

MEDGLOBAL BANGLADESH

CLINICAL PROGRESS REPORT



2021



Contact

MedGlobal

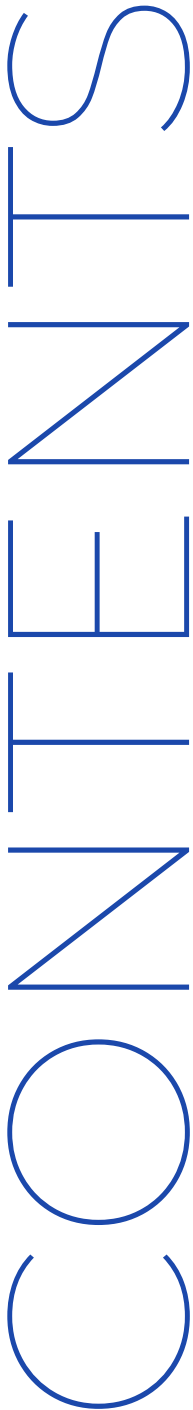
10604 Southwest Highway, Suite 107
Chicago Ridge IL 60415

www.medglobal.org
connect@medglobal.org
[@medglobalorg](https://www.facebook.com/medglobalorg)



DEDICATED TO A WORLD WITHOUT HEALTHCARE DISPARITIES

Table of Contents



01.

ACKNOWLEDGMENT

02.

INTRODUCTION

A. Purpose

B. Background

03.

METHODS

A. Overview of Study Design

B. Ethical Clearance

04.

FINDINGS

A. Data Collection for Children

- Results for Children

B. Data Collection for Adults

- Results for Adults

C. Health Promotion and Hand Hygiene

05.

CONCLUSION

Appendix 1 : Pictures

Appendix 2: Family Counting Number (FCN) of Forcibly Displaced Myanmar Nationals (FDMN) Adults

Appendix 3: Family Counting Number (FCN) of FDMN Children

The study team would like to thank all the individuals and organizations that have assisted and supported completion of this study. This primary data collection study was entirely conducted by MedGlobal's Infection Prevention and Control (IPC) Team under the supervision of MedGlobal Bangladesh Program Manager Labib Tazone Utshab. The team also acknowledges Dr Rehana Parvin, Dr. Fatema Jannat, Dr. Safa Islam and Medical Assistant Rezaul Karim for their support during data collection.

STUDY TEAM

Medical Team:

- Dr Rahana Parvin, Clinical Coordinator, MedGlobal
- Dr Fathema Zannat, Medical Officer, MedGlobal
- Dr Safa Islam, Medical Officer, MedGlobal
- Rezaul Karim, Medical Assistant, MedGlobal
- Sonali Akter, SSN, MedGlobal

IPC and Data Collection Team

- Sm Taufiqul Islam, Infection Control Officer, MedGlobal
- Anwar Hossain, Health Promoter, MedGlobal
- Md Zahurul Islam, Health Promoter, MedGlobal

Supervision

- Labib Tazone, Program Manager, MedGlobal

The number of forcibly displaced people labeled as refugees across the world has grown rapidly in the past few decades. In Myanmar, the Rohingya have been fleeing en masse from their homes since August 25, 2017. To date, more than 1.2 million Rohingya refugees have settled in designated refugee camps and expansion sites located in the Cox's Bazar district of Bangladesh.

Exploring the health needs of this population in the camp setting will help national and international organizations to deliver key services in a more organized and efficient way. Topics of particular interest include the prevalence of non-communicable diseases (NCDs) including hypertension (HTN), diabetes mellitus (DM), health needs of pregnant women, family planning needs, and distribution of Health Cluster diagnoses and comorbidities.

A. Purpose

In 2018, MedGlobal partnered with international non-profit, non-governmental organization OBAT Helpers USA to support a primary health post in Camp 4, Modhuchara region of Kutupalong that is operated by local non-profit, non-governmental organization Prantic Unnayan Society,. The health post serves Rohingya refugees from Camp 4 (population: 31,044), with some patients from surrounding camps. The health post is staffed by a team of permanent Bangladeshi staff, plus volunteers from the Rohingya community.

The services provided at the health post include: general health, NCD care, infectious disease (ID) care, sexual and reproductive care, mental health care, nutrition, and dental. To date, the health post has provided 189,000 consultations for Rohingya refugees including medications, laboratory tests and referrals for specialised care. MedGlobal has also implemented various health projects in Cox's Bazar town that benefitted underserved host community Bangladeshis.

Improved data collection is needed at the health post to monitor patient demographics, services provided, and patient outcomes. This data will allow us to improve the health post services by identifying the most pressing health needs.

B. Background

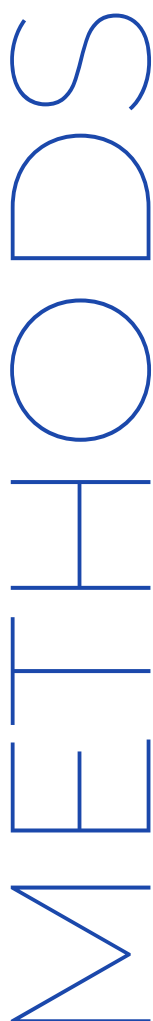
MedGlobal is a non-profit, charitable (501c3) organization registered in the United States that provides free, sustainable healthcare services to refugees, the displaced, and most vulnerable in crisis areas and low resourced countries worldwide. MedGlobal deploys healthcare volunteers, supports local partners and medical providers with training, funding, technology as well as donating medical equipment, medications and supplies. These services provide lifesaving and life-sustaining care, based on needs-assessment and best practices, to the most vulnerable around the globe.

INTRODUCTION

Supported Population

- Location: Cox's Bazar Refugee Camp 4
- Direct data collected from 3,637 individuals
 - 1,077 children
 - 2,560 adults





A. Overview of Study Design

The study employed a primary quantitative study design in Rohingya camp 4. This 81-day pilot project started on 6th March 2021 and ended on 23th March and then again started on 10 July and ended on 30 September 2021. It included structured questionnaires for all patients (women, men, and children) who received care at the emergency, out patient department (OPD) 4 (NCD patients), and OPD 5 (general care) stations. Data were not collected from the dental, maternity, or "flu corner" (infectious disease) stations, nor from patients who were referred out. We collected data from 3637 patients, who consisted of Rohingya refugees living in camp 4 and other surrounding camps, as well as some Bangladeshi host community members. After quality assurance, the data were analyzed for descriptive statistics of basic demographics. The frequency distributions are reported using tables and graphs in this report. Analyses were carried out using KOBO Collect version 1.29.3

B. Ethical Clearance

We have verbally informed the patients about collection of their information and participation in the study. Verbal consent was taken before data was collected from patients' "OPD cards" (paper records retained by patients).



FINDINGS

A. DATA COLLECTION FOR CHILDREN (CHILDREN = AGE 0 THROUGH 17 YEARS)

Data from 1,077 patients were collected; 472 patients were female and 605 were male

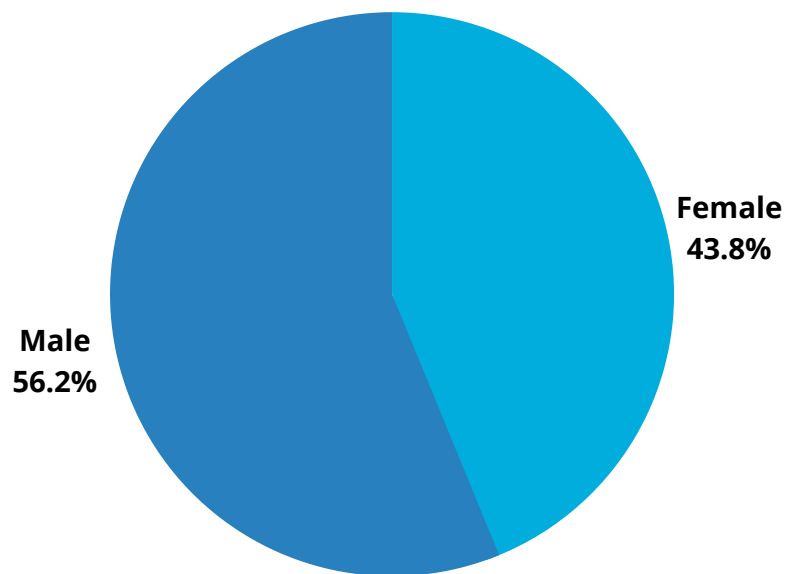


Figure 1. Percentage of Male vs. Female Pediatric Patients



Salma Enjoyed
the hygiene
education
session from
MedGlobal
Health
Promoters team

Out of 1,077 patients, 113 patients were suffering from chronic disease and 964 were suffering from acute health conditions. Chronic conditions are considered as 14 days or more of illness.

Acute conditions are often caused by a virus or an infection, but can also be caused by an injury or by the misuse of drugs or medications. Chronic conditions are often caused by unhealthy behaviors that increase the risk of disease.

