, 2020 with over 55 participants that will follow a similar format to the July session. HAEFA's goal is to train 600 healthcare workers per week in the six weeks between July 8, 2020 and August 31, 2020. The format of the program requires each trainee to train a minimum of 10 and ideally 20 new trainees, resulting in nationwide competency training for **all 36,000 healthcare professionals** working and fighting COVID-19 in Bangladesh by September 15, 2020.¹⁵

The training is designed to focus on eight core competencies, which are outlined on the right. Together, these eight competencies had been designed to deliver a comprehensive perspective on the most effective and efficient ways to address a COVID-19 outbreak in the refugee camps.

Eight Core Competencies of Training Curriculum

1. **Biology and Transmission Mechanisms** to give trainees a better understanding of the biological and pathophysiological aspects of SARS-CoV-2 and the epidemiology of the virus
2. **Infection Prevention and Control** to reduce COVID-19 transmission and outbreak
3. **Contact Tracing** to understand different types of case definitions and the methods of disease surveillance used in health facilities
4. **Screening and Triage** principles to identify the level of intervention required by patients
5. **Stabilization and Resuscitation** to learn appropriate and necessary actions needed to stabilize or treat affected individuals
6. **Diagnosis and Management** to learn clinical presentation of the virus and to identify different diagnostic approaches
7. **Health Facility Operations and Surge Capacity** to understand how health care facilities can best prepare for over capacity and effective care procedures
8. **Risk Communication and Public Health Messaging** to appropriately communicate procedures regarding outbreak response



ToT Training Schedule (in EDT)^{18 So}

Day 1	9am	Introduction and Background Module
	10	Infection Prevention and Control
	11am	Surveillance
	11:40am	Case Exercise
Day 2	9am	Screening and Triage
	9:45am	Stabilization and Resuscitation
	10:45am	Diagnosis and Management
	11:40am	Case Exercise
Day 3	9am	Surge Capacity
	10am	Risk Communication
	11am	Case Exercise

¹² 2020. COVID-19 Competency Training-of-Trainers (ToT) in Bangladesh.

¹³ 2020. Dhaka Tribune. Coronavirus: Doctors' mortality rate in Bangladesh 'highest in the world'. [Link](#)

¹⁴ 2020. COVID-19 Competency Training-of-Trainers (ToT) in Bangladesh.

¹⁵ 2020. COVID-19 Competency Training-of-Trainers (ToT) in Bangladesh.

Tracking Cyclone Amphan



CYCLONE AMPHAN RESPONSE

On top of the COVID-19 crisis, Bangladesh and Eastern India were hit by the Super Cyclone Amphan from May 16-21, 2020. Reaching peak winds of 160 mph (240 km/h), Cyclone Amphan caused over **\$13 billion in USD of damage** which significantly impacted the vulnerable populations of Bangladesh.¹⁶

Following the cyclone's devastation, HAEFA's medical teams assessed the needs of the cyclone's victims in Bangladesh. Throughout May and June, HAEFA was once more in communication with Project HOPE to collaborate and execute an emergency response to the cyclone. The two organizations put together a donation agreement, and in July, Project HOPE shipped over **2,000 lbs (close to 1,000 kg) of supplies and emergency medications** by air cargo to be distributed throughout the affected areas of Bangladesh.

The shipment included:

- | | |
|----------------------------|---|
| - prescription antibiotics | - diuretics |
| - pain relievers | - skin ointments |
| - antifungal medicine | - medicines to treat stomach acid, hypertension, and diabetes |
| - anti-worm medicine | |
| - multivitamins | |

These supplies have been used to treat Amphan victims in shelters, government medical centers, and nearby communities.

¹⁶ Sud, Vedika and Rajaram, Prema. CNN. 2020. Cyclone Amphan caused an estimated \$13.2 billion in damage in India's West Bengal: government source. [Link](#)

CURRENT WORK

Rohingya Refugees

Read-Made Garment
Factory Workers

Cervical Cancer Screening

Education





ROHINGYA REFUGEES

Since October 9, 2017, HAEFA has provided health care to the Rohingya refugee population in the Kutupalong and Balukhali refugee camps, focusing primarily on health services for non-communicable diseases such as:

- hypertension
- diabetes
- asthma
- malnutrition
- anemia
- tuberculosis
- pregnancy complications

HAEFA's medical teams have provided **over 145,000 patient visits** to the Rohingya people using a four-station model of registration, height and weight, blood pressure and blood tests, and a physical exam.

