

Health Care Needs and Health Seeking Behaviour among Rohingya Refugees in Cox's Bazar: Study in selected camps served by BRAC's health care facilities

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ACRONYMS AND ABBREVIATIONS

UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WHO	World Health Organization
NGO	Non-Governmental Organization
HIV	Human Immunodeficiency Virus
AIDS	Acquired Immunodeficiency Syndrome
BRAC	Building Resources Across Communities
EWARS	Early Warning, Alert and Response System
DMCC	Disaster Management and Climate Change
JPGSPH	James P Grant School of Public Health
FPC	Finite Population Correction
ANC	Ante-Natal Care
PNC	Post-Natal Care
ODK	Open Data Kit
SPSS	Statistical Package for the Social Sciences
IDI	In-Depth-Interview
FGD	Focus Group Discussion
HH	Household
PHC	Primary Healthcare Centre
MSF	Médecins Sans Frontières
GK	Gonoshasthaya Kendra
PHD	Partners in Health Development
IOM	International Organization for Migration
TB	Tuberculosis
WFP	World food program
CIC	Camp in Charge
ACF	Action Contre la Faim
FDMNs	Forcibly Displaced Myanmar Nationals

EXECUTIVE SUMMARY

Background

More than one million Rohingya refugees now live around the communities in Cox's Bazaar. The influx of huge numbers of refugees during August-October 2017, which has contributed to this number, has been described as one of the worst humanitarian crises in recent history. As of September 30 2018, 895,631 Rohingya refugees have been driven to Bangladesh from Myanmar. This displaced population has been accommodated into makeshift settlement camps in Ukhiya and Teknaf, the two sub-districts (Upazila) of Cox's Bazar in Bangladesh.

There are different national and international non-government organizations (NGOs) and government organizations who have established health facilities to provide essential health care services in the camps. However, in order to improve and make the existing health care service provision more efficient and more responsive to population need, BRAC, one of major providers of healthcare services in the camps, is undertaking steps to address the changing health care needs, health seeking behaviour and the access to health care facilities of the Rohingya population in different camps.

The BRAC James P Grant School of Public Health (JPGSPH) at BRAC University was requested by BRAC to undertake a research with the general objective to understand the illness patterns, access to and utilization of health services and health facilities by Rohingya refugees in the various camps in Cox's Bazar. This study aimed to examine the prevalence of morbidity, study the factors that are contributing to the level of utilization of healthcare services, determine the study population's level of satisfaction from the utilization of health services in the camps.

Research Design and Methods

This study has used a concurrent mixed methods study design where data were collected using both quantitative and qualitative approaches from the households about the illness of the household members. These households were selected randomly in close proximity of the BRAC health facilities in 10 camps. Data were also collected on utilization of health care services and facilities for: delivery care and family planning services, preventive care such as ante-natal care, child immunization and post-natal care. From the household survey, information on health seeking behaviours of the household member who had an illness in the past 1 month (30 days from the interview date) was collected. The household survey was supplemented by 12 in-depth interviews (IDIs) with respondents drawn from the sample pool and focus group discussions (FGDs) with members of the community.

For quantitative data descriptive analyses were performed based on the distribution of variable and variable types, frequencies, percentages, mean (standard deviation) and range as summary statistics were reported by including socio-demographic characteristics, pregnancy, delivery care, family planning services, and child immunization. Chi-square tests whereas performed to measure the associations between socio-economics, demographic factors, illness pattern, utilizations of health facilities and satisfaction level regarding health care facility and service providers. For the analysis of qualitative data, a thematic approach was used. The researchers read the transcripts repeatedly and carefully in an attempt to bring out emerging themes using a prior code-list to familiarize with the data. Themes were then discussed in detail with data against each theme.

FINDINGS OF THE RESEARCH

Socio-economic Status

This study recruited 1,167 population from 364 households, and gathered households' information on socio-economic status, and on illness pattern and the health seeking behaviour of 337 individuals. Most of the households (78%) has males as the head, and in most cases (75%) males taking decisions on health care. The average number of member for these households surveyed were 5.9.

Illness Pattern

The average number of reported ill persons per household is 2.3; the estimated rate of reported illnesses throughout the camps is 39.7%. Overall, the average number of reported ill people is 2.3 per household, and about 22.5% of households reporting that 3 HH member were ill. The majority of the individuals who were reported to be ill fall within the age bracket of 15 to 59 years (46.6%). Around 93% of the total 364 interviewed, have reported some sort of acute illness or symptoms within the last month, among which 47.1% were suffering from chronic illness. Similarly, around 52.1% of the reported ill person had suffered from a chronic illness within the last one year.

Chronic fever is the most prevalent reported chronic illness (19.6%). Gastric/Ulcer problems was the second most reported chronic illness (11.2 %). Similarly, fever is the most (54.5%) reported acute illness, followed by cough/cold (26.4%), and diarrhoea (11.7%). This could be due to a possible prevalence of infections, viral, bacterial or parasitic, spreading throughout the camps; causing fevers and stomach problems such as diarrhoea and dysentery.

Health Seeking Behaviour

The major primary level health care facilities within the camps are primary health care centres (PHCs), health posts, labour rooms or sexual and reproductive health

only facilities, and community clinics. Apart from these facilities, there are private practicing doctors within the refugee community, and pharmacies in the local markets. The pharmacies have recently become a private sector providers which are found in local markets within or outside the camps.

In terms of health care seeking, 85.8% of individuals reported to suffer illness sought some form of formal and informal health care; the qualitative findings confirm this finding, as all interview respondents stated that they sought formal care. Both the quantitative and qualitative findings revealed that care is sought from various providers, and is not exclusive to facilities in the camps. In our analysis of qualitative data we found treatment seeking pathway consists of visits to many different health care providers, e.g. traditional healers, camp health centres, and private facilities outside of the camps. These findings indicate that the traditional approach of KABP (Knowledge, Attitude, Belief, and Practice), which assumes individual behaviour is built on rational decision making based on knowledge may not provide a complete picture of the situation. Therefore, it is important to recognize that individual health care decisions for a displaced population living in temporary settlements in refugee camps with ad-hoc health care systems are mediated by the immediate practical environment, social roots, previous care seeking behaviour, and general life situations. It became clear from the qualitative interviews that respondents, in some cases, went from provider to provider for seeking health care.

From the survey, the main reason for not seeking healthcare was self-treatment (22%). Surprisingly, 10.8% of respondents stated that they had no money for treatment, this can be largely attributed to prefer to seek care from private healthcare providers, or, many believe treatments at camps are not free.

The household (HH) survey suggests that the main reasons for seeking care from a particular provider include quality of treatment (32.6%), proximity (30.1%) and reputation (16.2%). Qualitative findings provide us with an understanding of these choices; neighbours are often the first source of information for respondents, followed by relatives, Majhis (community leaders); health workers in the community suggested they influence the perception of treatment quality and reputation through them. FGD findings also suggest that, despite formal facilities providing free health care, respondents mentioned that if they had money, they would rather seek care from Burmese doctors (Doctors from Myanmar living in the community), who provide flexible services, as they are able to visit them at home, or, are able to treat them on short notice.

Utilization of Services and Facilities

BRAC (22.8%) and Médecins Sans Frontières (MSF) (17.3%) facilities were the most visited facilities for illnesses; however the difference between them is very small, and it is mostly dependent on the preference and experience of the respondents. There is also good representation from other NGOs (12.8%), which include Friendship, Gonoshasthaya Kendra (GK) and Partners in Health Development (PHD) health posts as the providers of primary care.

From the households that had one or more members who were ill (337), 91.4% of these had at least one or more married couples. Of the married women, 13.3% were pregnant and 7.5% of them had delivered within the last two months. Most pregnant women sought ANC (76.6%), and from the 23 women who had delivered recently, 65.2% of them took PNC. For services around maternal health, BRAC is the first choice for both ANC (43.1%) and PNC (33.5%) services, followed closely by MSF (20.7% & 22.9%). However, in terms of delivery services, informal services/methods dominate, with 81% of the respondents reporting having had a home delivery. This is influenced by traditional/historical factors, as home delivery is normal practice for Rohingyas in Myanmar. These factors coupled with the preference for a local doctor can explain the high rate of home delivery in camps.

Satisfaction and experiences with the facilities and providers

Satisfaction regarding treatment and health facilities were measured using a standard five point Likert scale representing 'very poor, poor, acceptable, good and very good.' Overall, most of the respondents selected "good" for expressing their satisfaction about both treatment and services provided. From the qualitative findings, we see that respondents were positive about formal treatment in terms of behaviour, examination, explanation and advice; respondents said that they feel good when a doctor gives them time, and when they examine using medical devices. Respondents had complaints about the behaviour of some staff and health workers, they also expressed dissatisfaction with waiting times, which was around 10 minutes, the average of all camps being 10.25 minutes for illness. In contrast, they said that informal providers were able to facilitate better relationships, thus making them feel more comfortable. Even though informal providers charge for services, they are willing to pay to reap these benefits. Some also show preference for traditional/religious healers before they try to seek formal healthcare.

Experience with BRAC Health Facilities

Through the qualitative interviews, a more detailed account of the experiences with BRAC health facilities were uncovered. Most respondents had easy access to BRAC, with very short travelling times. With regards to

treatment and behaviour, most said that staff at BRAC health facilities were courteous and respectful. However, they also described negative experiences, where they complained of rude behaviour from staff and doctors. In terms of quality of treatment, there was mixed responses, some expressed dissatisfaction with doctor availability, and the amount of time doctors consulted them for; oftentimes doctors were in a hurry. Others complained that the treatment provided in terms of medicine was insufficient, either the same medication was prescribed multiple times, or, the medication provided was ineffective, so they saw no point in making revisits. Respondents also complained about the opening hours of BRAC health facilities; as facilities would close as early as 3 pm, and were not open on Fridays. These factors have an effect on the perception of BRAC facilities, especially things like bad behaviour from facility staff and opening times, which can often overshadow the positives.

Barriers

The most important barrier according to qualitative interviews is costs of care, this was also evident from the quantitative findings, as 12.8% of respondents stated 'having no money for treatment' as one of the reasons for not seeking care. This again highlights the demand for private health services as they will be able to avoid long waiting time; demand is explained by the limitations in time slots by at most camp based providers, can have more focused treatment, and greater supplies of medicine. Other barriers include, lack of awareness regarding treatment options, shame associated with seeking care in facilities, language barrier with the doctors. Gender of the providers is another issue, and they prefer delivery care by female providers as women feel shy to share specific problems with a male doctor. Other barriers revolve around geography and time; the preference is for facilities that are close by, as many camps are situated in hilly areas, also, most facilities have limited opening hours which prevent many prospective patients from seeking care.

Travel Time, Waiting and Consultation time at the facility
From our survey we found that the average travel time to the facility ranged from 17 minutes to about 28 minutes; the low times for PNC and FP can be accounted for by small number of respondents seeking PNC, and the nature of FP services, where, FP methods are distributed across the camps at various locations. For waiting time, it is best to focus on the illness and ANC patients, with the average ranging from 50 to 52 minutes. Consultation times ranged from a minimum of 1 minute to a maximum of 120 minutes, with the highest average for ANC patients. However, 10 minutes was the average time spent on an ill patient. The study was supplemented with further associations between variables to analyse socio-economic data, service utilization, and service satisfaction across all camps. These are detailed in section 6.4.

Study Limitations

The study has provided some insight on many dimensions of health care and seeking from the perspective of Rohingya population in the refugee camps and who live in areas around BRAC health facilities. However, like all other studies there are limitations in this research which can be discussed with respect to the following aspects: Due to the time constraints and settings, data on illnesses and health care seeking behaviour for all household members in whole family could not be collected. We collected some economic information regarding the camps, however, we did not expect the high number of respondents seeking private health care. Therefore, we did not retrieve information cost of travel, consultation, drugs and supplies purchased, and other associated fees and could not report on economic barriers.

Health seeking models dictate the importance of cultural practices that precede health decisions; our study, through qualitative analysis was able to uncover certain aspects of Rohingya norms and customs. However, a more detailed account would be needed to fully understand the population and their health care concerns.

Recommendations

Building on our limitations, appreciating the practicalities of a humanitarian situation, we present the following recommendations.

- **Review of BRAC health facility operations:** Providing services after standard working hours need to be examined. Furthermore, there needs to be an improvement in consultation time, this will require a review of human resources and resource allocation.
- **Facilitate health communication in coverage areas:** Many respondents are either unaware of appropriate treatment options, or have very high expectations of primary health care facilities. This knowledge gap can be mitigated by providing improved health awareness programmes probably using BRAC's community health workers.
- **Implementation research to understand private health care options:** Private providers, most notably Burmese doctors (Doctors from Myanmar), private doctors and pharmacies have become crucial and important providers. It is important to gain an appreciation for the health system as a whole, we recommend, a further comprehensive study on Burmese doctors, to understand their credentials, methods and motivations; a study on the coverage of pharmacies, their legality, quality of care and standard in and around the camps, including the presence of other private doctors. This may also be supplemented with an economic study of the costs associated with seeking care outside of the camps.
- **Disease specific study:** As we collected data on reported illnesses and symptoms, it limited us in scope, especially in terms of identifying all the types of illnesses that are prevalent; non communicable

diseases (NCDs) would be an appropriate area to start with, as many conditions reported involved chronic diseases.

1. BACKGROUND AND RATIONALE

More than one million Rohingya refugees now live around the communities in Cox's Bazaar. The significant influx of refugees during August-October 2017 has contributed to this number. This has been described as one of the worst humanitarian crises in recent history. The Rohingyas represent the largest group of Muslims in Myanmar. Since 1982, successive governments in Myanmar have refused to recognize them as citizens of the state, therefore, denying them basic human rights.

Prior to 25 August 2017, 33,000 Rohingya refugees were officially registered in Bangladesh and resided in United Nations High Commissioner for Refugees (UNHCR) managed camps, but an estimated additional 200,000-500,000 Rohingya individuals were living in informal settlements (makeshift camps) and with host communities (1, 2). As of September 30 2018, 895,631 Rohingya refugees have been driven to Bangladesh from Myanmar. The Rohingya are now one of the largest stateless populations in the world. The displaced population has been accommodated into makeshift settlement camps in Ukhiya and Teknaf, the two sub-districts (Upazila) of Cox's Bazar in Bangladesh. Bangladesh is not a signatory of the 1951 Refugee Convention, therefore the Government of Bangladesh (GoB) does not recognize the Rohingya as refugees but as Forcibly Displaced Myanmar Nationals (FDMN) denying legal refugee status and associated rights (terms 'Rohingya' and 'FDMN' will be used interchangeably in this report)¹. Currently, there are 34 camps in 15 locations, which include: Kutupalong, Rubber Garden, Balukhali, Mainner Ghona, Burmapara/Tasnimarkhola, Hakimpara, Jamtoli/Thangkhal, Unchirprang/Roikhong, Leda, Nayapara, Shamlapur, and Dokhinpara. Through accommodating more camps, the Cox's Bazar Forest department reports that 6,340 acres of land have been acquired. As a result, 4,818 acres of forest reserves have been damaged (3, 4). The population density of the settlement area is approximately 9,0411 per square mile. Along with the difficult terrain, these settlements have been subject to a host of public health problems, which include, but are not limited to, congestion, contaminated water, access to cooking fuel, psychosocial issues, violence against women and adolescents, outbreaks of disease, and changing conditions in the climate. Such conditions worsen living standards, reduce access to health facilities, and increase the risk of water- and vector-borne diseases(5).

The initial crisis management in emergency settings with forced displacement is usually concerned with providing shelter, clean water, sanitation, and preventing serious communicable diseases (e.g. like diarrhoea, cholera, diphtheria) (6). It is no different in this situation. For instance, the United Nations Children's Fund (UNICEF) and World Health Organization (WHO) launched the world's second largest oral cholera vaccination campaign in October 2017, and 900 000 doses were prepared for a vaccination campaign in Ukhiya and Teknaf, two sub-districts of Cox's Bazar in Bangladesh (7). While these priorities remain, changing demography and lifestyle means that there is a shift of disease burden towards non-communicable diseases(8, 9). Gradually, different national and international Non-governmental organizations (NGOs), government organization have realized this need and have established facilities to provide other essential health care services. There is still a lack of intervention for non-communicable diseases, malaria, tuberculosis, and human immunodeficiency virus (HIV)/ acquired immunodeficiency syndrome (AIDS). Data on the health status of the Rohingya population in Myanmar is limited. This mainly due to the government's decision to enact the 1982 Myanmar citizenship law, which stripped the Rohingya to their right to citizenship, and some of them were internally displaced in the Rakhine state of Myanmar, where they were kept in refugee camps with restrictions on their movements. As a result, the Rohingya population are not included in the national health statistics and there is little information on their health status and indicators. What is available are reports by international organizations and research papers on the Rohingya population in Bangladesh, this will be expanded on in the literature review section.

Although studies on the health practices of Rohingyas are limited, one study in 2009 indicated that they were using a range of medicinal plants from a degraded forest area in Teknaf for a variety of health conditions and illnesses (10). Regarding information in the camps, data on the type of services being provided by the different organizations in the camps are compiled and recorded mostly for monitoring purposes. However, in order plan and improve the health care service provision and rethink the delivery of service packages, we have to understand the illness patterns, the access to care, and care seeking patterns of the Rohingya population in different camps. Though efforts are being made for effective co-ordination and co-operation among the different stakeholders engaged in providing different types of health care services, there is a need to examine how this can be made more efficient.