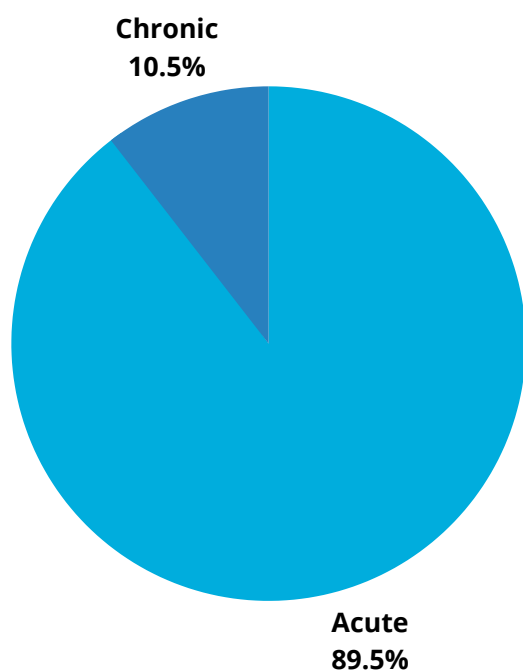


Figure 2. Acute vs. Chronic Conditions in Pediatric Patients

Out of 1077 children, 975 were treated for cough, fever or diarrhoea in our flu corner.

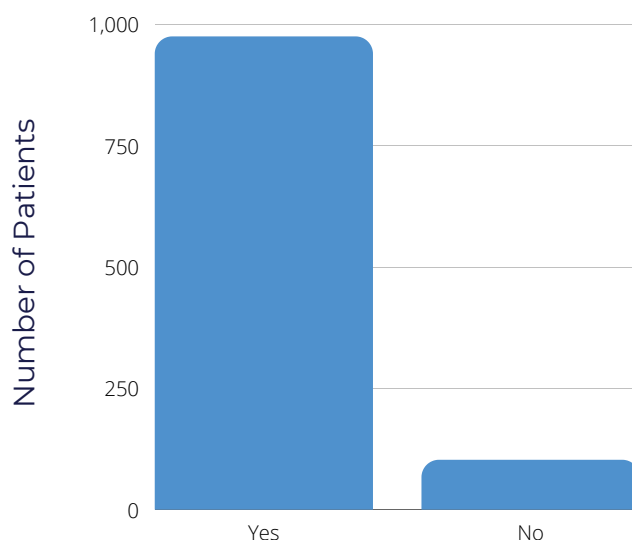


Figure 3: Children treated for cough, fever, or diarrhoea

DISEASES CLUSTER

	Diseases	Patients Number	Percentage
SKIN DISEASES (466)	Scabies	135	12.53
	Dermatitis	90	8.36
	Taeniasis	85	7.89
	Bacterial skin Infection	66	6.13
	Other unspecified skin infection	40	3.71
	Fungal Infection	13	1.21
	Impetigo	35	3.25
	Viral Infection	2	0.19
	Diseases	Patients Number	Percentage
AWD(122)	Diarrhoea-Acute Water Diarrhoea	99	9.19
	Diarrhoea-Other	10	0.93
	Diarrhoea-Bloody (Dysentery)	13	0.37
	Diseases	Patients Number	Percentage
ACUTE CONDITION(233)	Other acute conditions	72	6.68
	Varicella	5	0.46
	Acute Health Condition "Abscess"	74	6.87
	Gastritis/GI Problem	27	2.51
	Intestinal Worms	23	2.14
	Viral illness/ common cold	11	1.02
	Abdominal pain	3	0.28
	Unspecified acute condition	7	0.65
	Musculo-skeletal problems	10	0.93
	Vaginal infection non-STI	1	0.09

Table 1. Pediatric Patient Diagnoses

DISEASES CLUSTER

EYE PROBLEM(23)	Diseases	Patients Number	Percentage
	Eye problem- Conjunctivitis	12	1.11
	Eye problem- Acute Eye Injury	8	0.74
	Eye problem- Other	3	0.28
EAR DISEASE(61)	Diseases	Patients Number	Percentage
	Ear Disease	10	0.93
	Ear disease- Ear pain unspecified	2	0.19
	Ear disease- Chronic otitis media	16	1.49
OTHER DISEASES(45)	Ear disease- Acute otitis media	33	3.06
	Diseases	Patients Number	Percentage
	Urinary tract infection	12	1.11
	Lower Respiratory Tract Infection (RTI)/ pneumonia	1	0.09
	Upper RTI/Acute Respiratory Infection	7	0.65
	Anemia	2	0.19
	Dental Condition	8	0.74
	Asthma	2	0.19
	Measles/Rubella Suspected	4	0.37
	Diabetes Mellitus (DM)	1	0.09
	TB- suspected	1	0.09
	Mumps- suspected	1	0.09
	Birth Asphyxia	1	0.09
	Fever Unexplained > 101°F/38.5°C	5	0.46

Table 1. Pediatric Patient Diagnoses

DISEASES CLUSTER

NCD CONDITION (24)	Diseases	Patients Number	Percentage
	Other NCDs/chronic conditions	4	0.37
	NCDs/CC: Thalassemia	4	0.37
	NCDs/CC: General weakness	12	1.11
	Haemorrhoids	1	0.09
	Other NCDs/CC: unspecified	3	0.28
INJURIES (92)	Diseases	Patients Number	Percentage
	Bites	1	0.09
	Burns	25	2.32
	Other injuries	64	5.94
	Accidents (Inc. Traffic Accidents)	2	0.19
REFERRED CASE (11)	Diseases	Patients Number	Percentage
	Referral	11	1.02

Table 1. Pediatric Patient Diagnoses



Asma is one of our mother's club members who enjoyed a health education session

Figure 4: Child Diagnosis

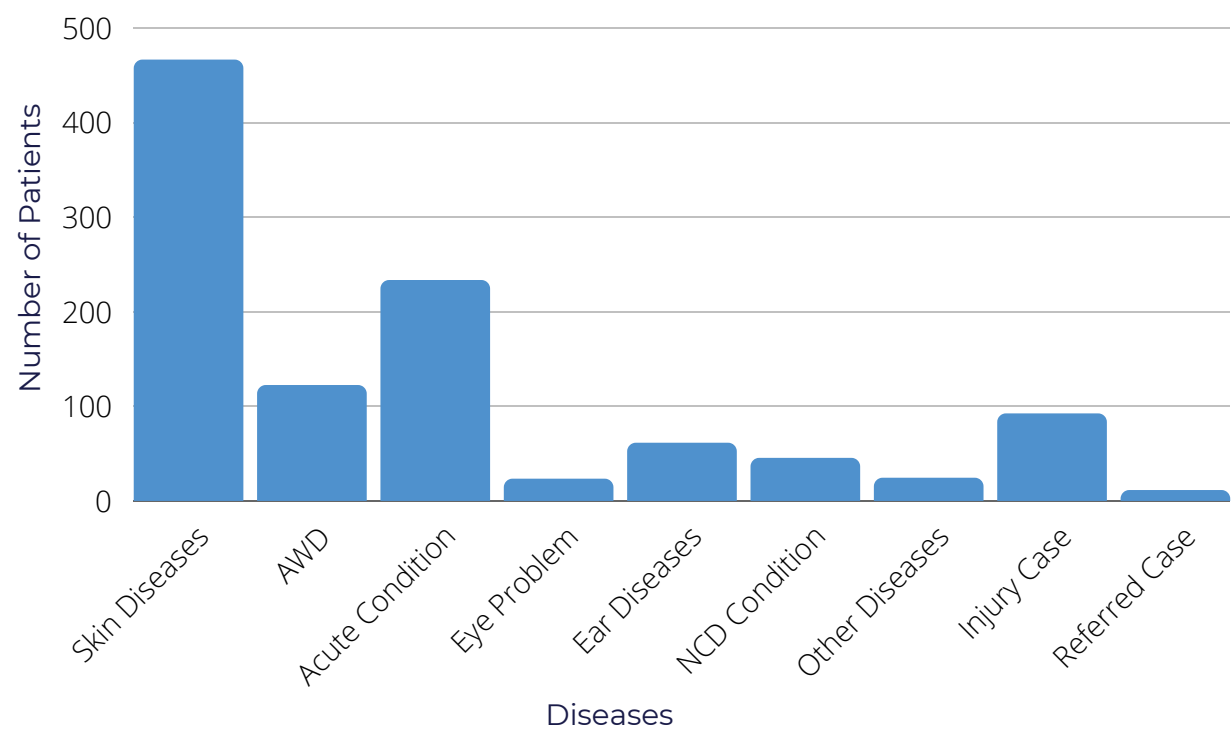
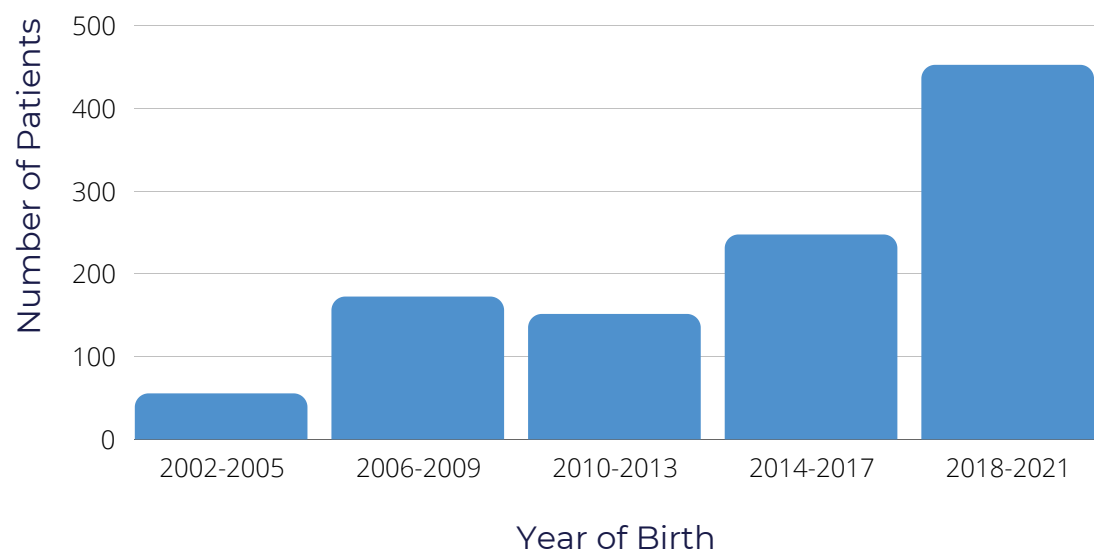