In 2020, the organization spearheaded the COVID-19 response in the camps by providing patient triage, screenings, treatments, quarantine, and referrals to the Isolation Center. HAEFA has also provided Protective Health and Hygiene Packages that come with face masks, bar soaps, washing aprons, and toilet brushes for patients with comorbidities that make them most vulnerable to COVID-19 (hypertension, asthma, tuberculosis, over 65 of age).

HAEFA is also continuing their partnership with the professional services network PricewaterhouseCoopers (PwC) to create an **on-site pathological laboratory** in the Balukhali refugee camp where it will provide screenings for hypertension and diabetes as well as medical services medical for pregnant women. This project is made possible due to generous support from the PwC Foundation alongside technical expertise from LabAid Diagnostic Center. The climate-controlled, state-of-the-art laboratory will process blood tests on-site and evaluate the progress of patient treatments. Furthermore, **a HAEFA laboratory technician has recently been trained to collect COVID-19 samples by the World Health Organization (WHO)**. HAEFA is currently exploring if it could set up a sample collection center while following essential safety precautions in order to support the COVID-19 response in Bangladesh.

READY-MADE GARMENT WORKERS

Since July 2013, HAEFA has provided **over 30,000 workplace screenings** to ready-made garment (RMG) factory workers and rickshaw pullers across Bangladesh. Rickshaw-pulling is an informal labor sector in Bangladesh with a labor force of around 200,000 people. HAEFA's healthcare teams have brought efficient on-site screenings that fit into the RMG workers' and rickshaw pullers' schedules. These screenings check patients for non-communicable diseases such as:

- hypertension
- diabetes
- asthma
- malnutrition
- anemia
- tuberculosis
- pregnancy complications

In 2018, HAEFA developed an on-site, single-visit **See-and-Treat cervical cancer screening initiative** and thermocoagulation treatment process for female workers.

HAEFA has been recognized and supported by a number of grants for their work providing healthcare services to RMG workers.

- In 2016, HAEFA received funding from Brown University to screen and treat **over 5,000 RMG workers**.
- In April 2018, HAEFA was awarded the Stars in Global Health grant by Grand Challenges Canada, which the organization used to provide screenings for non-communicable diseases to **10,200 factory workers** in seven factories while further developing the usage of NIROG and medical technology from MobileODT.

Through this award, HAEFA was also able to provide cervical cancer screenings to **1,200 women** for the first time.

CONTINUED





This essential work continued even after the funding from Grand Challenges Canada ended in March 2019, with HAEFA medical teams providing monthly follow-up treatments to three of the original factories through February 2020 for patients who were diagnosed with noncommunicable diseases, tuberculosis, and cervical cancer.

After the initial year of funding, Grand Challenges Canada typically chooses a small number of organizations from the original awardees to continue supporting through a scale-up grant. HAEFA has been selected as a contender for a scale-up grant, but the process has been delayed due to the COVID-19 pandemic. If they award this grant to HAEFA, Grand Challenges Canada will split the cost with the Bangladesh Garment Manufacturers and Exporters Association (BGMEA) to fund a **US\$1 million project** to screen and treat **4 million RMG and industrial workers** at 5,400 factories.

Most recently, HAEFA held a campaign with the Aman Garment factory in Savar through which healthcare workers treated a total of **2,473 patients** between July 27th and September 18th, 2019. Patients were tested for hypertension, diabetes, tuberculosis, anemia, and pregnancy-related complications.

While the routine, monthly RMG factory medical visits have been paused since the organization turned its focus to the COVID-19 emergency response, HAEFA has recently begun assessing the medical care needs of carbon factory workers across Bangladesh. Carbon factories offer notoriously dense and cramped working spaces, making them a particularly vulnerable location for a COVID-19 outbreak. HAEFA has been in communication with factory owners to provide healthcare screenings and treatments to this population.