¹ <https://reliefweb.int/report/bangladesh/rohingya-amongst-us-bangladeshi-perspectives-rohingya-crisis-survey>

2. OBJECTIVES

The Humanitarian Crisis Management Programme of BRAC has significantly contributed to the development and improvement of the changes in settlement structures; establishing new camps and facilities that have contributed to the gradual improvement in the basic living conditions. BRAC has vast experience of implementing health programmes. During the influx, approximately 7,000 people a day (11) were entering Cox's Bazar; in response, BRAC made significant progress in establishing health care facilities. However, the health seeking pattern or behaviour of the Rohingya population has not been examined. Moreover, health sector bulletin-6 reported that WHO's Early Warning, Alert and Response System (EWARS) only covers 62% of functional health facilities (Community Clinics, Health and Family Welfare Centres; Health Posts fixed and mobile; primary health centres; sub-centres; upazila health complexes; and secondary facilities), while 38% are not registered till the reported date (as of November 2018) (12). The importance of a study on illness pattern, current levels of access and utilization of health services of the refugee population has been recognized by BRAC Disaster Management and Climate Change (DMCC) programme. BRAC James P Grant School of Public Health (JPGSPH), BRAC University was requested to undertake a study that will help to provide insights and identify gaps in health care provisions.

The primary objective of this study was to determine the illness patterns, access and utilization of health services and health facilities in selected Rohingya camps in Cox's Bazar where BRAC has been providing primary healthcare services. The secondary objectives of the study were:

- I. To examine the current morbidities of the study population.
- II. To determine the study population's level of satisfaction from the utilization of health services at primary health care facilities in selected camps.
- III. To study the factors that are contributing to changes in utilization of the health care services provided at primary health care facilities.
- IV. To identify the gaps between demand for primary healthcare services of the study population versus the priorities of key stakeholders for addressing the barriers and utilization, and improvement in provision of primary healthcare services.

3. RESEARCH DESIGN AND METHODS

The study was conducted in 10 Forcibly Displaced Myanmar Nationals (FDMNs) refugee camps of Ukhiya and Teknaf sub-district in Cox's Bazar district, on the southeast coast of Bangladesh. The study population was Rohingya

refugees migrating from Myanmar to Bangladesh till now, and residing in the refugee camps of Ukhiya and Teknaf. A mixed methods approach was applied, where both quantitative and qualitative methods were used. The quantitative component was designed to elucidate the patterns of illness and utilization through numeric data, while the qualitative component was designed to further explore and obtain in-depth information on the perceived illness, context of decision making, access and utilization patterns. The cross-sectional household survey together with the in-depth interviews and focus group discussions were planned to address objectives 1, 2 and 3. The Delphi study with key stakeholders was planned to address objective 4. As the study had to be completed within 3 months (against the proposed time of 8 months), we had to reduce the scope of the study, and did not attempt to include all ill persons of a selected household in the survey. As such, we attempted to study health-seeking patterns in terms of the most recent illness in the household, and last health service sought (30 days preceding the interview). Hence, it is possible that the last ill person may not be the most severely ill person in the households.

3.1 Quantitative Study: Household Survey

According to the Bangladesh Refugee Emergency population fact sheet, as of 30 September 2018, the total number of Rohingya refugees is 895,631 (3). We conducted a scoping review on health-seeking behaviours of Rohingya refugees who are staying at the camps in Cox's Bazar and did not get any relevant estimates. We decided to focus on national data, and found a morbidity prevalence of 172.23 per 1000 population from the Health and Morbidity Status Survey 2014 of the Bangladesh Bureau of Statistics (13). Considering this as the prevalence rate, and for getting estimates of our outputs and results with a 95% confidence interval, a 5% margin of error and 1.5 for design effect, the estimated sample size calculated was 329. Given the large study population (895,631) and considering the finite population correction (FPC), the estimated sample size was 328.9, approximately 329. In addition, assuming that the non-response rate would be 10%, the estimated sample size was 362 (361.9) individuals. The sample size calculation is based on the formula below:

Where,

$$n = \frac{z^2 p(1-p)}{d^2} \times deff \quad FPC = \sqrt{(N-n)/(N-1)}$$

z = Standard normal deviate at 95% confidence level

p = Proportion of the morbidity among the population of Bangladesh

d = Margin of error

$deff$ = Design effect

N = Study population

n = Sample size

FPC = Finite Population Correction

A three-stage sampling procedure was used to obtain information from 361 households. Data were collected on socio-demographic characteristics, current patterns of illness & health seeking behaviour, maternal health, child immunization and family planning. Respondents were an adult member (over 18 years of age) of the household who was ill, or was able to respond for his/her illness, and/or a parent/guardian of a child (less than 18 years of age), or a caregiver of an ill person. Women of reproductive age (13–49 years of age) were interviewed for the sections relating the health care services for family planning, ante-natal care (ANC), delivery care and post-natal care. Mothers or care givers of the children under 5 years of age were interviewed for collecting information about immunization.

In the first stage of sampling, 10 out of 34 camps were purposively selected based on the presence of BRAC's primary health care facility. In the second stage of sampling, BRAC's health facilities were chosen from every selected camp. In the third stage of sampling, 36 households were visited in each selected camp to collect quantitative data. Respondents were chosen from the households with approximately half mile radius of the facility but for very densely populated areas, a quarter of a mile radius was considered. The area was divided into four equal segments from which data was collected by 8 data collectors who were supervised by 4 supervisors. However, the proposed way of selecting the households could not be strictly followed in all camps due the structure and landscape of the camps. In the event of two or more BRAC health facilities being present in a selected camp, the allocated sample of 36 households for each camp was divided equally and were selected around two facilities. A map of the camps is provided below.

Furthermore, as our study aims to produce findings that can be generalized for all camps, we will apply weights to our survey. As our sampling strategy is multi-stage, we accept the loss of participants and therefore data. Hence, applying survey weights will ensure statistically valid results by adjusting for under-sampling. The method

used is probability weighting, where the weights are calculated based on the sampling probabilities for each sampling stage. The calculation is based on the following stages of probability selection.

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} b_{hi} \quad (1)$$

Where,

a_h = number of PSUs selected in stratum h (10 camps selected with BRAC PHCs)

M_{hi} = number of HHs in ith primary sampling unit

$\sum M_{hi}$ = total number of HHs in stratum h (In this case, total number of camps, which was 34) (See Appendix)

b_{hi} = the proportion of HHs in the selected cluster compared to the total number of households in PSU i in stratum h if the PSU is segmented, otherwise $b_{hi} = 1$.

$$P_{2hi} = g_{hi} / L_{hi} \quad (2)$$

Where,

g_{hi} = the number of households selected in the respective camp (Which in this case is 36).

L_{hi} = the number of HHs listed in the respective camp (See Appendix)

Therefore, the overall selection probability is:

$$P_{hi} = P_{1hi} \times P_{2hi} \quad (3)$$

The weight for each HH per camp is:

$$W_{hi} = 1/P_{hi} \quad (4)$$

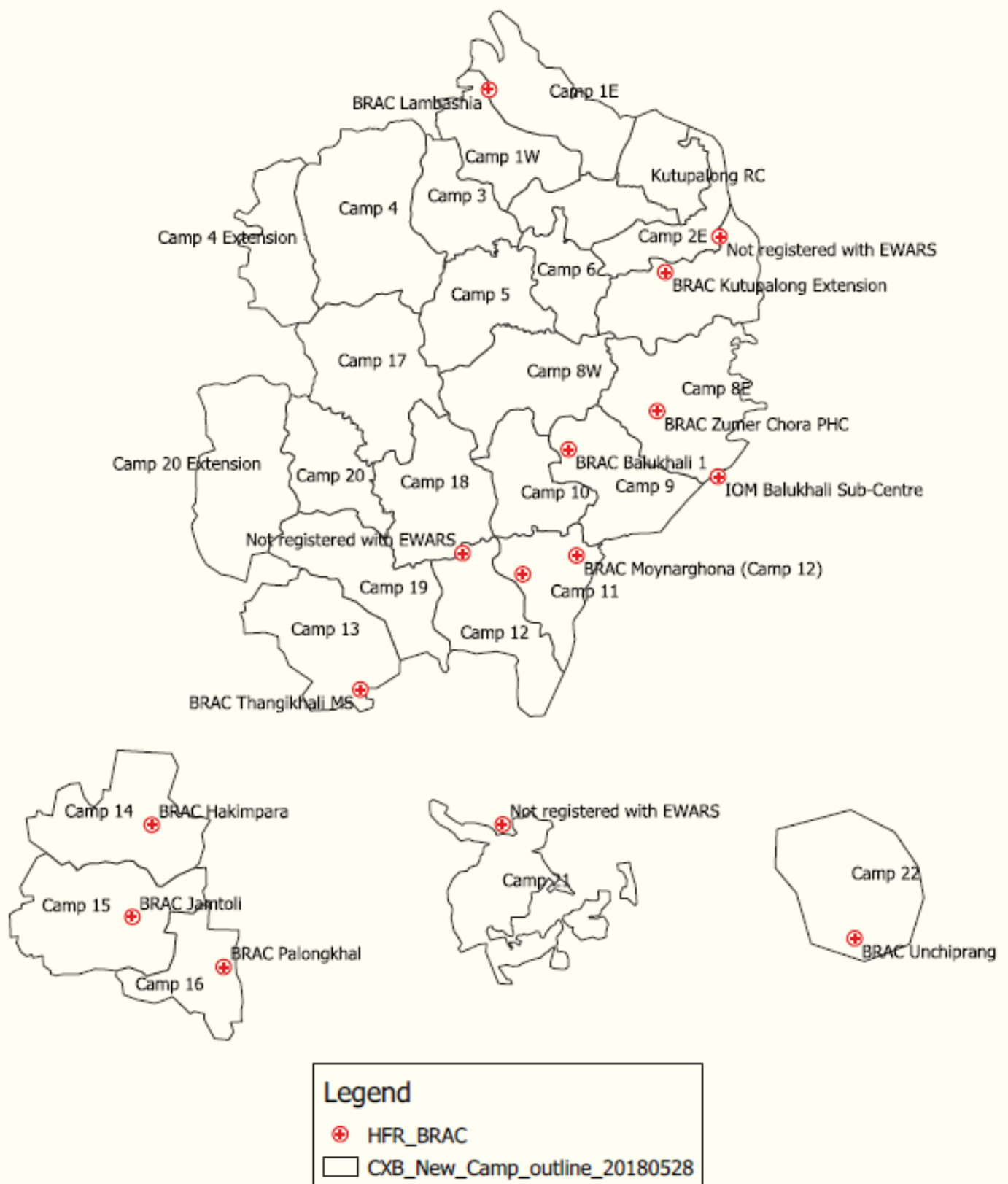


Figure 1: Rohingya Camps with Selected BRAC Health Facilities

A list of the camps visited and locations is provided in the table (Table 3.1) below.

Table 3.1: Camp & Location

Camp	Location
Camp 1E	Lambasia
Camp 7	Kutupalong Ext.
Camp 9	Balukhali-1
Camp 8E	Zumer Chora
Camp 13	Thaingkhali
Camp 14	Hakimpara
Camp 15	Jamtoli
Camp 16	Palongkhali
Camp 22	Unchiprang
	Balukhali-2
Camp 11	Moinerghona

Taking the BRAC PHC as a centre point, the data collector counted 600 steps for a half mile radius in sparsely populated areas; for densely populated areas, 200 steps for quarter mile radius. This was done for either 2 or 4 directions away from the facility. Once required steps were taken, the data collector randomly selected the house in closest proximity to begin the survey. The next house was selected after taking 10 steps from the first household in the direction of the facility in a zigzag pattern (where possible) until the desired number of households was reached from each segment (Figure 2). Study participants were asked if any household members sought care for an illness within 30 days preceding the survey, and whether care was sought from an informal provider, the camp's primary health care centre, from a public or private hospital/clinic outside the camp, from private providers outside or within the camp, or from national and international NGO hospitals. Additionally, we also looked at care seeking patterns for selected preventive

healthcare such as antenatal care (ANC), postnatal care (PNC), delivery care, family planning and child immunization. If no one from the household was reported to be ill during the last one month (30 days), we collected their background and socio-economic information from the household. If there was more than one ill person, we noted the number of household members reported to be ill at that time. The information on the person who was last ill within the household includes—health seeking pattern, utilization of services, barriers to access to care and level of satisfaction with health services.

Data were collected through an Open Data Kit (ODK) template using a Survey CTO version 2.5 (Dobility Inc) server. Downloaded data was converted to SPSS (Statistical Package for the Social Sciences) version 20 (IBM) and STATA (statistical software package) version 13 (StataCorp).

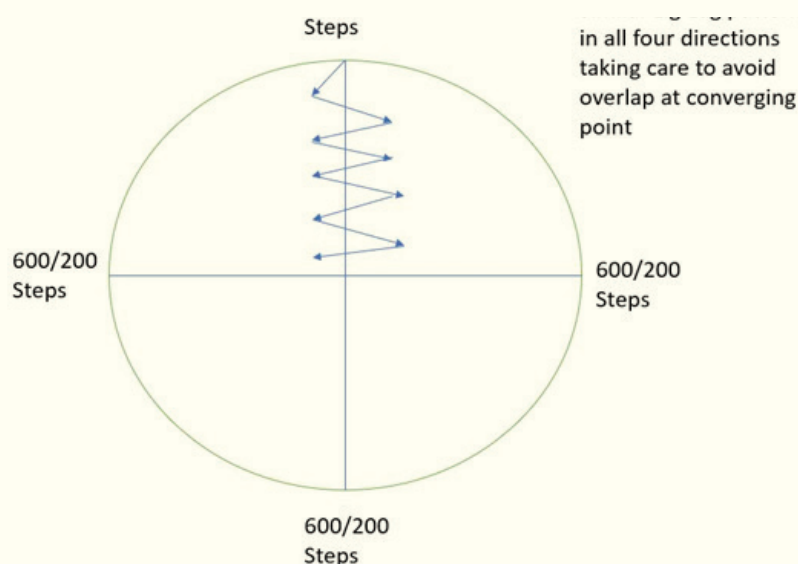


Fig. 2: Sampling Strategy

3.2 Qualitative Study: In-Depth Interviews and Focus Group Discussions

The qualitative component of the study was designed to be conducted concurrently with the household survey. Applied anthropological methods were used which include, In-Depth-Interviews (IDIs) to collect primary data at the individual level, supplemented by Focus Group Discussions (FGDs), which allowed for an observatory component between two separate groups, which, in this case was by gender.

Twelve IDIs were conducted with recipients of healthcare services who are eligible for the household survey. Respondents for IDIs were chosen according to three categories: (i) ill persons 5 years and below (ii) ill persons over 50 years of age (iii) women who were currently pregnant or had delivered within the last 2 months. This enabled us to cover different types of respondents, thus giving us a broader representation. Two FGDs were conducted, where, respondents were chosen from two camps which were selected on the basis of health facility density and gender; one densely populated and the other sparsely populated, where, men and women who may or may not be beneficiaries of health centres, but have some knowledge of the healthcare provision were selected. Creating two groups based on health facility density allowed us to compare and contrast experiences of respondents in different camps; camp 1E was selected to represent camps with high population density, and camp 8E was used to represent camps with low density of health facilities. This provided us with the opportunity to get a full representation of health seeking across all camps, by factoring in camp structure.

3.3 Delphi study

The Delphi study was conducted following our mixed methods study; the time period was from February to April 2019. The Delphi study was conducted in order to elicit the opinions and perspectives of key stakeholders regarding the primary health care situation in the camps. This was done to collect a set of propositions with the objective of determining the primary health care priorities as opposed to demands. The goal of this is to seek a consensus among participants working in the same area, albeit in different functions. This was done through an iterative step-by-step process, where we gathered and narrowed down data by averaging scale order rank responses. We gathered their priorities for intervention and implementation of policy changes that, according to their opinions, would improve health services access and utilization among Rohingya refugees. This was accomplished through three rounds of data collection.

Participants were selected using snowball sampling, whereby 22 participants, who are healthcare implementers in the Rohingya refugee setting, were invited to attend a workshop. The majority of the respondents we were

able to successfully contact were from the SRH cluster of the health sector. In the first round, each of the 22 participants were asked to identify three priorities in verbatim. From this exercise, we gathered 46 verbatim priorities, from which we also identified 10 broad areas for health services improvement. Questionnaires for the next two rounds were developed iteratively using results from the previous rounds, and were communicated to respondents via email.

For round two, using Likert scales as the standard scale rank order, we asked participants to rank each of the 46 verbatim priorities on a scale of 1 (highest priority) through 5 (lowest priority). They were also asked to rank the 10 broad priority areas using the same scale order. At the end of the round, weighted averages were used to identify the top 10 verbatim priorities and top 6 broad areas.

These were then sent through to the participants for the third and final round of questionnaires. Participants were asked to rank their top 5 priorities and their 3 prioritized areas using the same scale order rank. The top 5 priorities areas and top 3 broad areas were identified through weighted averages of 20 participants (2 participants dropped out from round 3).

4. DATA QUALITY ASSURANCE & DATA ANALYSIS

4.1 Data Quality Assurance

Local data collectors who are able to speak in Rohingya dialect as well as in Bengali were provided 7-days hands-on training by JPG researchers. Data collectors were trained to interpret Bengali questionnaires and consent forms to respondents to avoid the need to translate tools and consent forms in Rohingya dialect. All the tools for the quantitative and qualitative study were pre-tested before finalization. During survey data collection, supervisors (JPG researchers) checked the data after the interviews, the data collectors were debriefed at the end of day which provided useful tips to understand how to adapt or improve work in the field. Survey data were screened for quality assurance. JPG researchers facilitated IDIs and FGDs, and the local data collectors played the role of interpreters for the facilitators. All the interviews were recorded with consent, verbal and written. The interviewer and an assigned note taker took notes simultaneously to avoid loss of data accounting for any trouble with the recorder. After collecting qualitative data, transcripts were completed by the end of the day to avoid loss of data and maintain quality. Subsequently, transcripts were checked by other data collectors, and were again re-checked by BRAC JPGSPH researchers. The study received ethical approval from the ethical review board of BRAC JPGSPH, BRAC University.