Figure 5: Children Year of Birth



SERVICES PROVIDED TO PEDIATRIC PATIENTS

Department	Patients Number	Percentage
Emergency	897	83.29
Out Patients Department	165	15.32
Non-Communicable Diseases	15	1.39

Table 2: Services Provided to Pediatric Patients

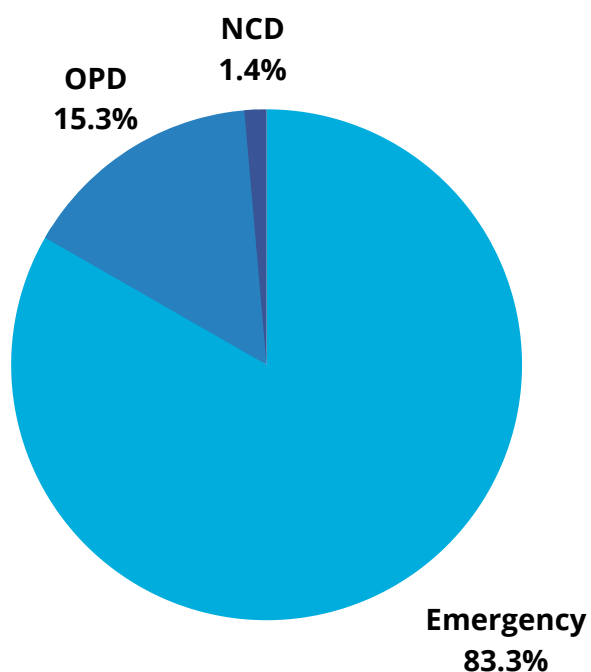


Figure 6: Services Provided to Pediatric Patients

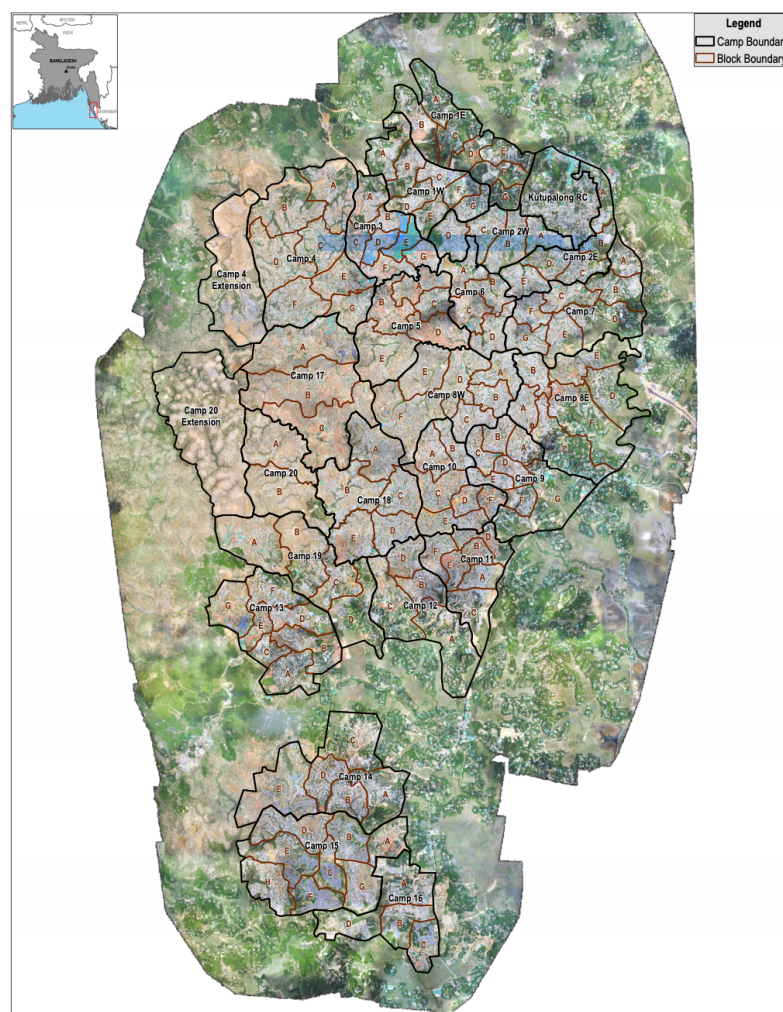


Figure 7: Map of Rohingya Refugee Camps

PATIENT NUMBERS ACCORDING TO CAMP RESIDENCE

Camp Number	Number of Patients	Percentage
Camp 1	58	5.39
Camp 1-W	11	1.02
Camp 1-E	2	0.19
Camp 3	91	8.45
Camp 4	793	73.63

Table 3: Geographic Location of Pediatric Patients

PATIENT NUMBERS ACCORDING TO CAMP RESIDENCE

Camp Number	Number of Patients	Percentage
Camp 5	22	2.04
Camp 7	2	0.19
Camp 8-w	8	0.74
Camp 12	1	0.09
Camp 13	1	0.09
Camp 14	2	0.19
Camp 17	58	5.39
Camp 18	2	0.19
Camp 19	1	0.09
Camp 20	9	0.84
Bangladesh (Host community)	16	1.49

Table 3: Patient Numbers According to Camp Residence

Results for Children

We reached 3,637 patients at the Prantic Health Post. Among the study population 1,077 were children. The age range of children in this study is zero years to eighteen years. Of the 1,077 patients, 605 were male and 472 were female. The most commonly diagnosed diseases were Abscess, AWD, Asthma, Burn Injury, Ear Disease, Eye Problem, Gastritis, Measles, Mumps, MSK, Other Injury, Skin Diseases, TB Suspected and UTI. Most of the patients were suffering from communicable diseases, including 43.27% suffering from different types of skin diseases, 11.33% suffering from AWD, and 7.80% suffering from ENT problems. Additionally, 8.54%, of patients suffered from injuries, 4.18% from other NCDs, and 21.63% from Other Acute Conditions. We referred 1.02% for care at other facilities.

It is alarming that the most common complaint amongst children was Skin Diseases. Pediatric skin conditions can be caused by heat, cold, fungus, bacteria, drooling, allergies, or prolonged contact with a wet nappy. Fortunately, most children's skin conditions are short-lived and clear up on their own over time. It can be difficult for parents within the camp setting to maintain their children's hygiene due to overcrowding and limited access to safe water.

In terms of patient demographics, the majority (73.63%) of pediatric patients lived in Camp-4, followed by Camp 3 (8.45%), Camp 17 (5.39%), and Camp 1 (5.39%). Host community children made up 1.49% of pediatric patients.



FINDINGS

B. DATA COLLECTION REPORT FOR ADULTS (ADULTS = 18 YEARS AND OLDER)

Out of 2,560 adult patients, 1,104 were male and 1,456 were female.

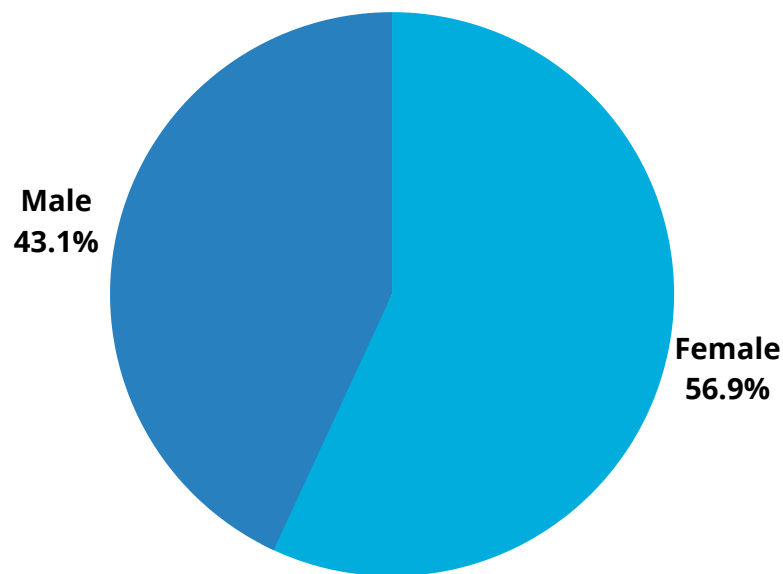


Figure 8: Percentage of Male vs. Female Adult Patients



Rahim (on the left of the picture) is one of MedGlobal's NCD patients of MedGlobal

According to the data, out of 2,560 adult patients, 1,497 presented with chronic conditions and 1,063 presented with acute conditions.