CERVICAL CANCER SCREENING

Why is screening necessary?

In Bangladesh, 58.7 million women are 15 years of age or older. Of this group, **11,956 women** are diagnosed with cervical cancer annually, equal to slightly over 20 diagnoses for every 100,000 Bangladeshi women. To contrast, in the United States, this rate fluctuates between seven to eight cervical cancer diagnoses per 100,000 women.¹⁷ Cervical cancer kills 6,582 women or **11.2 per 100,000 women annually in Bangladesh** and 2.3 per 100,000 women in the US.¹⁸ Women in Bangladesh are two to three times more likely to be diagnosed with cervical cancer and almost five times more likely to die from it. HAEFA's See-and-Treat Program aims to bridge this gap in diagnosis and care for the many Bangladeshi women suffering from cervical cancer, particularly in the early stages of the disease, when the cancer is symptomless but easily treatable.

The emphasis on providing services in rural regions was also very intentional. "People come into the clinics, and then they get screened," said Dr. Susan Cu-Uvin, director of the Brown Global Health Initiative (GHI), "But the rest of the population, particularly in rural areas where they have no direct access to services are not being screened." HAEFA hoped to fill the need by targeting such areas.

¹⁷ CDC US Cancer Statistics: Data Visualizations: [Link](#)

¹⁸ National Cancer Institute - SEER Program "Cancer Stat Facts: Cervical Cancer" [Link](#)



See and Treat Method in RMG Factories

HAEFA has piloted a unique **See-and-Treat cervical cancer treatment program** in response to a regional lack of awareness and treatment of the disease. The screening program was spearheaded by Dr. Abid in partnership with Dr. Cu-Uvin. Dr. Cu-Uvin first established the Cervical Cancer Screening Program at Academic Model Providing Access to Health Care (AMPATH) and Moi Teaching and Referral Hospital (MTRH) in Eldoret, Kenya. Dr. Abid and Dr. Cu-Uvin were awarded a **Stars in Global Health fund** by Grand Challenges Canada to introduce cervical cancer screening using the See-and-Treat method to the RMG workers from March 31, 2018 to March 31, 2019. The See-and-Treat method consisted of a single-visit approach using VIA and thermocoagulation.¹⁹

RIGHT: Graphical representation of EVA WELL, MobileODT Device used by HAEFA's medical teams during gynecology exams. MobileODT. 2019. EVA WELL device front.png

¹⁹ Khan, Md. Saim. Report Inception and Training on Cervical Cancer Screening and Treatment Project in Kurigram.

Cervical Cancer Screening in Kurigram

The cervical cancer screening project in Kurigram was coordinated by Md. Saim Khan. The training took place on October 30 and 31, 2019 with a total of **29 participants each day of training** from the Upazila Health Complex (UHC) of Nageshwari, Ulipur, Chilmari, and Kurigram. Dr. Cu-Uvin led the training sessions and Dr. Pial translated them in Bangla. Representatives from Nageshwari and Ulipur brought 27 women to the training for VIA screening. In order to expand the program, three community mobilizers from each UHC gathered women from the community and sent them to the UHC.

The training focused on the visual inspection with **acetic acid (VIA) method**. VIA involves performing a vaginal speculum exam in which a health care provider applies diluted 3-5% acetic acid (vinegar) to the cervix. In order to complete VIA, HAEFA trained participants to use technology from MobileODT, a medical technology company focusing on women's health. Trainees learned to:

- input data
- use an examination table
- prepare an instrument tray with cotton swabs, sterile vaginal speculums, examination gloves, and acetic acid.

For those who tested VIA positive, thermocoagulation was a possible treatment. Thermocoagulation is a method of treatment for cervical cancer that uses heat to destroy tissue. After treatment, the superficial epithelium layer of the cervix blisters off, and the stroma and glandular crypts beneath the epithelium are destroyed by desiccation. The destroyed tissue removes the threat of cancer.