4.2 Data Analysis

The analyses detailed in the next section looked at the following components: age, household locations (camps), time they moved in the camps, socio-economic status, distance to facility, waiting time, consultation time of the service providers have influence on reported illness pattern (acute only or acute illness with chronic illness history), utilization of health services and facilities for family planning, antenatal care and postnatal care, and child immunization. The outcome variables of interest are: illness pattern, choice of service providers, and patient's satisfactions about the health care providers and facilities. Though the health care that is provided within the Rohingya refugee camps is free, there were some reported expenditures incurred by the households. The differences in mean expenditure for obtaining health care in different camps, or for acute only vs. acute with chronic illnesses are studied. Based on distribution of variables and variable types, frequencies, percentages, mean (standard deviation) and range as summary statistics were reported by including socio-demographic characteristics, pregnancy, delivery care, family planning services, and child immunization. Moreover, descriptive analysis are used to identify challenges faced by Rohingya population needing care for illness on the basis of distance and waiting time of health facility, their restriction and reason for not taking services or not feeling comfortable at health facility. Chi-square tests were performed to measure the associations between socio-economics, demographic factors, illness patterns, utilizations of health facilities and satisfaction level regarding health care facility and service providers. As we used Open Data Kit (ODK) on a SurveyCTO server for data collection, it allowed for automatic data storage, which was converted to SPSS and STATA database files respectively for analysis.

For the analysis of the qualitative study, a thematic approach was used. Following data collection, translation from the local dialect, and translation to English, the data was analysed. A thematic approach was used, where, a guideline, a priori codes, and themes for analysis were developed prior to data collection. The translation was done by BRAC JPGSPH researchers. In order to bring out emerging themes using an a priori code-list, researchers carefully read transcripts, and repeated this process a few times. This was done through a team approach, this enabled us to minimize any possible individual biases. Furthermore, inter-coder reliability was used. ATLAS.ti version 8 was used for analysing the IDI and FGD data. Following this framework, relevant updates were made to the themes based on an assessment of the data. A final set of themes were decided, and outputs were derived based on them. A discussion of the outputs provided us with a critical assessment of the data, followed by an identification of the possible interlinks and discrepancies with the quantitative data.

5. REVIEW OF THE LITERATURE

The purpose of our literature review is to gain an understanding of the situation, review the historical background, existing theories of health/care seeking behaviour, and use previous studies to guide our project's methodology. Overall, the focus of our study is on the Health Seeking Behaviour of FDMNs, also looking at the utilization of health services at selected camps in Cox's Bazar. With these overarching objectives, we conducted a review of the existing literature.

However, the current situation presents complexities that span health, politics, management and law. Hence, to understand areas of morbidity and health seeking behaviours, it is important to get a holistic perspective of the situation, as the current situation is a result of an ongoing suppression. This can be done by understanding the history, politics, theories of health seeking behaviour, and health systems—i.e., the effect on FDMNs currently in the camps.

Keeping these perspectives in mind, we predominately used Google Scholar and PubMed for references using terms such as, "Humanitarian Crises", "Human Rights", "Displaced Populations", "Health Seeking Behaviour", "Health in Conflict", "Rohingya", or "Rakhine", "Arakan", "Burma", or "Myanmar". Additionally, we searched websites of the UK Home Office, Online Burma Library, Amnesty International, Médecins Sans Frontières, UN, UNHCR, UNICEF, World Bank, World Food Program, US Congress, European Parliament, European Union, Physicians for Human Rights, Human Rights Watch, Transnational Institute. We searched reference lists of papers and articles sourced using this search strategy, selecting based on relevance to our study.

Therefore, our literature review is presented and discussed under sub headings as follows: (i) History, Politics and Legal Issues (ii) Theories and Methodologies for Health Seeking Behaviour (iii) Previous Studies: (a) Health Seeking Behaviour (b) Health focused studies of FDMNs in Bangladesh.

5.1 History, Politics, and Legal Issues

As mentioned, to fully understand the situation of the FDMNs, it is necessary to understand the history behind the crises. This section of the review will start with an overview of the roots of the uncertainty regarding the identity of the Rohingya people. This will be followed by a brief overview of the laws and political actions taken regarding citizenship in Myanmar. By doing so, this will allow us to understand the structural factors of the human rights issues, and how they relate to the health and wellbeing of the displaced Rohingya population.

The historical origins of the Rohingya people is widely debated, with controversies over the origin of the term 'Rohingya', and the legacies that have developed over it. History goes back to the ninth century; Arab and Persian merchants on their way to China had arrived at the Arakan port (now referred to as the Rakhine State) establishing their settlement in the area. The borders of the geographical area of Chittagong and the Rakhine state have been variable, with a long history of people travelling back and forth (14) with the Arakan Kingdom conquering and ruling Chittagong from 1459 to 1666 (15). Understanding the modern day conflict requires us to look in to some key historical narratives. The Arab and Persian settlers had an influence on the Arakan Kingdom, so much to the extent that 'the Arakanese kings though Buddhist in religion, became somewhat Mahomedanised in their ideas' [Bhattacharya, 1927:141 cited in (15)]. An example of this is during the occupation of Chittagong, Arakan Kings added Muslim names to their original names (Jilani 1999 cited in Farzana 2015). Furthermore, Arakan kings started to adopt Islamic ideas, this coincided with an increased tolerance for the different belief systems in the region (Blackburn, 2000:14 cited in (15). According to the literature, conflicts began when Burmese King Bodawpaya conquered the Arakan region, leading to Arakanese rebellions (15). A number incidents such as massacres, forced labour that took place in the late 1700s, resulted in a mass exodus of Muslim and Buddhist Rakhines in Bengal territory, which at the time was under British rule. Eventually, this led to the British colonization of Burma, as the Arakanese backed the British as a response to their oppression by the Burmese King.

This point in time can be considered as the starting point of the ethnic conflict. This is because through the British takeover of Burma, their dual administration policy took over Burma's then monarchical system, subsequently they followed this by increasing recruitment of ethnic minorities of Muslims, Karen, and Shia into their colonial armed forces (15). As a result, there was growing insecurity, and a sense of oppression was created. The conflictual relationship was further compounded during the Japanese invasion of Yangon (Formerly Rangoon); during this time, the Burmese Independent Army sided

with the Japanese, until they were defeated by the British army. Also during this period, protective measures previously provided to ethnic minorities were removed. Prior to Burmese independence in 1948, the country's politics were contested between an encouragement for a federal state system or a single 'Burmese Nationality'. This coincided with events surrounding the 1947 Panglong Agreement, which was signed between General Aung San and major ethnic groups. However, after the assassination of Aung San later in the year, the agreement was abandoned. This was followed by a reinforcement of the national solidarity through the idea of a 'Single Burmese Nationality', under which Rohingyas were seen as incompatible, with religious differences making it easy to view and represent them as 'others' (15), that is, not matching with their idea of a Burmese national. Using this historical overview, it sets the framework to understand the recent legal and political events that have shaped the current situation.

By considering the historical roots of the situation, we now focus on the laws and policy changes that have occurred, focusing on historical displacement of the Rohingya people to the most recent situation and the events surrounding it. We will look at the major changes in national laws of Myanmar and the consequences in Bangladesh for the FDMNs.

Two main contentions lay the foundations for the modern day dispute. In support of the Rohingya case, there is the documentation by Scottish physician Francis Buchanan, who spent 15 years in the region. In 1799, he visited the then Arakan state, and during this visit he documented that Arakan was also known as "Rovingaw" among "Mohammedans", who have been long settled in Arakan, and who call themselves "Rooinga", or natives of "Arakan" (7). In terms of official classification, the first census of Burma was conducted by the British in 1872 (7), and, prior to independence, the last colonial census of Burma was conducted by statisticians in 1931. This census did not include the Rohingya among the 15 indigenous and 135 sub races. Major events that have pursued Burmese independence are presented in the table below.

Year(s)	Event	Political & Legal Outcome
1948	Burmese independence from British rule	The Union Citizenship Act 1948; defining national races as those that lived in the country permanently before 1824 (first Anglo-Burmese War)
1965	Nationalization of private businesses by General Ne Win ²	300,000 Indians left Burma. Also, Ne Win's socialist visions had set the seed for Buddhist rigidity, and prejudice against non-Buddhist ethnic minorities (14).
1974	First elections following military coup d'état	Rohingyas prohibited from voting

² Served as President of Burma from 1962 to 1981 & Prime Minister (1958 to 1960 & 1962 to 1974)

Year(s)	Event	Political & Legal Outcome
1977–1978	Operation King Dragon: Following the Burmese militaries' successes against Arakanese rebel groups, the Govt. launched a campaign to arrest illegal migrants.	200,000 Rohingyas flee to Bangladesh
1982	Myanmar Citizenship Law	Amendment to the Union Citizenship Act. Required citizens to reapply for their citizenship. This led to the Rohingya's to be stateless as the application was biased and selective. This also led to the formation of the Rohingya Solidarity Organization (An armed movement in Bangladesh) (14).
1991–1992	Displacement: Operation Clean and Beautiful Nation	Following a failed democratic election and deregistration of many Civil Society Organizations: 260,000–270,000 escape to Bangladesh as result of military action in the Arakan State.
1992	<ul style="list-style-type: none"> ▪ Burmese Government considers refugees as illegal migrants. ▪ Bangladesh signs Refoulement³ agreement with Myanmar 	<ul style="list-style-type: none"> ▪ The term 'Bengali' is increasingly used to refer to the community as a whole. ▪ Following the agreement, more 235,000 Rohingya are sent back to Myanmar (mostly involuntarily)
1994	Rakhine State made accessible to travellers and International NGOs	INGOs like Action Contre la Faim (ACF; Action Against Hunger) and Médecins Sans Frontières (MSF; Doctors Without Borders) set up bases in Myanmar
2005	Repatriation from Bangladesh to Myanmar stopped	
2012	<p>May – Killing of Buddhist woman. The start of the modern day conflict</p> <p>June – Retaliation for the killing</p> <p>October – Organized destruction of Rohingya neighbourhoods</p>	<ul style="list-style-type: none"> ▪ On May 28th 27 year old Rakhine Buddhist woman (Thida Htwe) was allegedly robbed, raped and murdered. Locals accused 3 Muslim men ▪ News on the incident spread across the country, with images of the body of the 24 year old shared on the internet ▪ A mob of three hundred attacked a bus carrying Muslims at a Government check post in Toungop (16) ▪ These events were followed by increased episodes of violence and protests
2013	<p>Govt. Development plan for Rakhine state expresses concerns about the increasing population of "Bengalis"</p> <p>Rohingya villages bordered by hostile neighbours</p> <p>Rohingya flee to Internally Displaced Person (IDP) camps</p>	<ul style="list-style-type: none"> ▪ Following attacks on Rakhine neighbourhoods, more than 140,000 Rohingya escape to the IDP camps. These camps are primarily treated as detention camps, where movement is restricted in accordance to the 1940 Foreigners Act. ▪ Rohingyas who refused to be identified as Bengali were also placed in the camps ▪ Humanitarian aid was restricted in IDP camps and villages surrounded by hostile neighbours

³ Refoulement is the expulsion of persons who have the right to be recognised as refugees (UNESCO; <http://www.unesco.org/new/en/social-and-human-sciences/themes/international-migration/glossary/refoulement/>)

Year(s)	Event	Political & Legal Outcome
2015	Myanmar Parliament passes a series of anti-Rohingya race and religious protection laws	In addition to the laws, Rohingya were not allowed to vote in the general elections. Aung San Suu Kyi's party wins majority of seats and forms Government the following year
2017	State security launches a terror targeting campaign against the Rohingya community	As a result of the campaign, there was an unprecedented period of mass displacement. More than 530,000 Rohingya are driven out of Myanmar

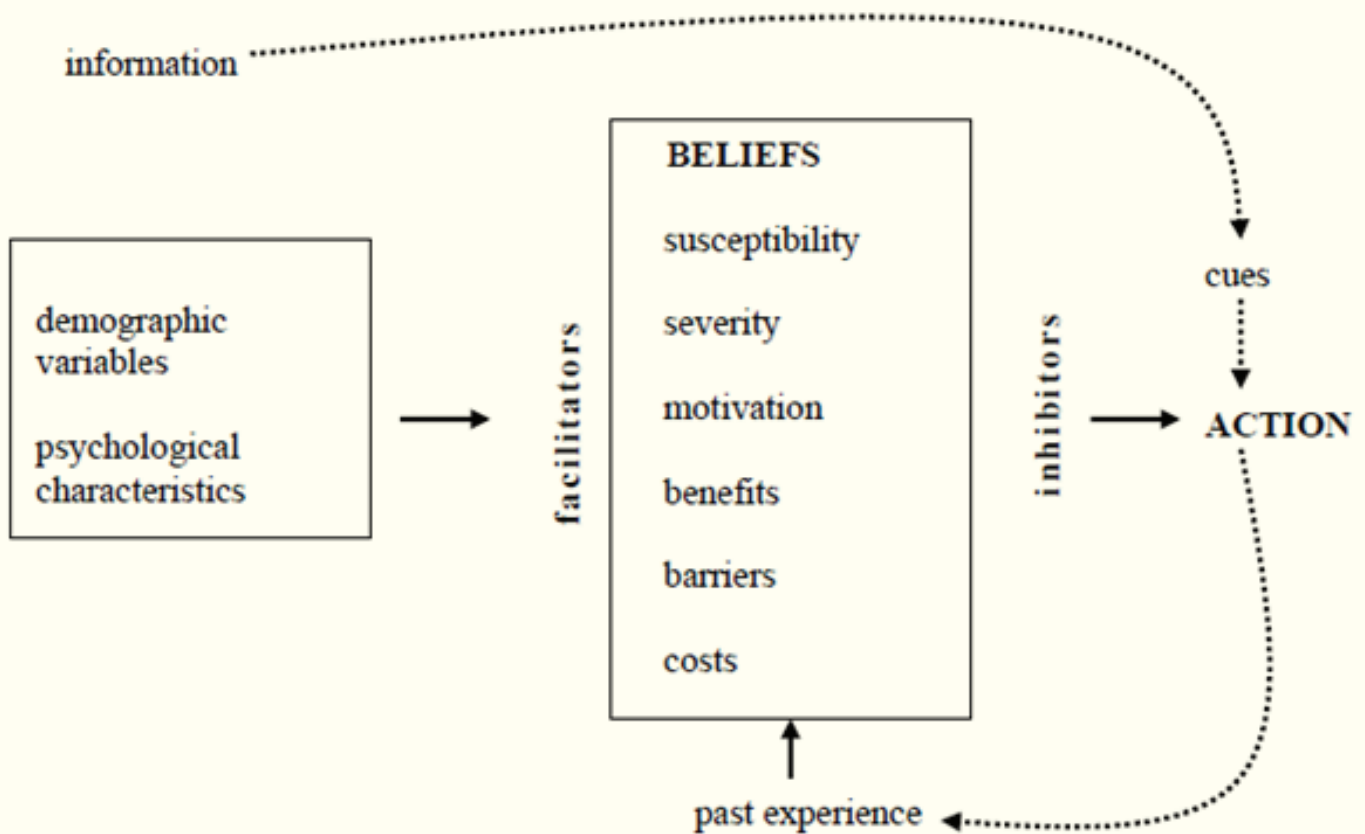
By looking at the history events, displacement of the Rohingya people has occurred at multiple points, with movement has occurred from as early as the late 1600s. However, with our historical review, we see that there are three major waves of displacement. The first was during 1977–1978 (Operation King Dragon), the second was after the failed democratic election which resulted in army attacks, and, the third and most recent wave was during the mass terror incident in 2017, which resulted in the mass displacement in August 2017. This overview of the historical incidents that have contributed to the current situation can lead us to understand the structural factors that affect health seeking behaviour. The following sections will focus on the literature around health seeking behaviour, followed by previous studies that have been conducted on the FDMNs in Bangladesh, by doing so, we a gain a thorough understanding, thus assisting us to develop and guide our project's methodology and analysis.

5.2 Theories and Methodologies for Health Seeking Behaviour

Following our historical and policy overview, the focus will now switch to the health seeking. This will be done through a review of some of the major theories of health care seeking behaviour. Understanding some of the key theories in health seeking provides us with the necessary knowledge to contextualize our study, both in terms of quantitative and qualitative methods. Furthermore, utilizing previous studies, we can build towards a situation appropriate methodology.

Health seeking studies tend to focus on the individual and his/her decision making. Specifically, they are interested in the unique and similar factors that determine an individual's behaviour at a given place and time. A standard

approach in health focused methodologies is based on the Knowledge, Attitudes, Beliefs and Practices (KABP) approach; formally assessing behavioural intentions and behavioural approaches, also known as KABP studies, predominately used in HIV/AIDS studies (17). This approach is based on theories of cognitive behaviour, which posits that individuals will assess their risk in performing a particular behaviour (17). In the case of our study, we are interested in an individual's health seeking, and the decisions that lead to certain outcomes of health seeking. A KABP approach is built on a rational choice model, that is, individuals' risk perceptions and behaviours rely on a calculated process, where information is interpreted and acted upon. Under a rational choice framework, prominent models of health seeking behaviour (HSB), to predict and explain health behaviour, include— theory of planned behaviour (TPB), theory of reasoned action (TRP), the health belief model (HBM), social cognitive theory (SCT); collectively known as social cognition models (18). Over the years, these models have undergone numerous updates and changes, adding various correlates that explain health behaviour. The HBM provides the basis of all models, and is determined by two cognitions – i. Perceptions of illness threat ii. Evaluation of behaviours to counteract this threat. Also, threat perceptions are based on two beliefs – 'the perceived susceptibility of the individual to the illness ("How likely am I to get ill?") and the perceived severity of the consequences of the illness for the individual ("How serious would the illness be?")' (18). Further developments have led to the "the major theorists" integrated SCM, which further incorporates correlates of health behaviour, that include psycho-social variables. The diagram below presents a visual summary of SCMs.