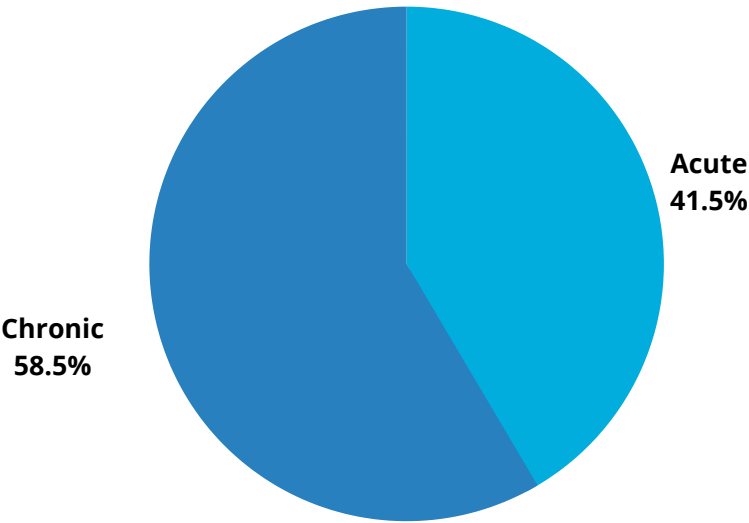


Figure 9: Acute vs Chronic Adult Patients

The doctors discussed family planning with 497 patients (19.4% of patients). This took place in our OPD, Emergency Room, and NCD Corner.

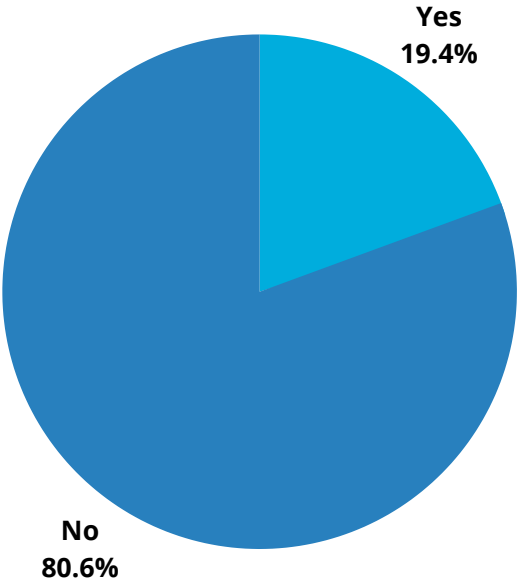


Figure 10: Did the Patient Discuss Family Planning with our Doctors?

DISEASES CLUSTER

	Diseases	Patients Number	Percentage
	Diabetes Mellitus (DM)	505	19.73
	HTN	520	20.31
	Musculo-skeletal problems	304	11.88
	Gastritis/GI Problem	199	7.77
	Chronic Obstructive Pulmonary Disease	108	4.22
	Abscess	69	2.7
	Diseases	Patients Number	Percentage
ENT PROBLEM (23)	Acute Otitis Media	1	0.04
	Chronic Otitis Media	1	0.04
	Ear Disease	6	0.23
	Unspecified Ear Disease	1	0.04
	Eye Problem Conjunctivitis	4	0.16
	Eye Problem Other	10	0.39
	Diseases	Patients Number	Percentage
INJURIES (82)	Accidental Injury- Road	3	10.12
	Burns	5	0.2
	Other injuries	72	2.81
	Bites	2	0.08

Table 4: Adult Patient Diagnoses

DISEASES CLUSTER

SKIN DISEASES (310)	Diseases	Patients Number	Percentage
	Scabies	70	2.73
	Taeniasis	100	3.91
	Bacterial skin Infection	8	0.31
	Other unspecified skin infection	85	3.32
	Fungal Infection	39	1.52
	Impetigo	4	0.16
	Viral Infection	4	0.16
AWD(28)	Diseases	Patients Number	Percentage
	Diarrhoea-Acute Water Diarrhoea	27	1.05
	Diarrhoea-Bloody (Dysentery)	1	0.04
ACUTE CONDITION(198)	Diseases	Patients Number	Percentage
	Viral Illness/Common Cold	21	0.82
	Acute Jaundice	1	0.04
	Hypertensive	2	0.08
	Rectal Bleeding	3	0.12
	Abdominal Pain	8	0.31
	Other Unspecified condition	163	6.37

Table 4: Adult Patient Diagnoses

DISEASES CLUSTER

OTHER DISEASES (144)	Diseases	Patients Number	Percentage
	Anemia	1	0.04
	Intestinal Worms	25	0.98
	Urinary tract infection	41	1.6
	Asthma	38	1.48
	Sexually Transmitted Disease/Infection	6	0.23
	Upper RTI/Acute Respiratory Infection	5	0.2
	Nonischemic Heart Disease	4	0.16
	Lower RTI/ pneumonia	2	0.08
	Meningitis-Suspected	1	0.04
	Unexplained Somatic Complaint	2	0.08
	Varicella	1	0.04
	Mental health conditions	1	0.04
	Intellectual Disability	2	0.08
	Fever Unexplained > 101°F/38.5°C	1	0.04
	Fever-Suspected Hemorrhagic Fever	1	0.04
	Ischemic Heart disease	8	0.31
	Birth Asphyxia	5	0.2

Table 4: Adult Patient Diagnoses

DISEASES CLUSTER

	Diseases	Patients Number	Percentage
OTHER NCD CONDITION(64)	Other unspecified chronic condition	10	0.39
	Hepatitis/Chronic Liver Disease	1	0.04
	Dysfunctional Uterine Bleeding	1	0.05
	Tumor	1	0.04
	Polycystic ovarian syndrome	1	0.04
	General weakness	44	1.72
	Haemorrhoids	6	0.23
REFERRED CASE (6)	Diseases	Patients Number	Percentage
	Referral	6	0.23

Table 4: Adult Patient Diagnoses



According to the data collected here, the chronic condition patients are 1497, acute condition patients and 1063 out of 2560 patients.

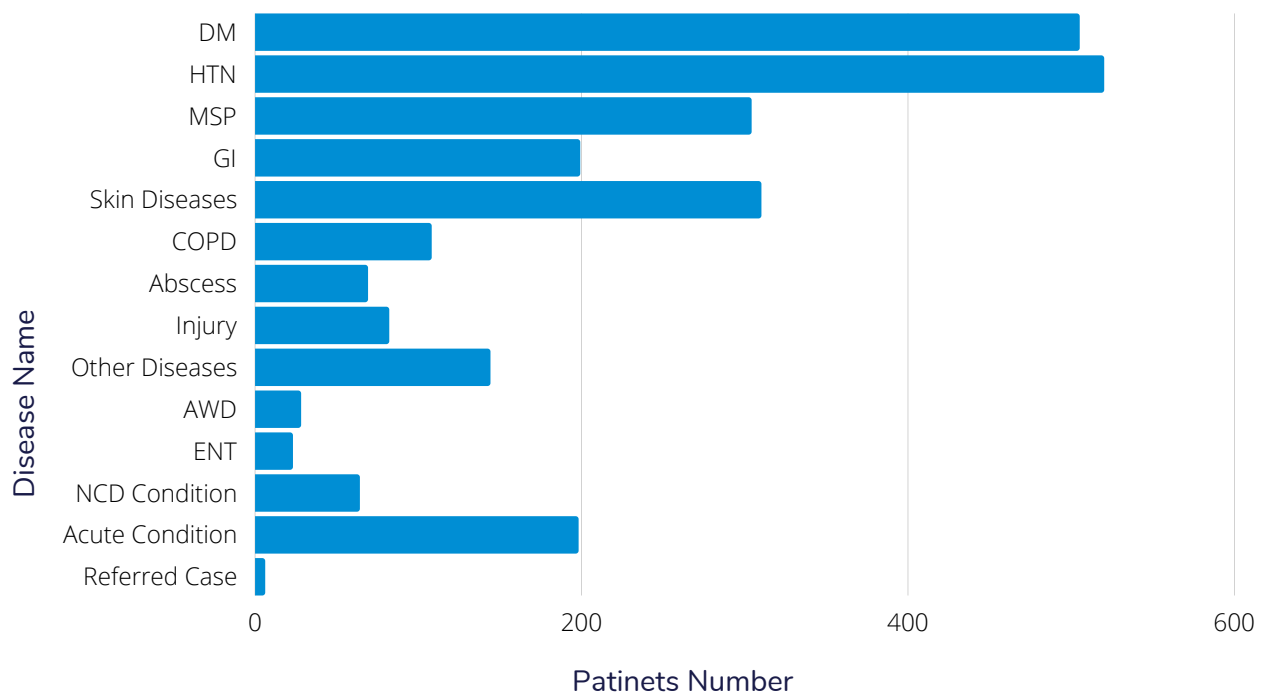


Figure 11: Adults Diagnosis

COMORBIDITIES AMONGST ADULT PATIENTS

Diseases	Patients Number
Other Acute Conditions	507
Other Chronic Conditions	334
Diabetes Mellitus	370
Musculoskeletal Disease	249
Gastritis	236
Skin Disease	239
Acute Watery Diarrhea	35
Lower Respiratory Tract Infection	12
Upper Respiratory Tract Infection	16
Dental Condition	1
Haven't any Comorbidity Showed	5

Table 5: Comorbidities Amongst Adult Patients

According to the data collected here, the chronic condition patients are 1497 acute condition patients and 1063 out of 2114 patients.