See and Treat Method in Kurigram

The cervical cancer screening project in Kurigram faced a few obstacles. Wifi connection was inconsistent, which made uploading and checking pictures of results daily difficult, and the MobileODT VIA equipment in Chilmari broke on November 6, 2019.

In the first quarter of 2020, 4,603 women were screened for cervical cancer in Nageshwari, Ulipur, and Chilmari UHCs across thirteen cervical cancer screening camps in Kurigram. A total of 944 women were screened in Ulipur UHC, 258 women in Chilmari UHC, and 675 women in Nageshwari UHC. Another 2,726 women were screened during this period at an additional thirteen cervical cancer screening camps set up throughout the Kurigram district. A total of 50 women tested VIA positive and received thermocoagulation or were referred for a biopsy. All cases were recorded in the office MobileODT.

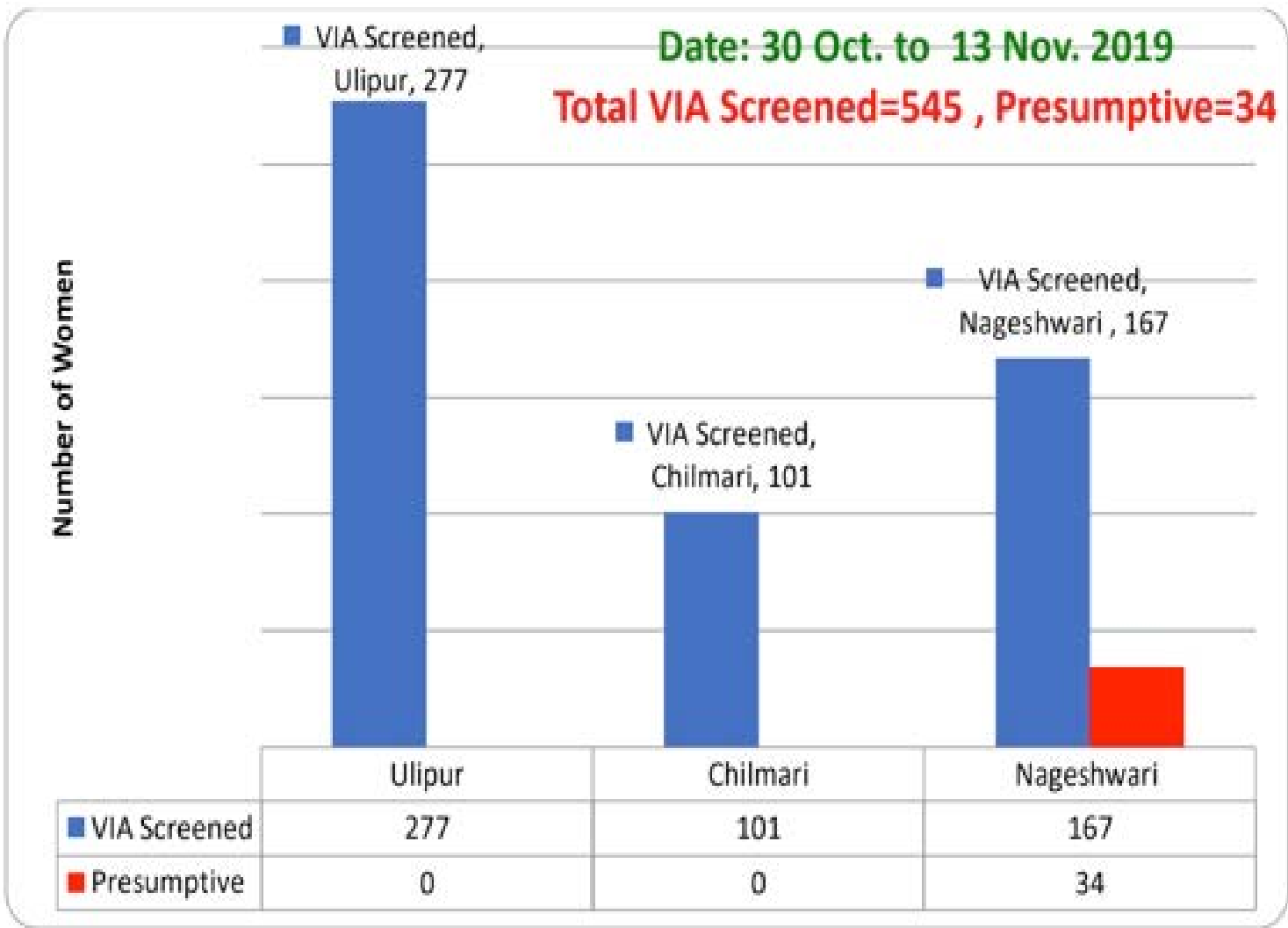
Both Dr. Abid and Dr. Cu-Uvin traveled to Kurigram from late December 2019 through January 10, 2020 to monitor trainings and continue to train hospital staff working on the project in the sub-districts of Nageshwari, Ulipur, and Chilmari. Dr. Abid and Dr. Cu-Uvin also conducted a refresher training course for midwives and nurses and a training for new midwives and nurses joining the project. This new training included:

- cervical cancer case reviews
- hands-on training from the district hospital
- meetings with staff from the United Nations Population Fund (UNFPA)

Both Dr. Abid and Dr. Cu-Uvin met with UNFPA, civil surgeons, and local stakeholders including community representatives to explain the project work and importance of ongoing community engagement.

The screening program had steady enrollment in January and February as well as into early March. Recruitment slowed beginning mid-March due to the COVID-19 pandemic. Community level engagement with patients and recruitment for screening at the UHCs is expected to be initiated as soon as the local lockdown due to the pandemic is lifted. Throughout the lockdown, trained midwives and nurses continued to provide COVID-19 related services at the sub-district hospitals in Ulipur, Nageshwari, and Chilmari.

Summary report of VIA screening between 30 October to 13 November, 2019



A summary report of the VIA screenings that occurred between October 30 and November 13, 2019. A total of 545 women were screened using VIA, with 277 in Ulipur, 101 in Chilmari, and 167 in Nageshwari. While neither Ulipur nor Chilmari had any presumptive cases, Nageshwari had 34.²⁰

²⁰ Khan, Md. Saim. 2020. Report Inception and Training on Cervical Cancer Screening and Treatment Project in Kurigram.



Cervical Cancer Screening in the Rohingya Refugee Camps

This past year, the See-and-Treat method was additionally implemented in the Rohingya refugee camps. Cervical cancer screenings are incredibly important for this population given the prevalence of sexual assault that occurred during the attacks against the Rohingya in August 2017. There were high hopes for the program in the camps given the success in the garment factories and the Kurigram district. However, due to cultural differences in the camps and poor messaging tactics, unfortunately the initiative was not a success. The Rohingya refugee population was predominantly Muslim and highly conservative. They were not used to preventative services, especially the pelvic exams that the screening required. None of the women had experience with gynecologists, and many were not properly educated on the importance of cervical cancer screening. Despite the See-and-Treat centers in the camps being very private with only female doctors, due to this failure in understanding the culture, Dr. Cu-Uvin and Dr. Abid were not able to make this a success.

Why did the program work in other places but not in the Rohingya refugee camps?

The “See and Treat” method worked for the garment factory workers due to the fact that these workers had significant power in their families and social networks given that they were financially independent. “[The factory workers] had a big voice in the family because they were financially independent, and they contributed to the finances of the family,” noted Dr. Cu-Uvin. “They just had a lot more power in negotiating the kind of health care that they wanted.”

In Kurigram, the doctors were able to speak with the leaders of the community, who had immense influence over the people, and as a result, these leaders, including the Surgeon general and town leaders, were able to convince community members of the importance of cervical cancer screening.

The initiative failed in the camps largely because of cultural differences and lack of education on the issue. HAEFA learned from the experience that going through the imam, a Muslim leader who typically leads prayers, would have been a better way to convince the rest of the community members. The imam would have been able to get the support of husbands, who have the greatest influence on their wives' lives. Dr. Cu-Uvin and Dr. Abid hope that given HAEFA's previous work in primary care and prevention in the camps, the imams can be convinced of the importance of screenings.