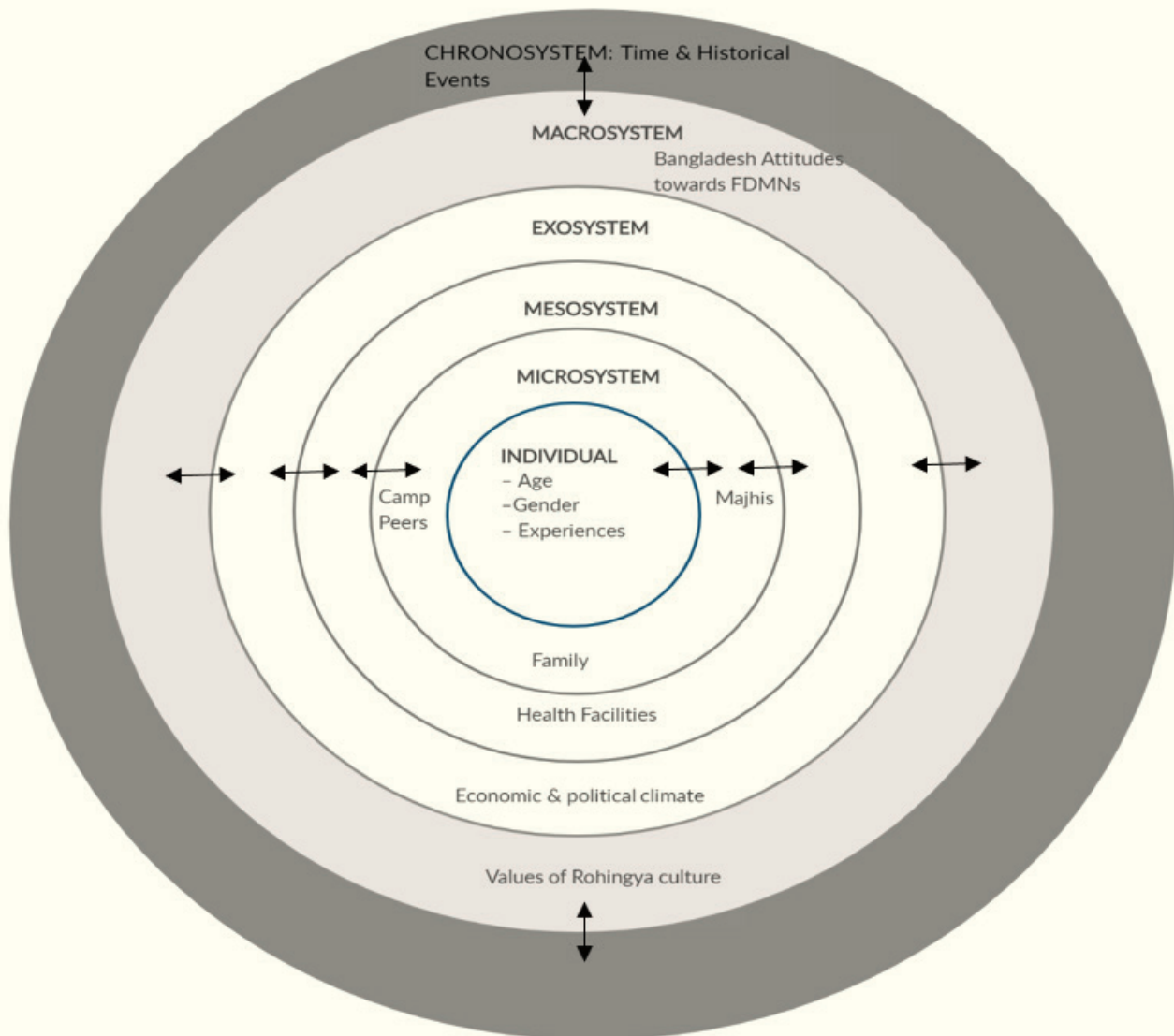
Source: (19)

Figure 3: Predicting health behaviour with social cognition models

As we can see from diagrammatic summary, SCMs identify multiple layers of influence at the individual level, which include social factors. However, the cultural context under which these social factors are developed are ignored. Elements of SCMs are utilized in the quantitative component of our study. Also, for our study, it is important to not only understand individual factors, but also cultural and historical context. This leads us to explore to overarching models/frameworks that take into account history, human rights and the current social and ecological climate of the refugee camps.

The SCMs focus on the correlates of health seeking behaviour rather than examining causal relationships (18). However, given the complex situation in the camps and the history of FDMNs, it is feasible to assume that

health seeking behaviours vary and cannot be explained through defined processes alone. Therefore, we utilize the following frameworks, (i) The Ecological Framework/Model (ii) A Human Rights Framework. As our study does not focus on a particular illness or behavioural outcome, we use the frameworks to organize our thinking, assess our methodology, and guide our analysis. The ecological framework as developed by Urie Bronfenbrenner (psychologist and systems theorist), and was originally developed to understand the social and spatial contexts that relate to child development, it is also used to identify the social determinants of health and understand the various contexts that affect an individual. This is illustrated in the diagram below.



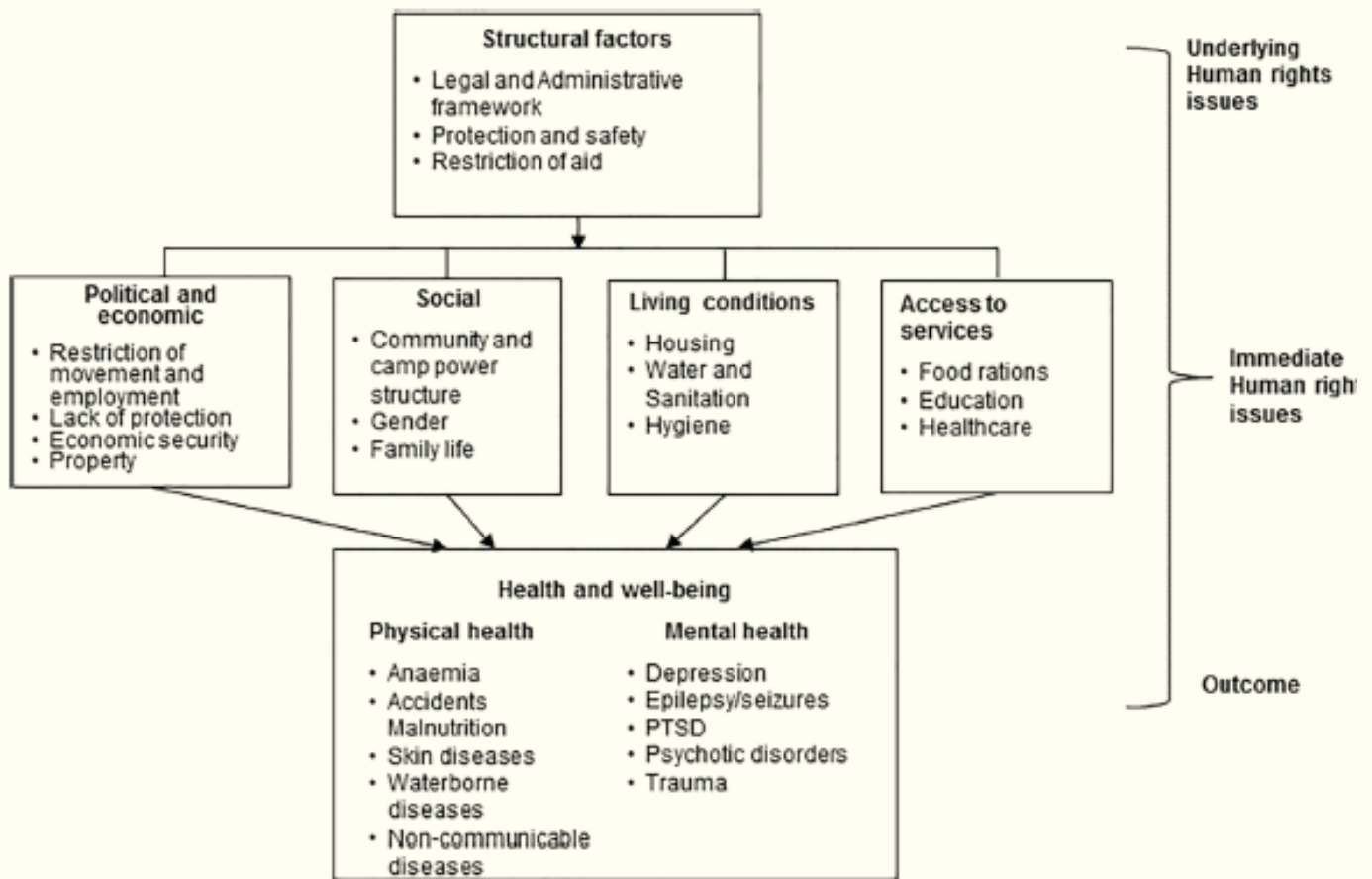
Source: BRAC JPGSPH Research

Figure 4: Using the social ecological framework to understand the situation with FDMNs

As we have already reviewed the historical events that have preceded the current situation, we are aware of the importance of events and how they affect the system and the health outcome of the individual. Also, as seen on the diagram, layers of the system have bi-directional influences; the social and economic climate together with attitudes of neighbouring communities all have an influence on the individual, and vice-versa. In terms of health seeking, the quantitative component of our study will allow us to account for the individuals' characteristics, his/her environment (microsystem)—which in this case is the camp in which he/she resides, and, to an extent the effect of the economic and political climate on the individual. The qualitative component of our study will

give us depth on an individuals' health experiences in the camps, but will also bridge our understanding of the different determinants of health that are influenced by other layers as outlined in the framework.

Furthermore, as the current situation is a result of an ongoing suppression—a humanitarian crises—a more specific framework as developed by Nidhi Wali and colleagues in their systematic review of FDMN health can be used alongside the ecological framework. The framework is presented in the diagram below.



Source: (20)

Figure 5: Framework to Understand & Explore Human Rights Factors Affecting Health Outcomes

This framework allows us to focus on the factors that FDMNs face in the camps on a day to day basis. Hence, it allows us to understand the everyday situation; the systematic review included peer-reviewed papers, reports, working papers, and theses or dissertations published in English between 1960 to July 2017, resulting in a total of 10 articles and 21 reports for the final review (20). The review revealed some key insights of the FDMNs in the camps. In terms of underlying human rights issues, it was found that Rohingyas experienced violence at various levels, both inside and outside of the camps, which also included complaints against Majhees who had purposely ignored their problems (20). Also, alongside forced repatriation in the past, in 2016, the Government of Bangladesh (GoB) put restrictions on aid distributed to newly arrived refugees, as it would encourage more Rohingya to enter the country (20, 21). Regarding the immediate human rights issues faced by the Rohingyas at the camps, they had reduced mobility, lack of employment opportunities, and were required to pay bribes to camp authorities (to work outside of camps). This resulted in Rohingya being a target for local police, and discrimination by local employers (paying them a lower wage) and community people (20). The reduced mobility of men forced women to seek work outside of camps, however, an increased economic role for women

has exposed them to increased violence both inside and outside of the camps (20, 22). Furthermore, overcrowding and lack of engagement in work has led to increased inter-familial conflict. Additionally, the review highlighted studies that state the hostile environment created by the increased power of authorities and Mahjees (20). The study by Akhter and Kusokabe revealed, 'The Mahjee's power is all-encompassing, so much so that the refugees cannot table complaints directly with the camp authorities (22). This has led to unattended cases of gender based violence. Though a system to address such problems exists through the UNHCR and other organizations, social stigma associated with such acts prevents women from raising issues with outsiders. Other problems include the semi-structured housing, limited education (up to secondary school), and lack of water and sanitation facilities (20). At the individual level, background of trauma, uncertainty of the future, and conditions of the camps all play a role in health and wellbeing of an FDMN. The poor hygiene and sanitation facilities have led to the persistence of communicable disease such as respiratory tract infections, diarrhoea, skin diseases, measles and water borne diseases (20). Additionally, the review also highlighted the study by Milton et al (2017), which highlighted the prevalence of non-communicable diseases such as respiratory disorders, cardiovascular

disease, endocrine and metabolic disorders(23). Also, the same study highlighted mental health issues such as epilepsy, seizures, psychotic disorders, and other unexplained somatic complaints.

Given the two frameworks, and the findings through the systematic review by Wali et al (2017), we begin to develop an overall idea of the camps and the individuals who live in them. Therefore, it becomes evident that we cannot just emphasize the individual and his/her health seeking behaviour, but we must consider the health system that is operating in the camps and how it relates to the wider socio-ecological structure. By doing so, we gain an appreciation for the wide range of factors influencing health seeking behaviour of individuals, and possible areas for recommendations. The next part of this review will focus on specific studies on HSB and FDMNs in the camps.

5.3 Review of Studies

To guide the development of our data collection tools, we also conducted a review of completed studies. This section is therefore broken down into (6.3.1) Selected HSB studies (6.3.2) previous studies on FDMN health/ HSB.

5.3.1 Studies focusing on Health Seeking Behaviour

In order to understand the nature of health seeking behaviour (HSB) studies, we decided to scope studies and reports that focus health seeking or perceptions of healthcare, and where possible we sought HSB studies that were conducted among displaced populations, or populations in conflict areas. The following table shows selected studies and reports that focus on health seeking behaviour.

Study	Study Approach	Study Population	Used For
Displacement and health - Samantha L Thomas and Stuart DM Thomas	Review	-	Defining displaced populations
Health needs and care seeking behaviours of Yazidis and other minority groups displaced by ISIS into the Kurdistan Region of Iraq - Valeria Cetorelli, Gilbert Burnham, Nazar Shabila	Household (HH) survey	Displaced minority groups in Kurdistan Region of Iraq	Methodology, tool design, overall guide
Perceptions of Quality of Care for Serious Illness at Different Levels of Facilities in a Rural Area of Bangladesh - Iqbal Anwar	Secondary analysis of baseline community survey data	Matlab Essential Obstetric Care (EOC) Project, implemented in Matlab, Bangladesh, by ICDDR,B	Methodology, tool design, overall guide
Dynamics of Health Care Seeking Behaviour of Elderly People in Rural Bangladesh - Priti Biswas, Zarina Nahar Kabir, Jan Nilsson, Shahaduz Zaman	Qualitative	4 villages in Chandpur district	Methodology, qualitative tool design (IDIs, FGDs), guiding qualitative analysis
An assessment of antenatal care among Syrian refugees in Lebanon - Matthew Benage, P Gregg Greenough, Patrick Vinck, Nada Omeira, Phuong Pham	Quantitative field-based survey	Syrian refugees in refugee camps in Lebanon	Methodology, tool design – Maternal health section,
Health-seeking behaviour studies: a literature review of study design and methods with a focus on Cambodia - John Grundy, Peter Annear	Literature review of study design and methods	-	Study design, methodology

Study	Study Approach	Study Population	Used For
<p>Psychosocial aspects of health seeking behaviours of patients with Buruli ulcer in southern Benin</p> <p>- Isabelle Aujoulat, Christian Johnson, Claude Zinsou, Augustin Gue´de´non, Francoise Portaels</p>	Qualitative	130 adults and 30 children in Zou province (Benin)	<p>Qualitative tool design (IDs, FGDs),</p> <p>Understanding how to assess psychosocial & cultural beliefs</p>
<p>Client satisfaction and quality of health care in rural Bangladesh</p> <p>- Jorge Mendoza Aldana, Helga Piechulek, Ahmed Al-Sabir</p>	Quantitative survey	Bogra district, Bangladesh	Study design, methodology for sub-sections on satisfaction
<p>The road to tuberculosis treatment in rural Nepal: A qualitative assessment of 26 journeys</p> <p>- Augustinus HA ten Asbroek, Merijn W Bijlsma, Puspha Malla, Binjwala Shrestha, Diana MJ Delnoij</p>	Qualitative (semi-structured interviews)	Rural lowland district of Nawalparasi, Terrai area of Nepal	Study design, methodology, understand pathways of HSB
<p>Changing health-seeking behaviour in Matlab, Bangladesh: do development interventions matter?</p> <p>- Ahmed, S. M., Adams, A. M., Chowdhury, M., & Bhuiya, A.</p>	Quantitative survey	Matlab, Bangladesh	Methodology, tool design,
<p>Health seeking behaviour and utilization of health facilities for schistosomiasis-related symptoms in Ghana.</p> <p>- Danso-Appiah, A., Stolk, W. A., Bosompem, K. M., Otchere, J., Looman, C. W., Habbema, J. D. F., & de Vlas, S. J.</p>	Quantitative survey	3 Villages in Ghana (south, central and north)	Methodology, tool design,
<p>Healthcare seeking behaviour, barriers in accessing medicines, and coping strategies in Africa: evidence from Koboko District, Uganda.</p> <p>- Johannes Dill</p>	Quantitative survey	Koboko District, Uganda	Methodology, tool design,
<p>Patterns of maternal care seeking behaviours in rural Bangladesh</p> <p>- Allisyn C. Moran, Peter J. Winch, Nighat Sultana, Nahid Kalim², Kazi M. Afzal, Marge Koblinsky, Shams E. Arifeen, M. Habibur R. Seraji, Ishtiaq Mannan, Gary L. Darmstadt, Abdullah H. Baqui, The Bangladesh PROJAHNMO Maternal Morbidity Study Group</p>	Mixed Methods (Semi-Structured Interviews, HH survey)	Three sub-districts of Sylhet District in north-eastern Bangladesh: Beanibazar, Zakiganj and Kanaighat	Methodology, tool design,

Review of these studies provided us with an insight into different types of health seeking studies. It is clear that there is no fixed methodology, as we have already reviewed, health seeking is a multi-layered process and cannot be narrowed down to a specific set of variables. The literature review conducted by Grundy and Annear reviewed different types of study designs; these include, HH surveys, facility-based surveys, qualitative surveys, ethnographic and narrative studies, mixed methods surveys (24). For the purposes of our objectives, a mixed methods approach is appropriate, as we want to explore the contextual influences on health care seeking. This approach was applied in the study conducted by Moran and colleagues (2007) on the maternal care seeking behaviours in rural Bangladesh. In this study, the qualitative interviews were used to identify the main care-seeking patterns (there were three) after which the quantitative survey determined the frequencies associated with this pattern(25). However, other studies on HSB were solely quantitative, such as the study of health needs and HSB of Yazidis and minority groups in Kurdistan. This study was able to provide details on timeline of questions, as 'Participants were asked if any household members had needed care for a health condition in the two weeks preceding the survey, and whether care was obtained from the camp primary health care centre, an outside public hospital or a private clinic' (26). As a result, this study was able to obtain detailed information on communicable and non-communicable diseases. In terms of study population, Ahmed et al. (2003) and Rahman et al. considered the spouse of the household head or any knowledgeable female member of the family as a respondent(27). In contrast, a study by Danso-Appiah and colleagues considered the main decision maker as a respondent(28). For our study, we are also interested in the satisfaction of health facilities; a study on perceptions of quality of care for serious illness in rural health facilities in Bangladesh revealed that behaviour and attitudes of providers, and availability of medicine were significant predictors for perceived quality of care (29). Similarly, another study on quality perception in rural Bangladesh states, 'politeness of the provider was the most powerful predictor variable, followed by satisfaction with the provider's respect for privacy, waiting time, and consultation time' (30). Such studies indicate that judgement of health facility experience are highly dependent on individual perception, therefore, in our case, the individual and the context in which he/she utilizes a health facility.