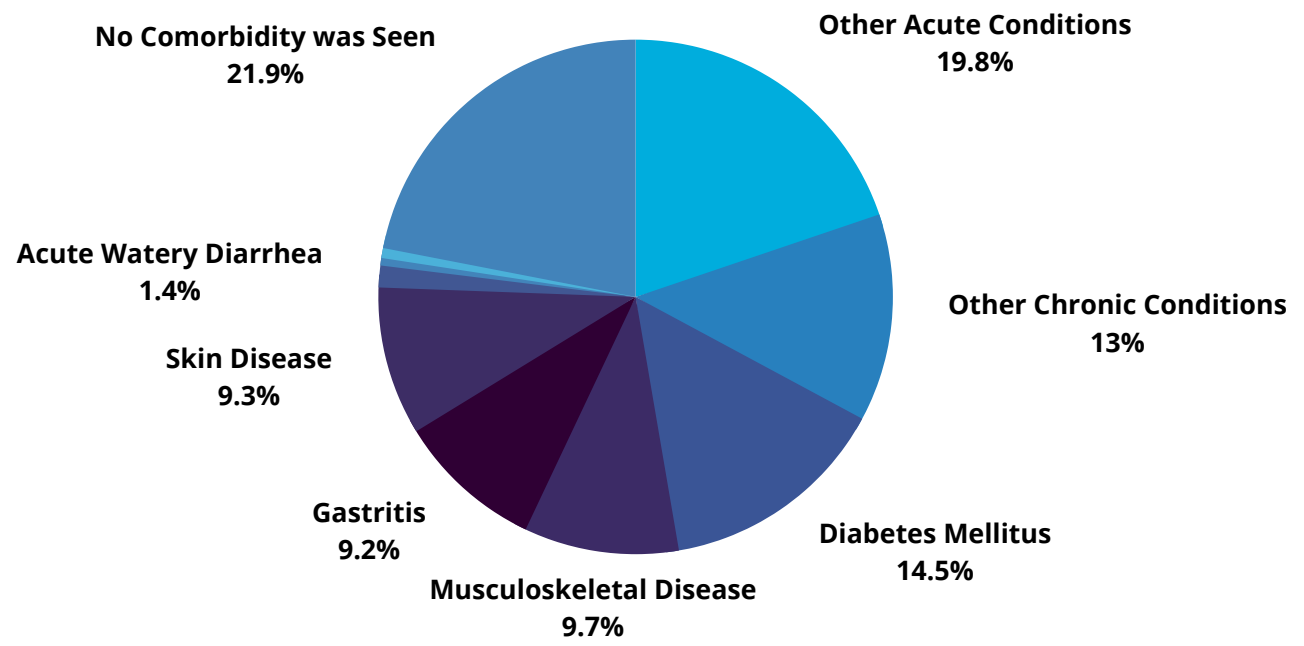


Figure 12: Prevalence of Comorbidities

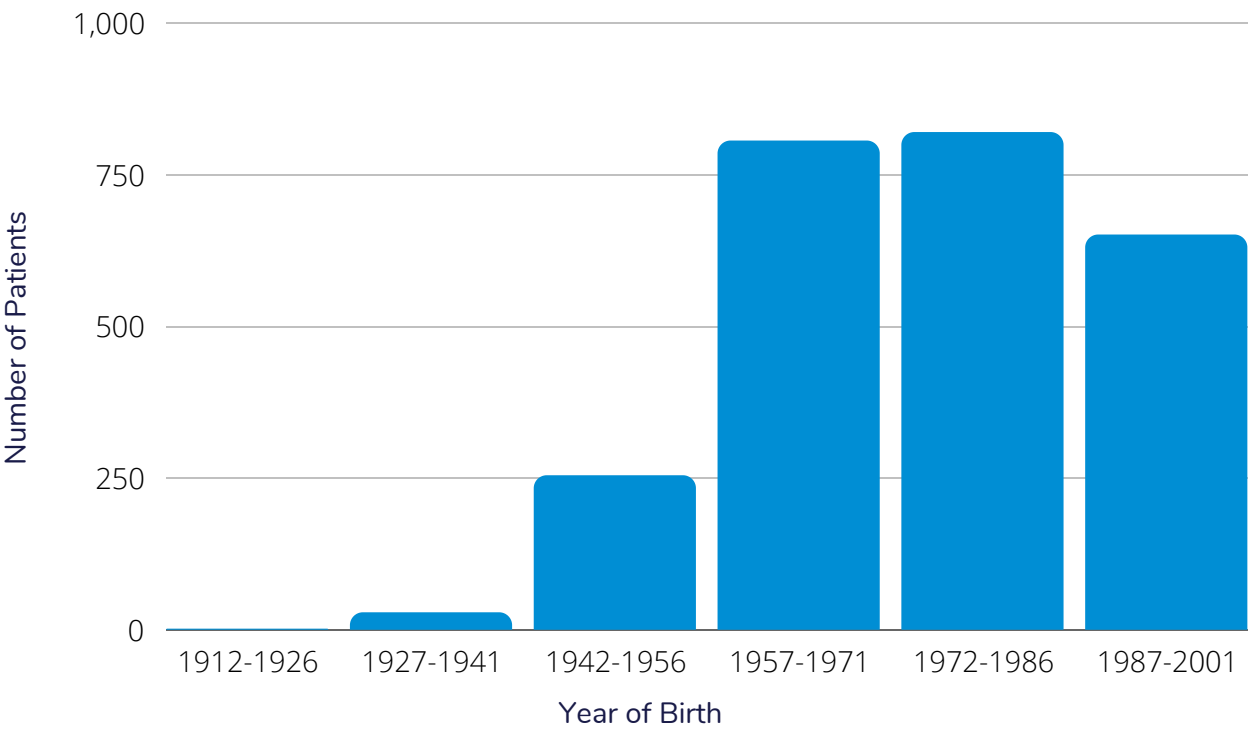


Figure 13: Year of Birth for Adult Patients

SERVICES PROVIDED TO ADULT PATIENTS

Department	Patients Number
Emergency	343
Out Patient Department (OPD)	1025
Non-Communicable Disease (NCD)	1192
Lab Service	423