Furthermore, many of the women in the refugee camps are both uneducated on these health issues and face language barriers. As a result of these experiences, Dr. Cu-Uvin and Dr. Abid have planned to work on health literacy in the camps in the form of a comic book explaining cervical cancer, the importance of screening, and protective measures that can be taken.

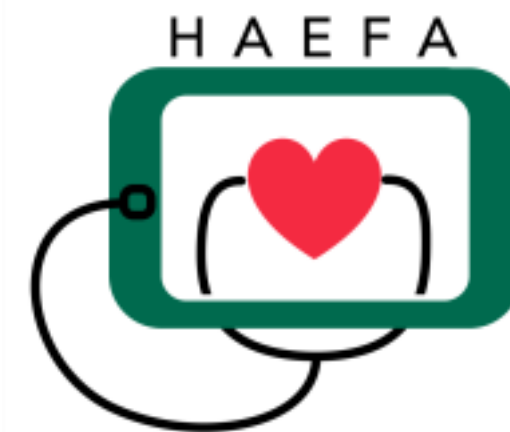




EDUCATION

HAEFA also promotes education among populations who are underserved. They have provided **funds and logistical support** to build a school for children of the Bangladeshi host community who have special needs. This school, Arunodoy School located in Bahar Chara of Cox's Bazar district, will specifically serve students with learning disabilities such as autism. These students have previously lacked the institutional and individualized support they could benefit from, and this will be the first school of its kind in the vicinity.

In early 2020, HAEFA collaborated with the **Keren Malki Foundation**, an Israeli foundation empowering the families of children with severe disabilities. Through this collaboration, HAEFA has provided **20 scholarships** for students in Gazipur and Dhaka.





FUNDRAISING

Throughout 2019, thanks to HAEFA's fundraising efforts in the US, the organization was able to send a total of **US\$89,426** (roughly 7,605,243 BDT) to Bangladesh in order to fund the medical teams working throughout the country and in the Rohingya refugee camps.

HAEFA's 2019 funding included grant awards of

- **\$7,800** from the American Online Giving Foundation
- **\$15,000** from the Semnani Foundation Grant
- **\$16,632** from the Pricewaterhouse Coopers Charitable Foundation Grant

In addition, HAEFA made out **\$2,060** in grants to nonprofits including Network for Good and the American Red Cross.

PHOEBE KENNAN AND JENNA MULLEN

In 2020, in anticipation of and preparation for a COVID-19 outbreak in the Rohingya refugee camps, Phoebe Kennan and Jenna Mullen, two Brown University students working with HAEFA's US team, founded the fundraising campaign Students for HAEFA on March 25. This fundraiser was matched by a Geneva-based company and raised **\$70,000** overall to provide HAEFA's medical teams with PPE and vital medicines.

This campaign included generous grants of

- **\$25,000** from Highland Europe
- **\$25,000** from the Oak Foundation

We would like to extend our deepest thanks and gratitude to these organizations, whose support has been vital to our pandemic response.



STUDENT PROJECTS

PHOEBE KENNAN AND JENNA MULLEN

Phoebe and Jenna founded the campaign Students for HAEFA on March 25, 2020. Phoebe and Jenna designed original infographics and pushed outreach on Facebook to effectively raise awareness of the specific vulnerabilities the refugee camps faced in the context of the pandemic. **“We tried to create a sense of urgency, so that people would step up to fund it straight away.”**

Jenna served as HAEFA’s COVID-19 Emergency Coordinator since March. In addition to coordinating the first COVID-19 Competency Training-of-Trainers (TOT) Program, Jenna investigated ventilator sourcing for the camps. She was awarded the **Royce Fellowship** from Brown University to complete independent research on COVID-19 in the Rohingya camps, aiming to improve HAEFA patients’ virus outcomes while simultaneously producing the first long term overview of the COVID-19 outbreak in the camps.

IMSHAN DHROLIA

In the summer of 2019, Warren Alpert Medical student Imshan conducted research in Bangladesh as a summer **CCSA and AMS Research Fellow** under Dr. Abid’s mentorship. His project, titled “Life in Liminality: Exploring the Resilience of Rohingya Mothers” studied the experiences of Rohingya mothers, women, and wives.