With our qualitative study, we are interested in exploring the context of the health facility experience, as well as the process of health seeking divisions. A study conducted by Biswas and colleagues (2006) found that elderly people in rural Bangladesh were influenced by familiarity and accessibility of health care providers (31). Also, it is important to acknowledge that health care may be sought from multiple providers; a qualitative study

on tuberculosis treatment in Nepal uncovered patients seeking multiple treatment providers, where influencing factors were perceived quality, costs and service level of a provider, and lack of provider initiated referral (32).

After focusing on a few HSB studies we see that studies can be quantitative, qualitative, or mixed methods. In the case of mixed methods study, the qualitative component is conducted first to identify health seeking patterns, followed by the quantitative study. However, this does not have to be the case, single method studies highlight different aspects, such as qualitative studies, which can help uncover health seeking pathways and reasons behind decisions. Therefore, a mixed methods approach is appropriate to meet the objectives of our study, as it would allow us to collect specific information on disease patterns, satisfaction and utilization rates, at the same time, the qualitative study will elucidate these findings while explaining context of the decision making process.

5.3.2 Previous studies on FDMN health/HSB

Literature on the Rohingya population is mostly based on reports by international organizations such as, MSF, Amnesty International, and UNHCR etc. Formal studies on health seeking behaviour are limited. Furthermore, health studies on Rohingya are limited due to their unrecognised status in Myanmar, therefore limited recorded data (3). From our historical overview, we know that over the last few decades, the Rohingya have experienced displacement and repatriation over a few periods. In Myanmar, most of their health needs were served by international organizations such as the MSF and ACF. However, in recent times many of them were subject to IDP camps in Myanmar, where aid was restricted. We also know that at the start of 2016, aid was restricted in Bangladesh (8). Therefore, considering the last great influx of Rohingya in Bangladesh in August 2017, we focus on studies and reports from 2016 to 2018 on the Rohingya in Bangladesh.

As MSF have a long history in working with this population, we consulted the December 2017 survey report, 'Health Survey in Kutupalong and Balukhali Refugee Settlements, Cox's Bazar, Bangladesh'. The study areas were Kutupalong and Balukhali settlement camps and extension areas. The report stated that the causes of death among the pre-existing population were diarrhoea (12.5%) and violence (12.5%), other reasons were unknown, with some deaths caused by elephant attacks (21). With regards to morbidity, participants were asked if they had any illnesses in the last two weeks, 33.2% (n = 1,490) reported experiencing illness (21). A study focusing on health seeking behaviour was conducted by Masud and colleagues in 2017, though the study had a small sample size (n = 149), it revealed that a 45.6% of the population had reported multiple problems (33). Whereas, 58.4% stated that their demands were met by health care providers 'sometimes', with the top reason being not

enough medicine and lack of doctors in camps (33.6%) (33). Other literature on the Rohingya in the settlement camps are in the form of needs assessments. The ICDDR, B conducted a needs assessment of maternal and child health, with special attention on pregnancy, lactation and family planning status of women, together with the health status of under 5 children. Though the report focuses on maternal and child health (MCH), it presents us with some useful statistics on demographics, family planning, and child health. These are presented in the table below.

Furthermore, the report provides insights on their field activities, stating that only women who were ever married were asked pregnancy questions, as this would avoid religious and cultural repercussions(34). A paper by (23) gives us an insight into the situation faced by pregnant women in Myanmar, through a representative case study, the paper revealed that pregnant women were required to disclose their pregnancy and gain permission to give birth from the Nay-Sat Kut-kwey ye (NaSaKa) group, a border security group (23). However, oftentimes women would still be beaten or killed for declaring their pregnancy (23).

Other valuable sources of information are in the form of news reports and situation reports. A June 2018 news desk report from the Lancet Infectious Diseases reveals that the combination of monsoon rainfalls with infrastructure in the camps brings about an outbreak of acute watery diarrhoea or cholera, and forms a dangerous combination with malnutrition (35). The news desk report also states the elderly are at most risk of death, this is given their age, loose motions, and the heat (35). The Inter Sector Coordination Group (ISCG), the central coordination body for humanitarian agencies serving FDMNs in Cox's Bazar, also produce situation reports. In July 2018, the ICSG reported that there were 34 primary health facilities, 1 per 50,000 people, and a diphtheria outbreak is continuing (36). In October 2018, the ISCG reported that since August 2017, 3,862,552 out-patient consultations have been provided to the refugees, though these aggregate figures hide differences in service uptake by marginalized and vulnerable groups (37). A rapid needs assessment (RNA) was conducted in March 2018 (published December 2018); it provides some key socio-demographic information, revealing majority of houses had 3 to 5 members, and, interestingly 79.9% of households reported no current income, where 76% of Rohingya household members over the age of 15 had no education (38). Furthermore, the assessment also

Table 5.1 : Key Statistics from ICDDR,B MCH Report

Statistic
Mean HH Size = 5.3 ± 2.25
% 13-49 years = 45.8%
Women of reproductive age < 30 = 70%
Mean age of 1st Pregnancy = 18 ± 2.4
Mean age at 1st marriage = 16.8 ± 2.2
Pregnant & married = 14% (370)
Pregnancy prevalence = 10.1%
Total Pregnant Women = 2.3%
% of lactating women = 6% → 26.4% (women of reproductive age) → 36.6% (Ever married women)
Head of at least 1 family planning method = 86.3%
Family planning:
Injection = 70.5%
OCP = 28.9%
Contraceptive Prevalence Rate (CPR) = 33.7%
Most answered medical problems for children:
Cough = 69.5%
Fever = 41.1%
Breathing difficulties = 12.4%
Loose stools = 9.8%
Crude Birth Rate = 35.6/1000 population
Prevalence of at least 1 ANC = 53.5%
Source:(34)

presents some key mortality data, revealing 10.7% of surveyed Rohingya households reported 1 person dying in the past 12 months, more than two times that of the host community (4%) (38).

Our review of HSB/health studies and studies/reports on Rohingya in Bangladesh have provided us with an expanded picture of the current situation, both in terms of health and demographic issues, as well as the methodologies that can be used to assess health seeking behaviour, service utilization, and service satisfaction.

Overall, our literature review has documented the background of the displaced population, taking consideration of historical events, and, where possible documenting health status of the Rohingya people before and after displacement. Also, we have utilized frameworks to contextualize the situation in terms of health, human rights, and community. As with all public health problems, there is overlap and interdependence, and, in this situation frameworks assist us in contextualizing our objectives, in addition to providing a foundation for our understanding and subsequent analysis.

6. RESULTS OF QUANTITATIVE ANALYSIS

The results and analyses are presented in different sections. These are i) Household characteristics and socio-economic status, ii) Current patterns of illness and health care seeking behaviour, iii) Satisfaction and experiences with the facilities and providers, iv) Association of socio-demographic factors with illness, and utilizations of facilities.

6.1 Household characteristics and socio-economic status:

Table 6.1 provides an overview of major socio-economic factors, which include household size, religion, decision making, and, income and expenditure. Due to the nature of set-up in each of the camps, households are usually clustered together around small spaces. In many cases, families consist of parents, children with their spouses and their children, averaging 5.9 members per household. Out of 364 households, 33.2% of the households have between 5 to 6 members, whereas 30.2% have between 1 to 4 members. Looking at the time lived in the camp, it is evident that the majority of FDMNs (93.1%) arrived in Bangladesh 12-16 months ago (at the time of data collection); the majority entering Bangladesh during the period surrounding the 25th of August, 2017. Around 3% of our sample have been at the camps for over a year and a half; many of them had entered Bangladesh over 10 years ago.

With regards to religion, the Rohingya community identify as Muslim, with 100% of the respondents reporting Islam as their religion. This is important to note, especially in terms of choice of health care, as religious and superstitious elements may influence their choice of providers. Furthermore, 78% of households have males as the head. Similarly, 75% of households have males taking decisions on health care, with only 22% of households headed by females.

The economics of the households are mostly determined by the relief they receive, with 42% of households stating selling of food relief and other material in the local market as their main sources of income. This is followed by daily wage labour (33%) and running a small business (14%). Daily wage labour is mostly pursued by male members of the family, and it can include various types of construction work (roads, buildings). Small businesses are in the form of corner shops and small shops in the local markets (bazar which sell groceries and goods from Myanmar), some pharmacies and tea stalls. Some respondents also stated that they had secured some type of work from NGOs (10%); such jobs range from health worker/assistant to photographer. In terms of expenditure, only 2% of households say that they do not have to spend money. In terms of healthcare expenditure, 60% of households spend between BDT1-2,000, where, the mean per capita household expenditure is BDT 1,252; this is expenditure for doctors' visits and medicine. The health services at the healthcare facilities established by the national, international NGOs and Bangladesh government in the camps are provided free of charges, however, many of the Rohingya community also seek care from private doctors, community doctors from Myanmar, and pharmacists. This varies by camp, and is elaborated in section 6.2. There are select cases where expenditure exceeds BDT 6,000, in such cases respondents have claimed to have sought health care outside the camps (i.e. Cox's Bazar City, Chittagong, Dhaka), and, in many cases have had to purchase medicine on a daily basis. Table 6.1 below provides a more comprehensive breakdown.

Table 6.1 Household Characteristics and Socio-Economic Information

Socio-Economic Information (n=364)	n	%
<u>Number of HH members</u>		
1-4 members	110	30.2
5-6 members	121	33.2
7-8 members	79	21.7
> 9 members	54	14.8
<u>Length of time in Current Camp</u>		
Up to 11 months	11	3.0
12 to 16 months	339	93.1
17 months and more	14	3.8
<u>Religion of the HH head</u>		
Islam	364	100
<u>Sex of the HH head</u>		
Male	283	77.7
Female	81	22.3
<u>Decision Makers on healthcare in the HH</u>		
HH head (Male)	273	75.0
HH head (Female)	80	22.0
Others	11	3.0
<u>HH's main source of income</u>		
Relief goods/selling relief goods	151	41.5
Daily wage labour	119	32.7
Own small business	49	13.5
Monthly wage labour	37	10.2
Others	8	2.2
<u>HH's monthly expenditure</u>		
No cash expenditure	6	1.6
BDT 1-2,000	29	8.0
BDT 2,001-4,000	72	19.8
BDT 4,001-6,000	122	33.5
BDT 6,001-10,000	95	26.1
BDT 10,000+	40	11.0
<u>Monthly health care expenditure</u>		
No cash expenditure	47	12.9
BDT 1-2,000	219	60.2
BDT 2,001-4,000	59	16.2
BDT 4,001-6,000	26	7.1
BDT 6,001-10,000	10	2.7
BDT 10,000+	3	0.8

From the table below (Table 6.2), we can see that for the majority of households, the average size is in-between 5.7 to 6.2 members per household; the overall average being 5.9 members per household across all the camps. Camps 13, 15, and 22 have above average number of HH members, this may be due to the camp size and structure of each household. In terms of time spent in current camp, the overall average is 14.2 months, with members of camp 9 average of one and a half years. The average monthly household expenditure for all camps is BDT 6,728, with camp 13 recording the highest average spent. Also, for households in the selected camps, on

average 28% of their monthly expenditure goes towards healthcare; survey results indicate that the majority spend on medicine, doctor visits, or both. It is important to note that these results only provide a limited picture of expenditure patterns, this is because respondents tend to overstate their health care expenditure, especially when interacting with NGO or development personnel. However, these figures provide a valuable insight, that despite free health care around the camps, the Rohingya refugees are paying for health care, which they avail from private doctors or from pharmacies.

Camp	Avg. HH Size [5.7, 6.2 CI]	Avg. Time in Current Camp (In Months) [13.9, 14.5 CI]	Avg. HH Monthly Expenditure (ME) in BDT [6,134, 7,322 CI]	Avg. Health Care Expenditure as a % of HH ME [25.59, 30.54 CI]
Camp 1E	5.8	12.9	5,960	43.4
Camp 7	5.7	12.7	7,297	36.6
Camp 8E	5.5	14.2	6,500	28.9
Camp 9	5.4	17.9	6,009	31.9
Camp 11	6.1	14.3	6,205	21.5
Camp 13	6.5	13.7	9,515	28.8
Camp 14	5.9	14.4	6,023	26.5
Camp 15	6.5	13.7	7,426	19.4
Camp 16	6.0	14.3	5,806	22.3
Camp 22	6.2	13.9	6,697	21.9

6.2 Current Patterns of Illness and Health Care Seeking Behaviour

This section focuses on acute symptoms and chronic illnesses of respondents, this is followed by the types of treatments sought for the last illness/symptom.

Furthermore, respondents are asked to provide their experiences with the facilities and providers they visited, and their assessment of the treatment received there.

Overall Rate of Reported Illness = 39.7%				
Camp	HH's Surveyed	Members	Ill persons	%
Camp 1E	35	110	79	71.8
Camp 7	38	117	82	70.1
Camp 8E	34	101	74	73.3
Camp 9	32	94	51	54.3
Camp 11	43	141	92	65.3
Camp 13	34	117	79	67.5
Camp 14	43	137	92	67.2
Camp 15	34	119	61	51.3
Camp 16	31	98	61	62.2
Camp 22	40	133	81	60.9
Total	364	1167	752	64.4

Table 6.3 shows that all camps had a reported morbidity rate above 50% within past 30 days of the interview date of the respondent. Taking into account the number of households interviewed, camps 1E, 7, 8E, 11, 13 and 14 had the highest rates of reported morbidity. The average number of reported ill persons per household

is 2.3; given our sample size (N = 364 households), we can conservatively estimate that the rate of reported illnesses throughout the camps is 39.7%. The table (Table 6.4) below shows the number of ill persons per household.

Table 6.4: Morbidity Information at the HH level			
Average Number of Ill People per HH = 2.3			
Morbidity Information (n=364)			
Number of ill person per HH	n	Un-weighted (%)	Weighted (%)
None	27	7.4	7.1
1 Person	107	29.4	30.4
2 Persons	104	28.6	27.5
3 Persons	82	22.5	22.7
4 Persons	29	8.0	8.4
More than 4 persons ill	15	4.1	3.9

Across all the camps surveyed, the reported average number of ill people per household was 2.3. Out of 364 households, around 58% of households reported have one to two persons who were ill, with 22.7% of households

reporting 3 people who were ill. Overall, the average number of reported ill people is 2.3 per household (Table 6.4).

Table 6.5: Profile of Ill Persons			
Age (years)	n	Un-weighted (%)	Weighted (%)
1 <	24	7.2	7.1
1 - 4.99	80	22.5	23.7
5 - 17.99	76	23.7	16.3
18 - 59.99	136	40.6	46.6
≥ 60	21	6.1	6.2
Suffered from Chronic Illness last 1 year			
Yes	168	52.1	49.9
No	169	47.9	50.1
Currently Suffering from Chronic illness			
Yes	150	47.1	44.5
No	187	52.9	55.5
Suffered from Acute Illness Last Month			
Yes	337	92.9	92.6
No	27	7.1	7.4

Looking at the profile of ill persons, the majority fall within the age bracket of 18 to 59 years (46.6%). Around 93% reported some sort of acute illness or symptom within the last month, among which 47.1% are currently suffering from chronic illness. Similarly, around 52.1% of the reported ill persons had suffered from a chronic illness within the last one year (Table 6.5). The reported chronic illnesses are provided in Table 6.6.