Table 6: Services Provided to Adult Patients

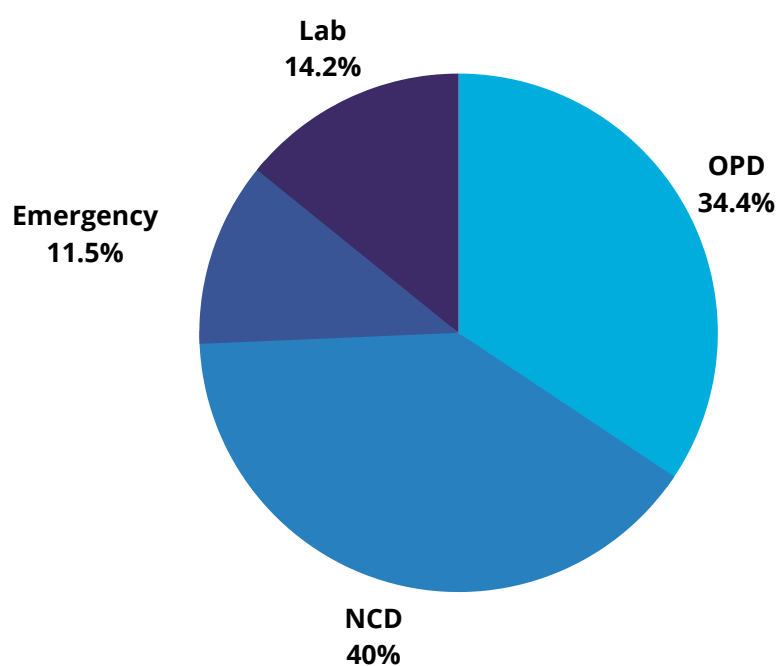


Figure 14: Services Provided to Adult Patients

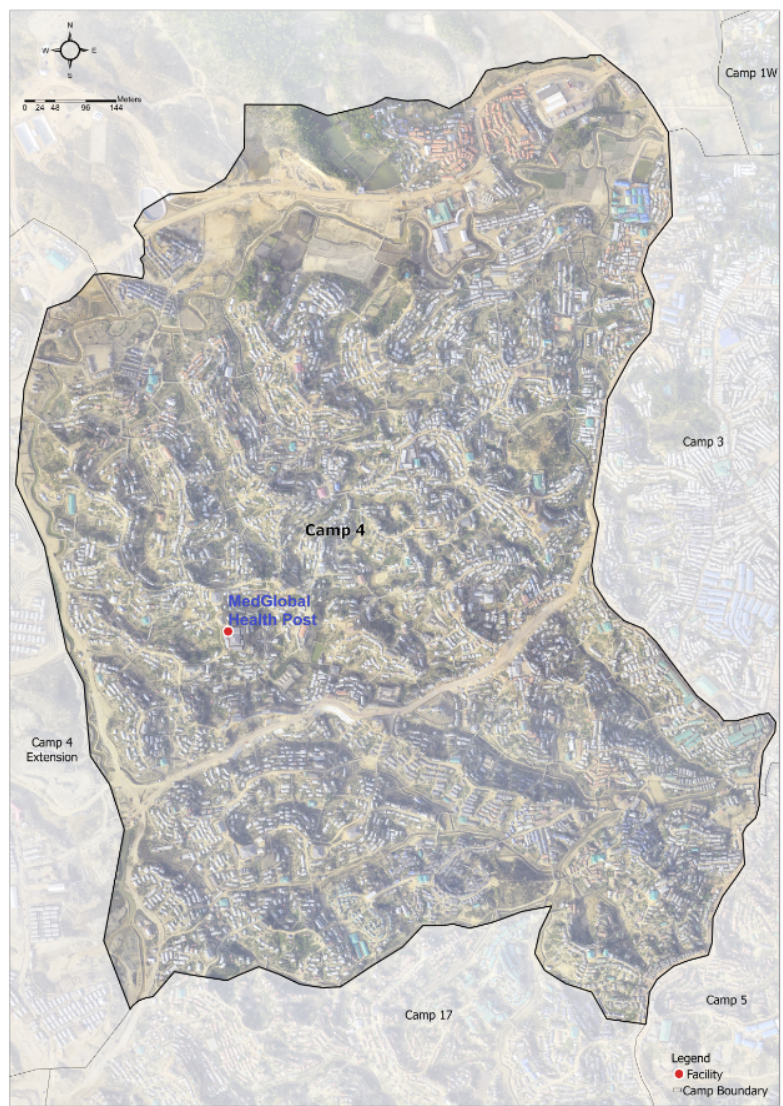


Figure 15: Geographic Location of Health Post Within Camp 4

PATIENT NUMBERS ACCORDING TO CAMP RESIDENCE

Camp Number	Number of Patients	Percentage
Camp 1	267	5.39
Camp 1-W	15	1.02
Camp 2	22	0.19
Camp 3	528	8.45
Camp 4	1367	73.63

Table 7: Patient Numbers According to Camp Residence

PATIENT NUMBERS ACCORDING TO CAMP RESIDENCE

Camp Number	Number of Patients	Percentage
Camp 4 Ex	4	2.04
Camp 5	32	0.19
Camp 6	23	0.74
Camp 7	5	0.09
Camp 8	1	0.09
Camp 8W	20	0.19
Camp 10	3	5.39
Camp 11	1	0.19
Camp 12	4	0.09
Camp 13	5	0.84
Camp 14	1	1.49
Camp 16	4	2.04
Camp 15	16	0.19
Camp 17	156	0.74
Camp 18	11	0.09
Camp 19	2	0.09
Camp 20	16	0.19
Camp 23	1	5.39
Camp 26	1	0.19
Camp 27	11	1.49
Bangladesh (Host community)	44	1.49

Table 7: Patient Numbers According to Camp Residence

RESULT FOR ADULTS

We reached 3,637 patients at the Prantic Health Post. Among the study population 2,560 were adults, including 1,104 males and 1,456 females. The most common diseases seen amongst these patients were Abscess, Diabetes Mellitus (DM), Hypertension (HTN), Asthma, Ear Disease, Eye Problems, Gastritis, Musculoskeletal (MSK) Diseases, Other Injuries, Skin Diseases, Urinary Tract Infections (UTI), and Unspecified Diseases.

In contrast to pediatric patients, most adults were suffering from non-communicable diseases (NCDs). Almost 19.73% of patients suffered from DM, 20.61% suffered from HTN. We speculate that high rates of NCDs may stem from unhealthy lifestyles; for example, the Rohingya population struggles to access healthy food.

In addition, 7.77% patients suffered from gastritis problems. Also, 12.11% suffered from skin diseases, 7.74% from other acute conditions, 2.50% from Other NCD Conditions, 5.63% from Other Diseases, 1.09% from Acute Watery Diarrhoea (AWD), 3.2% from Injury, 4.22% from Chronic Obstructive Pulmonary Disease (COPD), 2.7% from Abscess 2.7%, 0.9% from Ear, Nose, and Throat Disease (ENT) 0.9%, and 11.88% from MSP.



A Rohingya Patient is taking medicines from our pharmacy



Health Promotion

The graph below shows the number of patients who were educated on hand hygiene practices, through a one-on-one handwashing lesson, and those who were educated on COVID-19 per month.

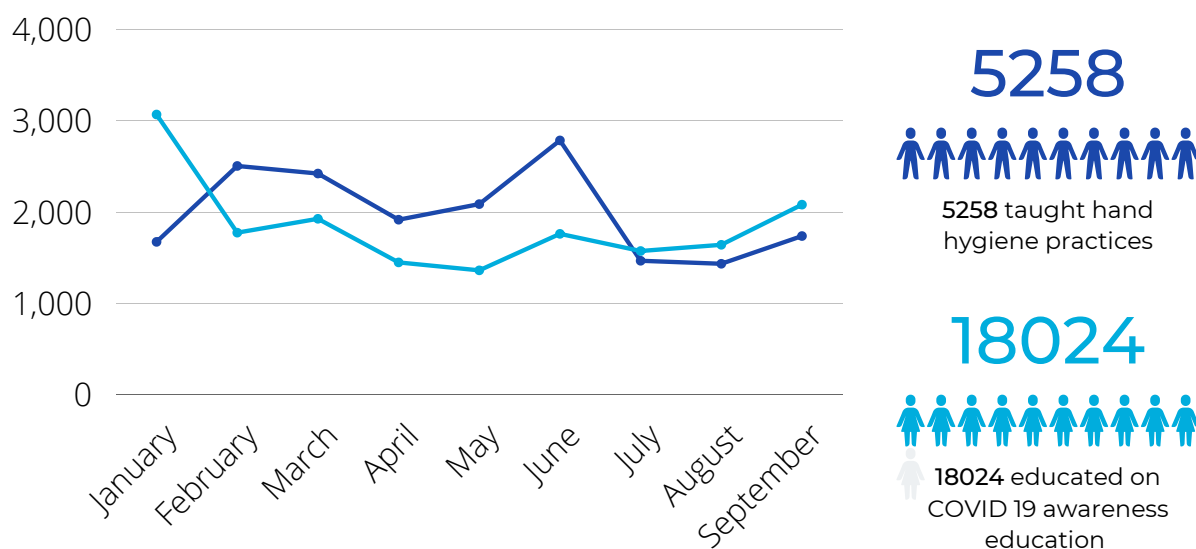


Figure 16: Patients engaged in Health Promotion activities



A Rohingya patient participates in a handwashing session.

CONCLUSION

This report highlights the need for special attention and care for chronic diseases within the adult Rohingya population, especially HTN and DM. Of adult patients, 40.03% of patients are suffering from chronic conditions. Conversely, there is a need to address acute conditions within the pediatric population, which account for 89.5% of child illness.

Hygiene promotion is a pressing need for all age groups. We report 466 cases of skin diseases amongst children (43.27% of pediatric patients) and 310 amongst adults (12.10% of adult patients). MedGlobal's IPC team has been able to teach proper handwashing to 5,258 patients, and this initiative should continue. In addition, 18,024 patients were educated on COVID-19.

We hope that the findings outlined in this report help the Bangladesh government and non-governmental organizations to design programs that address the observed health needs of the Rohingya population in Cox's Bazar.