EMMA RAMSDELL

In 2019, Emma wrote HAEFA’s 2017–2019 **Annual Report**. She created, continuously updated, and wrote blog posts for HAEFA’s website.

SEMINARS, WEBINARS, MEDIA

EVENT SPEAKER

International Conference on Rohingya Crisis in Bangladesh: Challenges and Sustainable Solutions

North South University, Center for Peace Studies and the Department of Political Science and Sociology, and UNHCR

July 27-28, 2019. [Link](#)

Bangladesh Rising Conference

Harvard University, Lakshmi Mittal and Family South Asia Institute

September 16, 2019. [Link](#)

Beyond the Crisis Narrative: Rohingya Statelessness and its Implications for Bangladesh

UC Berkeley, Subir and Malini Chowdhury Center for Bangladesh Studies and the Institute for South Asian Studies (ISAS) Initiatives

February 7, 2020. [Link](#)

Voices: the Risk of Coronavirus for Rohingya Refugees

New York University, Rise for Rohingya

April 27, 2020. [Link](#)

Healthcare Provision for Cardiovascular Disease in the World's Largest Refugee Camps

May 22, 2020.

Lifespan Cardiovascular Institute, Cardiology Grand Rounds

INTERVIEW

Nongor Talks. Host: Tapas Barua, Guest: Dr. Ruhul Abid

June 3, 2020. [Link](#)



NEWS

Health Plus. HAEFA's See-and-Treat Cervical Cancer Work

Channel 24 News Report on HAEFA's Cervical Cancer Screening and Treatment

March 4, 2020. [Link](#)

Emergency Response in the Rohingya Camps

Channel 24 Interview

May 18, 2020. [Link](#)

COVID-19 and the New Normal

Channel 24 Live Interview with Professor Ahmed Mushfiq Mobarak

June 2, 2020. [Link](#)

Current COVID-19 situation in Bangladesh and possible solutions

Channel 52tv

July 8, 2020. [Link](#)

PRESENTATIONS

Disease Profile Reports Using NIROG Data Analysis in the Rohingya Refugee Camps

Coordination Cell & ICSG NCD Core Group

Various dates.

HAEFA's Work Screening, Treating, and Developing Protocol for Non-communicable Diseases in the Rohingya Refugee Camps

Coordination Cell & ICSG NCD Core Group

Various Dates.



COLLABORATIONS

ORGANIZATIONS

- Abrosoft Software
- Brown University Global Health Initiative
- Brown University Warren Alpert Medical School
- Brown University, Watson Institute for International and Public Affairs
- Directorate General for Health Services (DGHS)
- International Organization for Migration (IOM)
- Institute of Epidemiology, Disease Control, and Research (IEDCR)
- Médecins Sans Frontières (MSF)
- Ministry of Health and Family Welfare (MoHFW)
- Physicians for Human Rights
- PricewaterhouseCoopers Foundation (PwC)
- Project HOPE
- Refugee Relief and Repatriation Commissioner (RRRC)
- United Nations High Commissioner for Refugees (UNHCR)
- United Nations Population Fund (UNFPA)
- Upazila Health Complexes (UHC)
- World Health Organization (WHO)

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Ellie Papapanou
Emma Ramsdell
Ingrid Ren
Auria Zhang





HOW YOU CAN HELP

HAEFA is constantly in need of public donations to support the Rohingya refugee crisis and to continue COVID-19 relief efforts. Any amount that you are able and willing to give helps HAEFA tremendously in **promoting access to health care**, and all donations are tax deductible in the United States. All ongoing funding received will be used to further HAEFA's mission.

For every **\$1 you donate**, **\$0.97** will be used for **direct program service** expenses, of which **\$0.80** are sent **directly to Bangladesh** and \$0.17 are split between technological supplies, travel, and fundraising expenses. The remaining \$0.03 are used for administrative expenses.

Please consider donating at the following link:

<https://haefa.org/donatetohaefa>