6.2.1 Reported Illnesses and Symptoms: Acute and Chronic

Looking at the list of chronic diseases, it is evident that chronic fever is most prevalent among the respondents in the camps (19.6%). Though this is reported, respondents

in interviews had stated recurring fever over the course of a few months, where symptoms have persisted despite getting treatment. A fever can be sometimes considered to be a symptom of an underlying condition, most often an infection, and given the structure of the camps, the possibility of infections spreading is high. Gastric/Ulcer problems are the second most reported chronic illness (11.2%), with Asthma/Breathing problems/Difficult-Fast breathing, and, body aches, bruises and pains as the fourth (8.3%) and fifth (.8%) most reported respectively. 'Other' chronic diseases include pneumonia (7 cases), and jaundice (9 cases) (Table 6.6.)

Total Reported Chronic Diseases (n=337)	n	Weighted (%)	Un-weighted (%)
Chronic fever	41	19.6	27.9
Gastric/Ulcer problems	24	11.2	16.3
Others	23	10.7	15.6
Asthma/Breathing problems/Difficult-Fast breathing	18	8.3	12.2
Body aches, bruises & pains	16	8	10.9
Blood pressure (hyper/hypo-tension)	10	4.9	6.8
Stomach ache	9	4.4	6.1
Jaundice	9	4.1	6.1
Pneumonia	7	3.4	4.8
Arthritis/ Rheumatism	5	2.6	3.4
Chronic cough	5	2.4	3.4
Swollen limbs	5	2	3.4
Diabetes	4	2	2.7
Eczema	4	1.4	2.7
Tumour	4	1.9	2.7
Chronic dysentery	3	0.9	2
Headache/Migraine	3	1.6	2
Excessive menstrual bleeding	3	1.6	2
Burning sensations	3	1.3	2
Leucorrhoea	3	1.6	2
Swollen throat	3	1.4	2
Chronic heart disease	2	0.9	1.4
Kidney problems	2	1.1	1.4
Cold & related symptoms	2	0.8	1.4
Disability/Paralysis	1	0.5	0.7
Chronic constipation	1	0.5	0.7
Cancer	1	0.5	0.7
Leprosy	1	0.4	0.7

Note: Percentages do not add up to a 100% as responses are multiple selection

It is important to note, that these are reported illnesses, though in many cases respondents had consulted a medical professional beforehand; in such cases they were able to clearly state their problems. Other respondents

stated their symptoms, for example, body aches, bruises and pains; these may be symptoms of other underlying conditions, which at that time could not be defined.

Table 6.7: Illness pattern for those reported suffering from acute illness during last one month

Total Reported Acute Illnesses/Symptoms (N=336)	n	Weighted (%)	Un-weighted (%)
Fever	186	54.5	55.7
Cough/Cold	93	26.4	27.8
Diarrhoea	42	11.7	12.6
Stomach cramps/Dysentery	33	10.3	9.6
Others	32	10	9.9
Asthma/Breathing problems/Difficult-Fast breathing	29	8.6	8.7
Headaches	27	7.8	8.1
Body and joint aches, bruises & pains	26	7.8	7.8
Pain	25	7.4	7.5
Weakness/Dizziness	16	4.1	4.8
Skin problems	16	4.6	4.8
Gastric	12	3.8	3.6
Pneumonia	11	3.5	3.3
Stomach ulcer	9	2.8	2.7
High blood pressure	8	2.4	2.4
Typhoid	7	1.8	2.1
Tuberculosis	4	1.2	1.2
Jaundice	4	1.5	1.2
Eye irritation	4	1.5	1.2
Swollen limbs	3	1	0.9
Swollen throat	3	0.9	0.9
Allergy	2	0.6	0.6
Low blood pressure	2	0.7	0.6
Female diseases	1	0.2	0.3

Note: Percentages do not add up to a 100% as responses are multiple selection

Similarly, with reported acute illnesses, fever is the most reported (54.5%) among FDMNs, followed by cough/cold (26.4%), Diarrhoea (11.7%), stomach cramps/dysentery (10.3%) and other illnesses (cough, ulcers) (10%). These results again indicate a possible prevalence of infections, viral, bacterial or parasitic, spreading throughout the camps; causing fevers and stomach problems such as diarrhoea and dysentery (Table 6.7). Other persistent problems reported are gastric and skin related conditions (many which respondents could not identify). It is also important to note, there were 7 cases where respondents reported suffering from typhoid.

6.2.2 Health Care Seeking Behaviour

The major primary level health care options within the camps are primary health care centres (PHCs), health posts, labour rooms or sexual and reproductive health only facilities, and community clinics. Apart from these facilities, there are private practicing doctors within the refugee community, and pharmacies in the local markets. The pharmacies have recently been set up by private sector traders in the local markets (bazar). The key elements regarding treatment seeking of these respondents is provided in table 6.8.

Table 6.8: Health Care or Treatment Seeking Behaviour			
Sought care from any Health Facility/Providers (n=337)	n	Weighted (%)	Un-weighted (%)
Yes	289	85.8	85.8
No	39	11.6	11.6
Delayed	9	2.6	2.7
Reasons for not seeking health care (n=39)			
Self-treatment	9	22	23.1
Others	6	16.4	15.4
Negative experiences/word of mouth (Negative)	6	14.9	15.4
Symptoms were not serious enough	5	11.4	12.8
No money for treatment	5	10.8	12.8
No time	3	7.1	7.7
Long waiting time	2	4.5	5.1
Distance from health facility	2	4.4	5.1
Quality of health care is not good	1	3.5	2.6
Doctors from Myanmar not available	1	2.8	2.6
Afraid of discovering serious illness	1	2.2	2.6
Reasons for choosing the facility/provider (n=289)			
Quality of treatment	100	32.6	33.9
Proximity	91	30.1	30.8
Reputation	46	16.2	15.6
Previous facility did not give adequate care	15	5.4	5.1
Word of mouth	13	4.6	4.4
Doctor availability	12	4.4	4.1
Others	11	3.8	3.7
Suggested by HH head/Decision maker	9	2.8	3.1
Availability of medicine	8	2.7	2.7
Referral/referred at first point of contact?	6	2.1	2
Short waiting time	5	1.6	1.7
Quality of equipment	4	1.7	1.4
Only facility open at night/Weekend	4	1.3	1.3
Prefer home service/Doctors from Myanmar	3	0.7	1
Cordial attitude of provider	2	0.7	0.7
Availability of female doctor	1	0.3	0.3

Note: Percentages do not add up to a 100 as responses are multiple selection

Around 86% of respondents sought some sort of health care, with 11.6% choosing not to seek treatment, and 2.6% delaying getting health care. Those who did not seek treatment at any healthcare facilities stated self-treatment as their main reason for not going, also, 'other' reasons (i.e. previously failed treatments) was the second highest reason, and previous negative experiences (either heard or experienced) was the third highest reason for not seeking care. Interestingly, 10.8% of respondents stated

that they had no money for treatment, this could mean two things, either they prefer to seek care from private healthcare, or, they believe treatments at camps require money. Respondents supplemented this answer by saying they were embarrassed for not having money, while there were a few cases where they said some NGOs were asking for money, these NGOs were not named. Going forward, these influencing factors may be something to highlight during programmatic interventions.

6.2.3 Utilization of Services at Health Care Facilities and Providers

The multitude of health providers in the camps provide the Rohingyas with multiple options in terms of seeking health care. In this case, we are defining 'formal' health care as camp based registered facilities, and 'informal' facilities are any other facilities in or outside of camps that are unregistered, they include Burmese doctors (Doctors from Myanmar), pharmacies, Kabiraj etc. Taking this into account, an increasing number of respondents stated that they prefer to seek treatment from pharmacies and private doctors (20.2%); the pharmacies are in the camps or in the peripheries of the camps. The personnel in these pharmacies are often referred to as pharmacists or doctors, however, from our interviews we cannot conclude if they are all fully licensed medical professionals.

In terms of providers at the camps, BRAC (22.8%) and Médecins Sans Frontières (MSF) (17.3%) were found to be the most visited for illnesses; however, the difference between them is very small, and it is mostly dependent on the preference and experience of the respondents. Given that our sample population are selected from the area around the BRAC facilities, the expectation was most of them (more than what we found) would use BRAC health facilities. There is also good representation from other NGOs (12.8%), which include Friendship, Gonoshasthaya Kendra (GK) and Partners in Health Development (PHD) as the providers of primary care facilities.

Along with a preference for private doctors, many respondents specifically stated that they prefer to seek care from doctors that have come from Myanmar (13.1%); reasons include better treatment, availability of medicine and injections. However, it is important to analyse what presupposes good treatment for the Rohingyas, this is explored through the qualitative analysis (see section 7.6). Also, a small proportion of our respondents stated that they did not know where they received care from (2.4%).

For antenatal care (ANC), most respondents choose BRAC health facilities (43.1%), this was followed by MSF (20.7%) and other NGOs (13.4%). Around 5 of our respondents go to pharmacies and private doctors for ANC. Among the respondents, the average number of ANC visits per household is 3.2. For deliveries, only 4 respondents went to BRAC and MSF, the majority of respondents prefer home care (80.8%). The most stated reason was proximity; this may be due to the nature of camp settings, as many of them are situated in elevated areas, which presents commuting challenges. However, for the 15 respondents that sought Postnatal Care (PNC), the trend is similar to seeking ANC; most respondents choose BRAC (33.5%), this is followed closely by MSF (22.9%) and doctors from Myanmar (20.9%), with most of the households making an average of 3 PNC visits (Table 6.9).

Table 6.9: Utilization of Health Facilities and Health Care Providers for Illnesses (recent acute illness), and Preventive and Delivery Care

For Illness (n=298)	n	Weighted (%)	Un-weighted (%)
BRAC	69	22.8	23.2
Pharmacy/private doctor	60	20.2	20.1
MSF	51	17.3	17.1
Doctors from Myanmar	39	13.1	13.1
Other NGO	40	12.8	13.4
International hospital	16	5.6	5.4
Govt. hospital/center	8	2.8	2.7
Don't know	7	2.4	2.3
Private hospital	5	1.9	1.7
IOM	3	1	1
For ANC Services (n=49)			
BRAC	21	43.1	42.9
MSF	10	20.7	20.4
Other NGO	7	13.4	14.3
Pharmacy/private doctor	5	10.7	10.2
Govt. hospital/Centre	3	5.9	6.1
IOM	2	4.3	4.1

Doctors from Myanmar	1	1.8	2
For Delivery Care (n=23)			
Home	18	80.8	78.3
BRAC	2	6.1	8.7
Missing	2	9.4	8.7
MSF	1	3.7	4.3
For PNC Services (n=15)			
BRAC	5	33.5	33.3
MSF	4	22.9	26.7
Doctors from Myanmar	3	20.9	20
Pharmacy/private doctor	2	15.3	13.3
Other NGO	1	7.4	6.7
For Immunization (n=226)			
Home	54	23.2	23.9
Majhi's house	49	22.4	21.7
BRAC	45	19.5	19.9
School	28	11.9	12.4
Neighbour's house/Beside house/open space	16	7.2	7.1
Mosque/Near Mosque/Religious leader's house	16	7.6	7.1
MSF	12	5.2	5.3
Other NGO	5	2.7	2.2
International Hospital	1	0.4	0.4
For Family Planning Services (n=92)			
BRAC	34	35.4	37
MSF	23	27.4	25
Pharmacy/private doctor	11	13.2	12
Other NGO	8	7.8	8.7
Doctors from Myanmar	6	5.5	6.5
Govt. hospital/center	4	5	4.3
Don't know	3	2.3	3.3
Others	3	3.4	3.3

For immunization services, responses indicate that respondents prefer proximity; Home (23.2%), Majhi's house (22.4%), BRAC health facilities (19.5%) and school (11.9%). Also, depending on the situation, children receive immunization near and around their households,

either a space behind the house, or a religious place. For respondents currently using family planning methods, majority of them seek services from BRAC (35.4%), MSF (27.4%) and pharmacies/private doctors (13.2%).

Table 6.10 Satisfaction Regarding Quality of Health Care in Camps			
	n	Weighted (%)	Un-weighted (%)
A. Satisfaction Level of Ill Persons or their Guardian/Accompanied (n=298)			
A.1 Satisfaction: Treatment/Services			
Very Poor	10	3.8	3.4
Poor	32	10.6	10.7
Acceptable	36	12.3	12.1
Good	180	59.0	60.4

Very Good	40	14.3	13.4
A.2 Satisfaction: Healthcare facility			
Very Poor	4	1.6	1.3
Poor	17	5.4	5.7
Acceptable	27	9.5	9.1
Good	212	69.9	71.1
Very Good	38	13.6	12.8
B. Satisfaction Level of ANC patients (n=49)			
B.1 Satisfaction Level: Treatment/Services			
Poor	1	1.8	2.0
Acceptable	5	9.6	10.2
Good	37	75.1	75.5
Very Good	6	13.5	12.2
B.2 Satisfaction Level: Healthcare facility			
Acceptable	5	9.5	10.2
Good	36	74.5	73.5
Very Good	8	16	16.3
C. Satisfaction level of delivery patients (n=3)			
C.1 Satisfaction Level: Treatment/Services			
Good	2	62	66.7
Very Good	1	38	33.3
C.2 Satisfaction Level: Healthcare facility			
Good	2	62	66.7
Very Good	1	38	33.3
D. Satisfaction level of PNC patients (n=15)			
D.1 Satisfaction Level: Treatment/Services			
Acceptable	3	20.6	20.0
Good	8	53.3	53.3
Very Good	4	26.1	26.7
D2. Satisfaction Level: Healthcare facility			
Acceptable	3	20.6	20.0
Good	9	60.4	60.0
Very Good	3	19.1	20.0
E. Satisfaction regarding family planning services			
E.1 Satisfaction Level: Treatment/Services			
Poor	6	6.6	6.5
Acceptable	10	11.4	10.9
Good	59	60	64.1
Very Good	17	21.9	18.5
E.2 Satisfaction Level: Healthcare facility			
Poor	8	9.6	8.7
Acceptable	7	7.0	7.6
Good	60	61.8	65.2

Very Good	17	21.7	18.5
F. Satisfaction regarding immunization (n=172)			
F.1 Satisfaction Level: Healthcare facility			
Poor	2	1.0	1.2
Acceptable	12	6.3	7.0
Good	136	79.0	79.1
Very Good	22	13.7	12.8

As mentioned in the previous section, due to the nature of the situation in the camps and sensitivities of the Rohingya refugees, our survey respondents were either individuals who were last ill in the household, or, depending on the age/condition of ill person, it was the person who accompanied the ill person to the respective health facility.

For treatment and services received for illnesses, majority of the respondents told us that the services were 'Good' (59%). Similarly, for assessing the health care facilities, 'Good' had the highest response (69.9%).

ANC patients had the same inclination, with the majority responding with 'Good' for both services (75.1%) and facility (74.5%). The trend of responding 'Good' as the most selected answer continues for satisfaction regarding PNC, family planning and immunization (see Table 6.10). With regards to answers, it is important to recognize the role of social desirability bias. Given our data collectors stated they were from BRAC and were equipped with BRAC apparel, this may have had an impact on the answers for satisfaction related question. Table 6.11 presents further details on health seeking for maternal health.

Table 6.11 Health Seeking Behaviour for Maternal Health Services			
	n	Weighted (%)	Un-weighted (%)
Married Couples of the Selected HH (n = 337)			
Yes	308	91.2	91.4
No	29	8.8	8.6
Current Status (n=308)			
Pregnant	41	12.8	13.3
Delivered recently (within last two months)	23	8.1	7.5
Not pregnant	244	79.1	79.2
Taking ANC (Pregnant & ANC included) (n=64)			
Yes	49	76.4	76.6
No	15	23.6	23.4
Taking PNC (n=23)			
Yes	15	62.6	65.2
No	8	37.4	34.8
Ever Used Family Planning (FP) (n=308)			
Yes	119	38.2	38.6
No	189	61.8	61.4
Ever Use of FP methods (Multiple Response) (n=118)			
Injectable	96	81.9	81.4
Pills	29	23.8	24.6
Tubectomy	1	0.9	0.8
Current user of Family planning (n=105)			
Injectable	64	73.1	73.6
Pills	22	25.6	25.3
Tubectomy	1	1.3	1.1

From the households that had one or more members who were ill (337), 91.2% of these households had at least one or more married couples. Of the married couples, 12.8% were pregnant and 8.1% of them had delivered within the last two months. Most pregnant women sought ANC (76.4%), and from the 23 women who had delivered recently, 62.6% of them took PNC (Table 6.12).

not asked about the reasons for not using any modern methods of family planning; we suspect that cultural and religious dispositions may play a role. Among the ever users, most used methods were injectable means (81.9%) and pills (23.8%). Among the current users of FP methods, methods used include injectable means (59.6%), pills (20.8%); one person told us that she had a Tubectomy.