A Rohingya patient participates in a handwashing session



APPENDIX 1 : PICTURES





APPENDIX 2: FAMILY COUNTING NUMBER (FCN) OF FDMN ADULTS

183054 285709 293802 239341 290997 286391 295853 146686 144652 289576 295161 181373 179318 183313 272945 187053
303748 188072 296593 276204 278779 186909 650171 175119 179166 277227 163573 287003 296168 400953 301488 650673
292016 186587 179704 143732 296868 184563 139978 151067 183949 293121 278015 287955 285853 172284 279379 138791
292415 280466 157862 275185 296707 180368 275187 187008 266510 176726 248497 140626 248497 186711 167236 188159
170578 283837 181312 186428 121062 289889 185086 276488 262394 266398 293081 161528 296168 276366 262394 285491
296407 239098 296105 286315 156456 193616 169386 298481 176948 282969 285298 281395 169237 186970 231176 170000
290972 145483 261734 148838 296421 170524 295642 303858 172417 218537 285853 150728 296560 245347 152962 279411
158827 272980 296722 164531 261556 156303 296439 162968 295803 276301 175185 101519 289570 289504 184937 282629
297081 169727 179704 287904 291739 286639 245264 296134 117080 301729 297943 243314 239341 296439 152903 285869
191824 168687 272969 174550 297994 304578 141757 185701 167139 186970 188072 296730 293356 195640 165961 179530
186221 151473 185980 650776 163000 168496 296774 170183 243314 298063 170578 276853 124749 171667 279534 18607
289183 265387 302557 162376 187831 154556 279615 172949 181635 245113 293818 2977081 279927 248497 245179 243729
280681 163184 181841 161516 250656 239278 249752 169047 295642 500120 188072 289820 285709 281190 158872 151039
138791 179153 248454 181954 245138 269609 285400 287976 140447 179153 184766 184777 273960 451767 1835551 152939
171496 191469 281153 102231 291716 154554 183054 176534 171288 186854 260554 295642 279411 184439 162760 270115 177180
177083 177791 287312 171763 296793 249673 184937 297994 301883 173023 169727 150728 296593 2909097 1833834 239781
291739 285370 287904 293121 187995 245264 181154 117088 156303 164775 140818 180644 286391 295803 175185 281582
187053 295831 186909 181373 289594 146686 262177 279496 295161 243314 245062 296722 187535 286315 245081 186450
172917 551002 155312 156626 205270 161650 159319 290256 189277 181490 169499 27630 158827 180556 149656 175119 290430
155765 266101 181019 144433 187532 162834 157862 245268 166184 293380 239137 180282 180282 186993 186993 194849
172284 293802 287955 239741 168735 132121 859590 190563 145683 272203 179704 163573 243314 188258 285259 289826
185066 296560 286639 293233 176567 214941 121020 286006 162550 276388 182170 165392 294989 151337 451530 161957
262596 186898 183459 166488 172738 179723 177675 278015 289587 650451 179933 179887 293314 293320 179669 164741
171153 153245 296723 270291 186221 185116 182293 219840 155543 168090 181980 286639 285678 296787 179845 204904
266398 177934 188384 293149 505026 284184 289183 273438 176817 172201 287965 173221 276204 180843 293104 278157
184265 183313 167185 278439 161517 289157 188274 245347 285678 171275 168782 180282 152939 281153 179976 183551 164531
151504 180644 186221 293843 173112 237572 181954 273363 138791 152178 243314 229561 287976 267223 176430 188213 186163
125167 180688 259861 279927 252322 128787 138529 180286 179153 148059 287963 282629 269609 151039 162460 140447
221944 181378 184777 186410 248454 171288 297948 162760 140107 188512 184439 187411 180036 296793 650673 200086
171654 287378 285370 159753 182807 296560 294444 115436 272945 245212 102231 181442 169947 184937 186587 179887
286391 291739 651043 183577 181961 234665 179207 177791 145182 166904 295809 214966 241906 290422 186860 171763
150073 132121 276237 297906 180282 243314 171500 121020 165961 214905 179351 180845 172949 183949 304461 169047
179153 187053 214920 186357 150728 218537 172889 245138 181635 145723 152939 456586 181373 293798 158827 249673
179153 285400 149656 146686 169727 289594 243314 180556 144652 285496 304453 295831 179351 165740 135173 276347
262177 186909 181154 297081 165961 191469 270963 270963 173023 243314 293165 281153 186357 171449 156303 185740
296134 101270 295803 650597 287336 187995 169947 246463 243314 104995 293380 301114 184508 186357 270114 299796
281579 285262 179351 106485 300645 243314 501183 286194 286357 188300 243314 188849 173895 184515 176858 650556
248552 293507 243314 293789 145683 239459 180169 177207 148059 208507 165960 296575 294444 289826 188258 221963
287955 172284 179602 187535 245131 245347 2933120 186357 243314 166184 184418 266398 161859 241906 285251 286633
173221 293380 218599 262244 181980 172980 204904 291770 293319 172126 180823 183419 298481 149341 166450 270117
187192 152520 270115 295842 239821 100729 289822 172722 152522 195673 186357 252822 179276 505554 175080 279411
158291 281785 182170 276094 132077 175185 303853 303858 171159 295700 156752 150073 145722 177638 177872 650171
112544 290997 174898 287003 273013 168539 254624 184777 169843 295886 151006 245496 256341 169037 297999 279534
151067 156872 177180 276301 175119 177809 186993 180888 133703 292415 294841 297944 273960 151337 183459 293802
154027 181019 179704 451530 289310 187995 179669 193142 270120 293314 185066 287312 139139 161957 172738 167929 304961
262596 177934 186587 188072 277975 280466 180283 166488 179723 296353 296722 214837 505262 188384 183834 180843
152962 245045 188072 179845 273960 830027 292310 165961 180282 294202 650734 166951 161495 252822 279016 165392
285400 289373 291736 171667 185980 293149 276482 124749 151536 284184 179589 176791 192372 1778072 650660 168735
176024 279238 296729 301488 284178 190437 155413 292331 239341 293818 293104 287562 186450 296774 169527 168844
281582 181954 159753 269609 248454 163337 190560 171288 162760 296560 184777 270115 157611 260554 184439 278015
651167 173112 161517 287976 294174 150073 291716 188281 3229581 115436 184265 291739 287904 184766 179153 650451 289157
152520 293123 187053 183551 186898 177809 159838 285370 179669 296793 296134 102231 168479 169947 181153 183577
268190 159554 280696 297944 121020 238707 295875 650916 285868 284199 168363 166695 161650 266070 162636 287955
177423 267227 189702 451767 162736 292310 181713 292312 299140 168701 160621 131191 302889 192372 186167 295895 166450
166904 179723 505262 287955 296575 184118 286639 293314 293320 187532 191469 186410 197904 181954 266822 161957
167185 181954 296868 165702 184563 263701 266064 173139 261645 290908 278537 190711 278538 161961 132197 248521
301494 302557 261648 147887 280664 181146 450841 171502 137335 167063 285870 280417 287965 286349 261984 296440
451767 129262 180283 121020 171405 180644 273572 172277 154556 191207 296439 190446 156521 280881 293352 165961



APPENDIX 2: FAMILY COUNTING NUMBER (FCN) OF FDMN ADULTS

187537 165392 151337 296457 261082 151337 291716 195640 505013 179468 163335 273489 218513 180702 287396 279309
291770 650979 239273 284034 163257 295647 151492 182962 287979 279444 158827 279411 244850 188066 177809 180644
190560 186450 281582 285853 144652 179845 193953 289157 284044 214954 297077 181143 283090 139139 245045 162376
154556 293350 245282 138644 278157 150073 166450 296722 289820 169947 184265 260554 293380 183949 285489 214833
186898 278739 183834 651167 102231 187411 171667 291739 188281 3229561 295803 304961 293798 171288 284585 289157
270120 294174 140447 650451 184439 287904 151337 294174 293507 121020 179346 170673 261082 505262 184777 159753
179229 179333 248454 169842 286391 151337 272945 279708 179669 282629 296793 164531 186081 288760 292744 270799
285962 188072 289183 289310 279337 169603 155312 270960 193189 156378 270963 139450 157611 651135 300177 298481
186902 290933 150220 188281 151337 183551 153931 149922 104165 279542 151738 505282 169046 262167 295808 168090
294766 171157 181439 285262 171469 186909 278015 171496 156303 172949 293104 296560 506065 239327 239741 185980
245062 150728 293843 168742 285370 172284 181373 169061 295161 181154 146686 152178 296353 650171 180286 190001 132121
650597 270957 287003 218519 278970 292310 245347 295225 400634 188281 244089 281586 151067 237572 276692 285994
155574 187996 274143 293380 188281 293818 293802 151462 121080 279444 186410 173112 151067 184937 289594 144652
293849 286312 188281 289805 300553 181835 289183 155543 159196 245045 151067 119149 258507 650979 148059 175119
179723 180556 183793 149656 179470 152939 296771 292331 152520 276774 250796 177791 111654 189015 197296 239814
500107 173116 162760 290546 450827 179419 293343 108035 180644 203732 172270 181442 150073 166904 262177 179669
289569 287562 296711 192372 161957 293314 181954 152908 219940 280419 294000 270186 186234 293678 152908 188072
188258 296126 186913 165702 172767 503955 294535 254624 280288 176817 167185 179704 268182 204904 278157 287955
249673 296560 650672 154272 184118 156872 162760 139139 284983 189141 295669 245045 194012 285870 187010 186249
295834 166431 162355 266398 297944 289826 650712 175677 650709 279601 186869 285257 176858 177160 162760 187532
292314 168411 297081 139139 184267 214954 156797 184762 243695 295861 172738 179887 286639 245131 177809 181315
179589 281190 451530 505262 190560 296722 181373 45658 278739 285370 237665 181153 169727 177791 168479 151039
260519 7048065 151504 148059 296593 285670 239341 152520 289587 162436 169842 270120 296774 237572 169947 188384
161517 294444 294444 150728 187053 180556 289898 177066 184937 273960 293120 149656 177083 290546 169527 61859
293380 170578 293320 293314 159838 248454 175119 181954 281153 218537 291739 184265 172201 179295 5830027 245045
286014 156872 139139 162760 650673 161957 179704 188258 187532 297906 175185 650480 289826 304961 287312 188072
298802 301488 295831 289820 138529 266398 124749 156303 172284 171667 186909 151067 156646 147887 297910 280419
171469 154152 169061 295895 181315 155543 268182 172277 189990 178589 289877 650621 179153 285990 183645 168577
303748 175052 180843 240820 179153 168811 181442 187411 280106 149349 173116 296793 289322 186015 301494 280863
505302 188073 303852 279357 181270 270286 249656 284503 287177 401713 280428 290436 260800 293195 173116 182829
302601 179323 401679 296405 186993 268101 279447 129292 290016 151067 172738 156050 650577 293149 297943 159196
155543 287955 164707 172767 198783 281582 168943 179887 185066 236447 237500 110315 165960 286332 289731 175052
265628 249570 152996 145722 145763 504103 163337 285642 191825 293669 187733 239096 156362 276210 287368 265727
284617 188504 451821 299106 148259 286651 284044 283042 284969 292093 293661 276150 248552 287992 186585 152850
450448 294858 195641 186353 181130 295821 296491 168090 137335 194003 141446 293317 288684 285370 11183272 163305
302557 177934 296560 177453 238838 294941 284511 180576 288760 172758 156288 172772 181886 195659 285300 651167
276301 157914 291800 296712 276897 239553 179639 650752 157042 214982 239553 164594 303954 450684 174287 127073
265559 154556 186930 180578 171450 451598 181952 177732 280109 151462 293370 135819 180580 12712 195751 155986 239886
293388 190014 266398 206380 181376 175119 295647 285990 181373 285990 165413 166820 400234 181971 179166 184766
183551 187919 295717 375583002 265432 285853 287963 249650 179101 102635 181153 179845 127914 185696 113962 144433
172484 134387 157569 175054 282629 186410 294897 180563 294341 176814 505262 169427 181154 266201 183949 195751
186818 237665 171496 245045 104995 293849 157862 188072 289576 284184 200145 293246 151242 283064 286312 287362
188582 162760 183313 177368 154027 296353 278013 180036 287955 295700 281582 157530 292344 278157 188286 276452
167472 285990 160687 195706 292344 276265 294907 651222 293991 245230 289155 145763 293661 144344 127411 162550
184320 164668 177237 295133 279363 297848 273444 278157 188163 186906 162793 278157 285990 277217 179202 188286
184832 173023 171601 285990 278157 176479 288507 279464 186906 272284 184832 162793 297633 279789 269097 181954
181376 273960 203614 235161 151504 7048065 157053 187597 177180 188512 293798 237572 289587 175185 293104 297081
152939 186869 289594 167185 166904 176219 187192 102231 174893 168943 171667 266040 169531 169842 171444 183551
182500 169390 180582 282715 153602 286651 50941 153227 272845 270195 192197 188504 184705 293826 179850 504121
168687 168090 195681 180759 281189 286447 169035 167554 294444 294444 171661 287312 175024 142773 243247 179153
293380 263895 163450 292936 134201 283042 279407 293105 304461 248521 280525 293862 268190 283061 182237 214941
278739 165895 179885 237544 296709 168539 266041 183365 280428 285868 296868 179419 181305 246219 164610 179153
172980 186587 179166 289820 188384 180473 272945 296745 214835 296560 188258 270115 187919 293149 650451 284184
169527 265718 291986 285677 179419 176782 272225 245348 156646 173033 179096 295870 287983 142658 504070 237583
176671 181392 176817 285959 401679 175525 187809 156378 237444 253001 179030 282620 175410 266398 181485 185302
175119 280868 156526 190711 142893 291393 190008 190560 289157 285489 172201 295831 288507 245389 190014 293314
293320 237665 245138 179704 186450 162969 172284 239327 296593 275161 183551 301488 168943 239741 296560 285370
236447 139139 239321 289863 277227 163000 173112 183577 302878 179166 270102 278739 186450 186587 159196