The majority of respondents said they had never used family planning services (61.8%). The respondents were

Table 6.12: Reported travel, waiting, and consultation times for different services				
	Illness	ANC	PNC	FP
Travelling time from home to facility				
N	297	49	11	90
Mean	22.79	28.24	12.27	17.50
(Weighted values)	(22.25)	(28.40)	(12.63)	(17.28)
Median	10	10	10	10
(Weighted values)	(10)	(10)	(10)	(10)
Mode	10	5*	10	10
(Weighted values)	(10)	(10)	(10)	(10)
Minimum	0	1	0	0
Maximum	360	360	30	120
Waiting time at the facility				
N	291	49	12	89
Mean	50.16	52.36	36.83	23.97
(Weighted values)	(50.14)	(59.66)	(39.53)	(24.88)
Median	20	15	12.5	5
(Weighted values)	(20)	(17.73)	(14.5)	(5)
Mode	5	5	5	5
(Weighted values)	(5)	(5)	(5)	(5)
Minimum	0	0	0	0
Maximum	540	420	300	360
Consultation time of the facility				
N	293	49	14	91
Mean	10.25	14.80	11.00	5.99
(Weighted values)	(10.65)	(14.54)	(11.08)	(5.89)
Median	5	10	10	5
(Weighted values)	(5)	(10)	(10)	(5)
Mode	5	10	10	5
(Weighted values)	(5)	(10)	(10)	(5)
Minimum	1	3	2	0
Maximum	120	99	20	30

Note: * indicates multiple mode, where the smallest value is presented

Table 6.12 shows reported travel times to health facilities, waiting times for check-ups, and consultation times at health facilities. For travel times, the average ranged from 17 minutes to about 28 minutes; the low times for PNC and FP can be accounted for by small number of respondents seeking PNC, and the nature of FP services, where, FP medicine and related are distributed across various locations. For waiting time, it is best to focus on the illness and ANC patients, with the averages of 50 and 52 minutes respectively, going up to a maximum of 540 minutes for patients consulting for illnesses, and a maximum of 420 minutes for those seeking ANC services; with median consultation times at approximately 15 minutes. Consultation times ranged from a minimum of 1 minute to a maximum of 120 minutes, 10 minutes

was the average time spent on an ill patient; the highest average for ANC patients was 15 minutes.

The long waiting times can be explained by the number of patients at health facilities, and may be down to logistical issues. However, during fieldwork, many respondents had complained about waiting times, some stating that they often waited long periods and did not receive care in the end, as the facility would shut down.

6.4 Association of socio-economics, demographic factors and illness, and utilizations of facilities

Tables 6.13 to 6.14 provide tests of association for various aspects related to care, illness and facility.

Age of persons with acute illness/symptoms (Years)	Suffered Chronic Illness (12 months)		χ^2	p-value
	Yes	No		
1 <	38.9	61.1	19.32	0.01**
1-4	35.7	64.3		
5-17	42.4	57.6		
18-59	65.3	34.7		
≥ 60	73.3	26.7		
Total	51.8	48.2		

Table 6.13 looks at the association between the ages of persons suffering from chronic illness/symptoms. A chi square test was performed, and a statistically significant relationship was found between a respondent's (suffering from acute illness/symptoms) age and having suffered or

not suffered chronic illness in the past 12 months, $\chi^2 (4, 337) = 19.32, p < 0.05$. Most of the older respondents (60 and over) who reported to have an acute illness episode also suffered from chronic illness conditions (73.3%).

	Age of ill person (Years)						χ^2	p-value
	Total	1 <	1-4	5-17	18-59	≥ 60		
Total	100.0	100.0	100.0	100.0	100.0	100.0	35.70	0.48
BRAC	23.3	23.5	33.3	28.8	15.3	14.3		
MSF	16.9	17.6	17.6	15.4	16.5	21.4		
IOM	1.4	5.9	0.0	0.0	2.4	0.0		
Other NGO	12.3	5.9	13.7	11.5	14.1	7.1		
International hospital	5.9	5.9	2.0	11.5	4.7	7.1		
Doctors from Myanmar	11.8	11.8	7.7	17.6	14.3	13.2		
Pharmacy/private doctor	29.4	13.7	19.2	22.4	21.4	20.1		
Govt. hospital/centre	0.0	2.0	5.8	2.4	0.0	2.7		
Private hospital	5.9	2.0	11.5	4.7	7.1	5.9		
Don't know	2.3	0.0	5.9	0.0	1.2	7.1		

Table 6.14 shows the relationship between age of the ill person and the facility from which he/she sought care from. A chi square test was performed and no statistically significant relationship was found between the age of an ill person and the health facility, $\chi^2 (4, 337) = 35.70, p > 0.05$. Despite this result, the table can still provide us with valuable information as to where health care is sought for different age groups. We can see from the table that care for ill persons aged 5 to 17 is mostly taken from BRAC (28.8%) health centres, whereas, for those over 60, the

preferences are MSF (21.4%), pharmacy/private doctor (20.1%), and Doctors from Myanmar (13.2%). Care for those under the age of one is mostly taken from BRAC (23.5%), MSF (17.6%), pharmacies/private doctors (13.7%) and Doctors from Myanmar (11.8%). Health facility utilization for those in the age bracket of 18 to 59 is more evenly distributed, with pharmacies/private doctors as the most utilized at 21.4%. Overall, pharmacies/private doctors are the most utilized in the camps.

	Camp											χ^2	p-value
	Total	1E	7	8E	9	11	13	14	15	16	22		
Total	100	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	85.211	0.353
BRAC	23.18	33.33	20.69	16.67	37.50	28.00	17.86	29.17	3.85	30.00	16.67		
MSF	17.27	12.50	27.59	16.67	12.50	8.00	10.71	12.50	30.77	20.00	25.00		
IOM	0.91	4.17	0.00	5.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Doctors from Myanmar	12.73	4.17	10.34	16.67	4.17	16.00	21.43	20.83	11.54	0.00	16.67		
Pharmacy/private doctor	19.55	16.67	10.34	16.67	29.17	12.00	28.57	20.83	19.23	10.00	33.33		
Govt. hospital/center	3.18	0.00	3.45	5.56	4.17	0.00	10.71	4.17	0.00	0.00	0.00		
Don't know	2.73	0.00	3.45	5.56	0.00	4.00	3.57	4.17	3.85	0.00	0.00		
Other NGO	12.73	12.50	10.34	11.11	4.17	28.00	0.00	4.17	23.08	40.00	8.33		
Private hospital	1.82	4.17	3.45	0.00	0.00	0.00	0.00	0.00	7.69	0.00	0.00		
International hospital	5.91	12.50	10.34	5.56	8.33	4.00	7.14	4.17	0.00	0.00	0.00		

Table 6.15 shows the relationship between utilisation of health facility for illness and camp. A chi square test was performed and no statistically significant relationship was found between utilization of different health facility and the camps included in our study, $\chi^2 (81, 220) = 85.211, p > 0.05$. Overall, BRAC facilities are utilized by 23.2% of the respondents, this is followed by pharmacies/private doctors (19.6%), and MSF (17.3%). In terms of individual

camps, BRAC's health facilities are most utilized in camps 1E (33.3%), 9 (37.5%), 11 (28%, tied with 'other NGOs'), and 14 (29.2%). Camps with the lowest utilization of BRAC's health facilities are 15 (3.9%) and 22 (16.7%). Building on these results, it may be useful to scope the structure of the camps to further examine individual preferences.

	Monthly HH Expenditure (BDT) Groups							χ ²	p-value
	Total	No HH expenditure	1-2,000	2,001-4,000	4,001-6,000	6,001-10,000	10,000+		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	75.78	0.003**
BRAC	22.6	0.0	21.1	15.4	26.9	28.1	11.5		
MSF	17.2	0.0	15.8	23.1	14.1	15.8	23.1		
IOM	1.4	0.0	5.3	2.6	0.0	1.8	0.0		
Doctors from Myanmar	13.1	50.0	5.3	15.4	11.5	8.8	26.9		
Pharmacy/private doctor	19.9	0.0	10.5	10.3	24.4	21.1	26.9		
Govt. hospital/center	3.2	0.0	0.0	2.6	2.6	3.5	7.7		
Don't know	2.7	0.0	5.3	0.0	5.1	1.8	0.0		
Other NGO	12.2	0.0	31.6	23.1	7.7	10.5	0.0		
Private hospital	1.8	50.0	0.0	0.0	3.8	0.0	0.0		
International hospital	5.9	0.0	5.3	7.7	3.8	8.8	3.8		

A further test was run to look at the relationship between utilization of different health facilities and a household's monthly health care expenditure. A chi square test was performed and a statistically significant relationship was found between health facility utilization and monthly health care expenditure, $\chi^2(45, 221) = 75.78, p < 0.05$. Households who have no cash expenditure seek care from Doctors from Myanmar (50%) and private hospitals (50%). As this analysis is implemented after the application of a weight variable, it allows us to generalize our findings towards all camps. However, we see that those who reported no cash expenditure, half of them utilize private hospitals, whereas the other half seek Doctors

from Myanmar. From qualitative interviews and informal discussions, it is understood that Doctors from Myanmar charge a fee. However, from our observations, we also note, oftentimes respondents would not disclose their expenditure. This can help explain our results.

Households spending over BDT 10,000 mostly seek care from pharmacies/private doctors (26.9%), doctors from Myanmar (26.9%) and MSF (23.1%). From the table, we can also see that regardless of the amount of cash expenditure, there is a steady demand for private care from pharmacies and Doctors from Myanmar (Burmese doctor).

	Satisfaction Level						χ ²	p-value
	Total	Very Poor	Poor	Acceptable	Good	Very Good		
Total	100.00	100.00	100.00	100.00	100.00	100.00	53.66	0.029
BRAC	22.9	25.0	28.0	29.6	20.0	24.2		
MSF	17.0	25.0	20.0	29.6	15.4	9.1		
IOM	1.3	12.5	0.0	0.0	0.8	3.0		
Doctors from Myanmar	13.0	0.0	0.0	7.4	17.7	12.1		
Pharmacy/private doctor	19.7	0.0	12.0	7.4	23.8	24.2		
Govt. hospital/center	3.1	0.0	12.0	0.0	1.5	6.1		
Don't know	2.2	0.0	0.0	0.0	3.8	0.0		
Other NGO	13.0	25.0	20.0	11.1	11.5	12.1		
Private hospital	1.8	0.0	0.0	0.0	3.1	0.0		
International hospital	5.8	12.5	8.0	14.8	2.3	9.1		

Moreover, Table 6.17 shows the relationship between utilization of different health facilities and satisfaction level of ill persons or their guardian/attendant on quality of treatment. A chi square test was performed and no statistically significant relationship was found between them, $\chi^2(36, 223) = 53.66, p > 0.05$. Though no significant outcome was found, the table can provide us with some useful insight. Among the highest satisfaction level group (saying 'Very good'), 24.2% of services were taken from BRAC and pharmacy/private doctors, with pharmacy/private doctor second (24.2%), and 'other NGOs' and

doctors from Myanmar third with 12.1% of the responses. The satisfaction level 'Good' was highest for 'pharmacy/private doctors' (23.8%), with BRAC (20%) and 'doctors from Myanmar' (17.7%) second and third respectively. On the other hand, the 'Very poor' category was represented by BRAC (25%), MSF (25%) and 'other NGOs' (25%). Again, it is important to acknowledge social desirability bias, with respondents tending towards selecting 'Good' or 'Very Good' for BRAC in some cases. However, we still see a favourable inclination towards treatment from 'pharmacy/private doctors' and 'doctors from Myanmar'.

Table 6.18: Satisfaction Level of Ill Persons or their Guardian/Attendant regarding health facilities/private practitioners (n=298)

	Satisfaction Level						χ^2	p-value
	Total	Very Poor	Poor	Acceptable	Good	Very Good		
Total	100.0	100.0	100.0	100.0	100.0	100.0	54.75	0.023
BRAC	22.8	25.0	9.1	28.6	22.1	27.6		
MSF	16.9	25.0	36.4	28.6	14.3	13.8		
IOM	1.4	25.0	0.0	0.0	0.6	3.4		
Doctors from Myanmar	13.2	0.0	0.0	0.0	16.2	13.8		
Pharmacy/private doctor	20.1	0.0	9.1	14.3	22.1	20.7		
Govt. hospital/center	3.2	0.0	9.1	4.8	2.6	3.4		
Don't know	2.3	0.0	0.0	0.0	3.2	0.0		
Other NGO	12.3	0.0	18.2	4.8	12.3	17.2		
Private hospital	1.8	0.0	0.0	0.0	2.6	0.0		
International hospital	5.9	25.0	18.2	19.0	3.9	0.0		

Table 6.18 shows the relationship between utilization of different health facilities and satisfaction level of ill persons or their guardian/attendant and the quality of the health facilities. A chi square test was performed and no statistically significant relationship was found between them, $\chi^2(45, 219) = 54.75, p > 0.05$. Among the highest satisfaction level group (saying 'Very good'), 27.6% availed services from BRAC, followed by pharmacy/private doctors (20.7%), 'Other NGOs' (17.2%), MSF (13.8%), and Doctors from Myanmar (13.8%). Regarding the 'Good' category, there are similar results, with BRAC (22.1%) and Pharmacy/private doctor (22.1%) at the top, followed by Doctors from Myanmar (16.2%) and MSF (14.3%). On the other hand, the 'Very Poor' category was represented by BRAC (25%), MSF (25%), IOM (25%) and International hospital (25%). Under the 'Poor' category, the most selected facilities were those from MSF (36.4%), International Hospital and 'other NGOs' (18.2%). Similar to the previous table, we again see that there is a favourable selection towards private healthcare options.

7.1 Demographic characteristics of Respondents

As noted under section 3, IDI respondents were selected through purposive sampling of household survey participants. We selected respondents from two Rohingya camps (Camp 1E and Camp 8E based on population density) based on three categories: a) ill children under 5 years old (4), b) ill adults over 50 years of age (4) and c) women who were pregnant or had delivered within the last 2 months from the time of the interview (4). This allowed us to analyse the health seeking behaviour of a range of age groups. A demographic profile of the respondents can be found in Table 7.1. For the first category, the respondents were mothers or caregivers of under-five children. Four ill children were males and one was female. Within the second category, three respondents were elderly ill people who talked about their own illness conditions. As for the fourth person in this category, she was unable to talk to us for the duration of the entire interview, as such, some questions were answered by her caregiver (son). Two respondents were male and two were female in this category. Finally, all respondents in the third category were women who talked about their own pregnancy-related experiences (Table 7.1).

7. RESULTS OF QUALITATIVE ANALYSIS

#	Category	ID Number	Camp Number	Age (Respondent)	Sex	Experience of	Reported Illness	Education	Marital Status
1	Under 5 Children's Mother	IDI_R4	1E	25	F	Son	Cold, Cough & Diarrhoea	Literate	Married
2		IDI_R6	1E	30	F	Son	Diarrhoea and mouth ulcer	Class 2	Married
3		IDI_R11	8E	18	F	Daughter	Fever, cold, asthma	Illiterate	Married
4		IDI_R12	8E	24	M	Son	Diarrhoea	Illiterate	Married
5	Delivery Care	IDI_R3	1E	28	F	Self	Pregnancy related waist pain	Illiterate	Married
6		IDI_R5	1E	25	F	Self	Abortion	Class 10	Married
7		IDI_R9	8E	22	F	Self	Pregnancy related experience	Illiterate	Married
8		IDI_R10	8E	20	F	Self	Pregnancy related experience	Madrassa study	Married
9	Elderly	IDI_R1	1E	63	M	Self	Fever, Neck pain, pressure, and Gastric	Illiterate	Married
10		IDI_R2	1E	78	M	Self	TB	Illiterate	Married
11		IDI_R7	8E	50	F	Self	Neck pain, pressure, and gastric	Illiterate	Widow
12		IDI_R8	8E	70	F	Self	Diabetics, pressure, constipation	Illiterate	Widow

#	Respondent ID	Camp Number	Age	Experience of	Illness Type
1	FGD_MEN_R1	8E	65	Son	Fever
2	FGD_MEN_R2	8E	60	Self	Cough and fever
3	FGD_MEN_R3	8E	27	Self & Family members	Fever, Diarrhoea
4	FGD_MEN_R4	8E	35	Wife	Leg Pain
5	FGD_MEN_R5	8E	18	Mother	Gastric & pressure
6	FGD_MEN_R6	8E	27	Mother	Burning sensation (Stomach)

#	Respondent ID	Camp Number	Age	Experience of	Illness Type
1	FGD_WOMEN_R1	1E	30	Self	Continuous bleeding (birth control injection), Skin problem
2	FGD_WOMEN_R2	1E	22	Mother (45)	Fever, headache, full body aches, cough
3	FGD_WOMEN_R3	1E	17	Mother (60)	Skin Disease
4	FGD_WOMEN_R4	1E	25	Children less than 5 years	Eczema
5	FGD_WOMEN_R5	1E	15	Mother (40)	Pressure, Acidity
6	FGD_WOMEN_R6	1E	18	No one	
7	FGD_WOMEN_R6	1E	17	Self	Sore Throat

We also conducted two FGDs with the community, with male and female respondents respectively in two camps. The rationale behind creating two groups based on population density was to get a better representation of health seeking by factoring in camp structure. For the female FGD, seven participants were found through the BRAC skills training centre located in Camp 1E. The researchers talked to the program organizer at the centre who facilitated recruitment of suitable participants through their network. For the male FGD, we sought the help of the block's Majhi to identify males from households where there was at least one ill person within the last 30 days of the FGD, also including at least one under 5 child.

7.2 Current Illness, Symptoms and Diagnosis

With the aim to understand the health-seeking behaviour of individuals in our sample, we first asked respondents to tell us details about their illness condition including what disease(s) they were suffering from (within the last 30 days from the date of interview), for how long they had been suffering within this period, and how they got to know about their illness condition. The pattern of illness revealed from the IDIs was that within the under-five category, most respondents (3) reported that their child was suffering from diarrhoea. Other illnesses reported within this category were fever (2), cold (2), cough (1), and asthma (1) and mouth ulcer (1). As for the second category of the elderly, respondents had suffered from high blood pressure (3), gastritis (gastric) (2), fever (1), tuberculosis(1), neck pain(2), diabetes (1) and constipation(1). For the third and final category, three women had talked about their ANC, delivery care and PNC experiences while one woman had talked about her abortion-related experience. Common illnesses reported from the participants of FGDs were various kinds of skin diseases such as rashes and eczema, overall body pains, common cold and fever, diarrhoea and diphtheria. (Table 7.2 and Table 7.3)

When asked about illness symptoms and diagnosis, respondents reported that they were able to identify the illnesses with specific symptoms which can be felt or seen. Examples include, high temperatures associated with fevers, 'gas/air in the stomach' associated with gastric, sneezing and coughing associated with the common cold and frequent defecation or loose stools associated with diarrhoea.