APPENDIX 3: FAMILY COUNTING NUMBER (FCN) FOR FDMN CHILDREN

296360 249668 175711 270114 171483 156637 295852 650227 188131 285288 266201 293231 193616 122648 149922 179297
179286 156422 325215 147887 263683 154879 303563 276492 175713 188652 276360 295804 551002 173792 287711 286308
181265 28711 254544 164707 279927 650227 184148 262044 169646 239810 301883 650275 304894 186970 266070 182469
161961 168496 177938 180687 175713 276433 258247 248366 214913 237500 276473 128356 291986 169953 260068 194012
158068 177806 183488 174179 239814 279603 278510 400518 163756 162640 188072 295641 351365 295641 279535 249752
248366 177938 180984 245366 270753 248552 293103 175056 155095 245081 298063 284983 179453 285642 290426 194003
248425 177717 254544 107185 168831 289824 155751 179367 295820 175713 289814 266406 258757 285488 272985 650478
650739 190848 165473 149355 198748 650919 276498 286625 179672 298377 279238 155916 155916 279615 245121 285990
175713 214913 294827 186248 287965 273485 270873 289876 214913 282705 181740 164707 248366 248366 400518 132667
248354 167063 245281 294137 267228 214913 287342 289820 272985 187291 277203 296460 401664 248366 292011 130824
179725 132183 293103 248366 169953 248366 190559 149953 266307 292011 169048 29204 179937 267228 185479 220551
164707 651242 162240 289667 132231 263157 135828 148366 266307 289171 297349 128356 164707 650664 185696 172150
296571 286355 279301 295855 188978 266307 164707 195793 296459 451023 152992 164709 287003 239741 286002 298000
198516 179361 195793 159096 113643 286355 270856 189144 400518 248366 166944 272974 168831 285966 279301 451040
294192 282705 266307 295158 285960 151738 186970 156285 181981 2011102 117696 279618 279301 289848 176383 248366
290970 266017 188708 176391 272974 277226 295831 285359 382602 287956 248375 650792 266307 280870 172150 184831
279301 181980 249669 292310 650564 266307 17393 187532 2979983 293188 296487 171211 266307 45117 243314 280870
141284 141991 179927 266307 245122 173535 280676 284418 282894 190014 252589 279301 278798 400939 292310 176025
266307 2732138 248366 1868516 293242 293242 295421 164707 106675 152317 180088 149656 292057 285506 276453
113643 217730 262347 291986 280457 299796 171990 167454 292310 168052 294871 299447 162243 132767 186210 277225
175054 184831 351109 292310 293019 155095 504282 279301 151091 289155 295631 284178 184628 180571 276489 186167
266425 295414 287955 166944 505326 282705 248521 184831 299796 261734 281478 132670 293103 289324 182318 209564
179295 245081 272980 226020 158580 132668 272261 180021 279301 125864 115481 276424 279618 279618 303202 156222
650792 278683 187747 281142 289888 167063 185809 262327 279301 132668 292304 133850 168711 131055 288648 149341
258250 171211 651152 294830 186210 239348 188286 166184 166184 260795 285268 289155 269925 194003 290420 295808
174478 185477 204338 185964 287370 185481 285493 169035 260795 147960 272284 237407 650771 295855 505322
145667 243314 145667 400159 288476 292937 176025 280880 295832 260795 269925 285249 187996 295880 162436 650711
293841 278683 295877 237600 279603 145612 188372 160259 299140 156667 260795 292937 262327 276276 476498 169047
273398 190478 284176 165472 266205 266501 260795 248311 292937 260795 194003 254619 297345 285976 252846 279603
296473 296403 158580 158446 296558 179361 266354 152888 245081 186970 285838 223619 183545 301079 169612 403278
292937 252606 279618 249658 179295 279620 185742 294137 151155 295808 401664 285284 248557 164652 287139 294594
179470 293103 291986 188072 137757 221963 173139 293920 252606 214873 650653 285266 285700 650725 209048
268222 293766 275600 286633 160259 260068 270883 219840 287965 450064 167437 293822 285284 276204 650569
400159 245121 276205 240454 295895 248311 275600 401658 101378 292314 263925 270799 171275 262327 166827 261570
266690 504783 168516 161961 287378 295631 296531 288306 294137 175784 289185 504484 270873 276212 505373 191179
276205 132663 179667 293766 172593 270799 272945 261984 286116 142408 248478 239327 281815 245168 2791615 287873
290436 348311 286119 282090 166944 188404 181153 104429173982 403720 180390 179804 285249 124649 296148 206138
158589 270959 163896 287873 298013 285976 276204 277221 279615 403720 302123 108035 252846 248311 270862 302618
296558 297931 286363 280286 180003 180644 188062 295921 255574 173112 152317 403720 135820 504282 401499 295852
325823 157420 248311 248311 248552 289876 289876 237588 650727 249765 106676 248311 187869 285867 161961 272985
239284 295669 248378 279618 287964 273960 167063 293852 285868 501110 237532 292314 179748 214839 163184 190054
276261 179470 188269 276492 108035 267227 179295 184267 135828 245081 284418 287314 287316 248379 293840 248311
296794 192245 187510 262445 176542 650653 288469 295919 132196 173535 293850 284199 108035 265685 152996 279313
180582 128236 248561 2932335 276280 172758 295886 295921 181735 296798 296459 16220 302579 650663 265559 239282
650671 294860 289171 268183 650569 248311 149955 260519 296459 180835 285409 168383 254624 287943 276257 215097
170045 451821 239284 175675 159477 2499030 179953 190719 296489 121020 287318 164927 127070 276385 650668
293230 168321 164713 181841 280286 282548 188276 450952 277845 191179 172736 188372 289888 289812 156050 200581
284436 204260 175817 188070 180685 165895 164594 285358 301080 294382 248311 171763 172626 172738 238992 166944
190496 450064 302872 164707 190719 115786 151340 151342 172270 214837 272208 283894 252589 279354 295886 266685
265628 296356 204418 650747 168736 214839 181707 181707 278683 176391 181130 135820 179293 171450 186970 296403
169920 245081 135819 167454 286195 277835 237544 156380 275761 129750 190710 277835 285255 293220 651005 272278
113962 297948 297648 292344 157570



Contact

MedGlobal

10604 Southwest Highway, Suite 107
Chicago Ridge IL 60415

www.medglobal.org 

connect@medglobal.org 

[@medglobalorg](https://www.facebook.com/medglobalorg) 