"I1: How did you understand that your baby had diarrhoea? R: His/her stool was softer. And he/she was going to the toilet more. Then I took him/her to see the doctor and told the doctor about it (symptoms).The doctor confirmed he/she has diarrhoea." - (IDI_R12),

People do not often get formally diagnosed for common illnesses such as fever, cold, cough and oftentimes, diarrhoea. When they identify the commonly known symptoms, they buy medicine from the local pharmacies

or private doctors and have it. In some cases, the health providers were reportedly unable to diagnose the disease from the symptoms:

"The baby was really ill. They couldn't diagnose (what had happened). Diarrhoea, mouth ulcer, or else the belly gets swollen." (IDI_R6)

Others had been diagnosed by a formal or informal provider. One elderly respondent (IDI_R7) mentioned that she was diagnosed for her hypertensive and gastritis condition by a Burmese doctor. Another elderly respondent (IDI_R2) realized he might have tuberculosis (TB) because he had a chronic cough with bloody sputum which was later diagnosed as TB from an X-ray carried out at a health facility. A third elderly respondent was tested for diabetes when she had suddenly fainted and was taken to a hospital in Cox's Bazar.

A majority (3 out of 4) of the female respondents in the ANC/PNC category were able to identify they might be pregnant through symptoms of morning sickness and through halted menstruation. Once they were able to sense this, two of them had sought diagnosis from formal health facilities and one from a Burmese doctor who carried out urine tests and physical examination to confirm pregnancy.

"I2: How did you know that you were pregnant? (Asking to the children to go to play) R: My menstruation had stopped. As I was not having menstruation, I went for a check-up. They gave me an injection and conducted a urine test. (They said) I cannot take pills from now on. My menstruation is off. They (at IOM) did a check-up and urine test and said that I am pregnant. Then they gave me saline and medicine. After that, I came back." (IDI_R3)

7.3 Treatment-Seeking Behaviour

In the following section, an overview of the overall treatment seeking behaviour found among our respondents are described in detail. After that, we will be discussing their reasons for choosing various providers and their experiences with different providers.

7.3.1 Treatment-Seeking Pathway

All IDI participants had sought care for their respective health condition(s) from health care providers. For a majority of respondents (9 out of 12), the first point of contact for treatment-seeking was formal facility-based, whereas, three respondents chose to go to an informal provider first. Seven out of twelve respondents went to both formal and informal healthcare providers at some point during their treatment-seeking, whereas five respondents only went to formal healthcare providers. A pathway of healthcare seeking according to illness condition is outlined in Figure 2. However, as many respondents were unable to recall the names of particular

health centres that they visited, they have only provided us with the landmarks around centre/facility from which we have been able to identify the centre when it was possible. Longer pathway of seeking treatment has been observed with TB and Diarrhoea. The health care seeking

behaviours were driven by the proximity to the hospitals/health facility. However, the cases of TB and abortion were exceptions as they were referred from the respective health centres. Almost all IDI respondents shopped from one provider to another due to lack of medicine supplies in the hospitals/health facilities, unsatisfactory treatment by the healthcare providers and perceived ineffectiveness of medicine supplied by them.

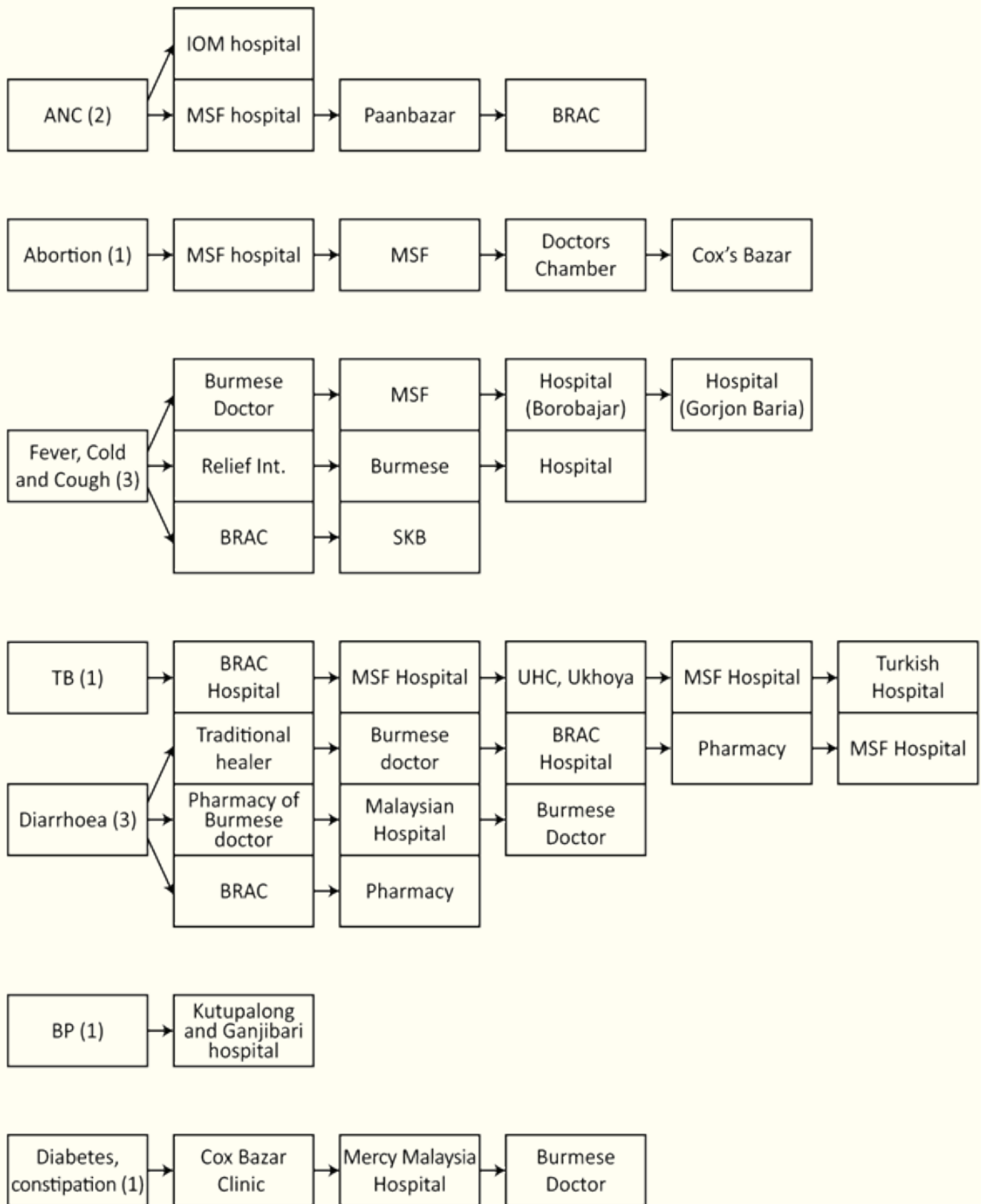


Fig. 3: Treatment Seeking Pathway

“First I went to BRAC. But their medicines were not able to cure the children. That is why I went to SKB. After going to SKB, they gave 3 (types of) medicines as well. His son got well. His fever also subsided. But the cough is not receding.” (IDI_R9) (Father of a new-born child)

“I went to a hospital nearby. They gave me tablets but because they did not work, I went to the Burmese doctor’s place to get an injection. That made me better. Now I don’t have any money so I am going to the health centre to get treatment (free of cost)” (IDI_R1) (Elderly man)

Due to not being able to get medicine from the hospital, the main cause of major dissonance was found among the IDI respondents including women FGD participants. Regarding multiple care seeking from different hospital, atypically a fifty year old widow commented that illness cannot be cured if someone receives treatment from different points of care.

“I continued the first visited hospital. If I go to 70 hospitals, they will give me 70 kinds of medicine. I will die if I have so many medicines. I made my mind that no matter what happens, I will visit my selected hospital”

However, male FGD respondents reported differently than other study respondents. They have reported seeking care from multiple providers in case of chronic illnesses, and felt that care for such conditions is not readily available within the camps.

7.3.2 Decision-making

A key part of the decision-making process for our respondents was the source of information. Analysis reveals that there were five key sources of information who aided the decision-making regarding choice of provider(s)—neighbors, relatives, Majhis (community leaders), health-facility staff and field-level health workers. Neighbours (men and women) are often the first source of information within the camps. As such, neighbours who frequently visit health facilities shared information regarding their personal experiences, through word of mouth to many respondents, referring them to certain providers. In this manner, respondents are also able to know the exact location and estimated distance to the facilities.

“People said there is a hospital/clinic which is very good. They provide medicines which are also good. People said after coming here, we will get something good. That’s why we came here.” (FGD_ Women)

Respondents also sought suggestions from their relatives, especially ones who knew health facilities well and made frequent visits. Relatives sometimes accompanied respondents to the health facility.

“I have a brother there, he suggested me that he (the doctor) is good. Then I took her to that doctor.” (IDI_R8)

Majhis or community leaders (and their family members) in the area who are well-known and often well-respected are also a trusted source of information regarding the best places for health-seeking.

“I talked with the wife of Nur Majhi. She told me that, near Kutupalong there is a new hospital opened. This hospital is good and they give medicine.” (IDI_R7)

Health facility staff and field-level community health workers are also sources of information, for example, which pharmacy to buy medicine from, or which facility will be good to seek treatment from.

“The girls that came from over there (BRAC) said so (most likely referring to health workers). They said there is another patient in the neighbouring house who is like me and who is taking medicine from BRAC” (IDI_R2)

Apart from that, previous personal knowledge of providers, especially informal providers such as doctors from Burma (commonly known as Burmese doctors) and traditional healers who are also part of the community, aid people in making decisions related to seeking informal healthcare. Table 1 provides an overview of the various sources of information that respondents use in their health-related decision-making.

SL	Respondent ID	Neighbours	Relatives	Previous Experience	Majhi	Formal field- HW	Formal health FC	Informal HCP	Others
1	IDI_R1	Y		Y			Y		
2	IDI_R2		Y			Y			
3	IDI_R3	Y					Y	Y	
4	IDI_R5								Y
5	IDI_R6		Y						
6	IDI_R7	Y			Y				
7	IDI_R8	Y	Y						
8	IDI_R9					Y			
9	IDI_R12	Y	Y						
10	FGD Men					Y			
11	FGD_Women					Y			

Note: HW- Health Worker; FC- Facility Worker; HCP- Health Care Providers

After a decision has been made regarding choice of formal or informal provider, we wanted to look at the overall experience of respondents with formal and informal healthcare providers which has been outlined in the following sections.

7. 4 Formal Facility Experience

We asked respondents whether they sought care from any formal healthcare providers such as primary health centres (PHCs) or hospitals, why and how they came to such a decision as well as their experience at formal facilities.

7. 4.1 Reasons for choosing formal healthcare facility

Eleven IDI respondents and two FGD participants talked about the reason(s) why they chose a particular formal healthcare facility. Most respondents (5 out of 11 IDI respondents and one female FGD respondent) said that they went to a health facility because they saw someone receiving good treatment there, or because somebody known to them had recommended it. Two IDI respondents and one FGD respondent said they went to a health facility because of close proximity. Some respondents (2) mentioned that the referral system involuntarily led them to choose certain formal facilities. If the nearest facility availed did not provide the expected essential healthcare or diagnostic services, then they were referred to another facility. For example, respondent IDI_R2 said that the BRAC facility he visited did not have the option of testing urine, stool or blood, which is why he went to another.

Sometimes respondents mentioned that they preferred formal healthcare over informal healthcare. For example,

atypically, one respondent said that he preferred going to healthcare centres because Bangladeshi doctors had better knowledge from formal medical training as opposed to Burmese doctors, who he perceived could not give good quality of treatment.

“Doctors from this country have knowledge from medical books. Burmese doctor does not check-up well and give medicine. Doctors from this country, the way they do check-up, Burmese doctor can’t do that.” (IDI_R4)

Other respondents said that they chose formal healthcare facilities as they provided free medicine, they had no money to go elsewhere. Facility operating hours also influenced the choice of formal provider. For example, some respondents mentioned that they go to MSF in case of any emergencies at night, as it is open 24 hours a day. People cannot avail facilities like BRAC, even if they like the treatment. Apart from two BRAC 24 hour health facilities, the rest of the BRAC PHCs stop seeing patients at 2 pm, although the centres remain open till 4 pm. Other influences behind choosing a provider are medicine availability, satisfaction with healthcare provider and facility environment. One elderly respondent (IDI_R1) said he would go to Mercy Malaysia hospital because the environment of the hospital is good, and they have a prayer room. Apart from this, there can be monetary incentives in choosing health facilities. Some health facilities allegedly offered patients money if they went there. In this case, even though there might be a facility in their area, people are willing to travel longer distances. Lastly, field-level staff from formal healthcare facilities often go door to door and ask patients to visit their health centres.

"I3: As you live in an area close to BRAC's health facility, why did you go to IOM facility first rather than the BRAC facility? R: Those who come to me, I go to them...I did not go there by myself. A girl from there from IOM came to me and asked my husband whether he would permit me to go there? If they ask permission from him and he lets me go, then I go there." (IDI_R3)

After respondents had chosen a facility, we wanted to perceive what their experiences had been at formal facilities. Apart from BRAC, respondents from IDIs and FGDs mentioned that they went to Mercy Malaysia Hospital, Médecins Sans Frontiers (MSF), Human Relief Foundation, Turkish Hospital, and International Organization for Migration (IOM), Pustikhana (nutrition centre), etc. Among them, most of the respondents went to MSF and IOM. MSF has well-established, spacious facilities with provision for performing various diagnostic tests, including computerized testing, X-rays and ambulance services. Respondents mentioned that they received satisfactory services from other hospitals as well, however, if a hospital they went to was unable to provide a particular service, they usually refer patients to MSF or IOM due to their extensive capacity. Sometimes, respondents went outside of the camps to Cox's Bazar for better treatment or for surgeries and other complicated procedures not available within the camps.

7.4.2 Overall Formal-Facility Experience

Patients' experiences at formal health facilities were found to revolve around five major themes – travel; waiting time and environment; quality of treatment; cost, effectiveness and availability of medicine and facility operating hours.

Respondents preferred their nearest health facilities due to easy accessibility. As the camps are situated in a hilly terrain, it is difficult for patients to walk long distances, there being no proper transportation systems available within the camps. The average time to walk to the facilities was 10-30 minutes. When required to seek better treatment outside camps, patients used public transport available such as bus and auto-rickshaw services. Reported one-way fares ranged from 10 to 70 taka (depending on distance). One woman from the FGD mentioned that MSF provided her 40 taka as remuneration for transport. Respondents often mentioned that they are unwilling to travel longer distances even if they know health facilities situated further away provide better treatment because of these reasons. Respondents shared that in a health facility, one normally needs to obtain tokens or tickets and maintain a queue. Waiting time is dependent on the number of people in queue and this is also associated with the time of the day as at certain times, facilities/health centres remain very busy with patients. Reported waiting times ranged between 10 minutes to 4 hours depending on the number patients visiting the facilities at any one time. From the words of respondent IDI_R1;

"I had to wait a long time. There were too many women in the queue. I had to wait up to 3 to 4 hours." (IDI_R1)

"If you went there after Fazar prayer, then it will be easy to enter the hospital and consult with the doctor. If you go there at 10 to 11 then you have to sit outside (outside of the hospital for the queue)". (IDI_R7)

Respondents also talked about the waiting environment. They mentioned cleanliness, sitting arrangement and the availability of (ceiling or table) fans as being indicators of a good waiting environment. One respondent's comment regarding the waiting environment at an IOM health centre they visited is as follows:

"It (the environment) is good. They have a fan. They have an air supply." (IDI_R3)

Apart from infrastructure-related concerns, overall experience of respondents encompassed quality of treatment. Doctor availability and consultation time were two important indicators of quality of treatment. The approximate doctor's consultation time reported, ranged from 2 to 10 minutes. Most respondents mentioned that they found doctors available when they went to the clinic and that doctors had examined them well and maintained confidentiality. However, some said that doctors come in late or leave early, and their desired doctor is sometimes unavailable to consult them. Others mentioned that doctors were in a hurry due to the large queues and conducted the consultation in a rush.

During consultation, doctors did provide explanation on how often, how long and in what manner to take medicines prescribed. Many respondents also mentioned that doctors asked them to come back for follow-up visits and to collect remaining dosage. For pregnant women, a follow-up booklet is often provided to facilitate regular visits.

Eight of twelve respondents talked about medical instruments used by doctors to examine them. It is apparent that respondents associated being seen with medical instruments (such as stethoscopes) with overall quality of treatment. One female respondent from IDI, age 23, informed

"I went to get vaccination, to get tablets for my vomiting. Then they took me to a room and tested my urine with the instrument. They examined me everywhere with an instrument. And then, they gave me medicine... Yes, I liked it."

Some respondents are aware that certain diseases like diarrhoea do not require the use of medical instruments to examine. Others felt that doctors could see them better with the instruments.

"I had a disease inside of me. There was a boil/abscess inside. They took me to a room inside and examined me really well...The doctor didn't see me in front of other people. They took me in a separate area and examined me well inside clothing." (IDI_R1)

Most of the respondents mentioned that doctors and other facility staff had behaved well with them. They were polite, talked to them nicely and made them understand how to take the medicines prescribed. However, others mentioned that doctors had not told them how many days they had to take the medicine. Some respondents also mentioned their preference towards doctors of the same gender as themselves. A few respondents also recounted bad behaviour from staff – shouting at the respondent, 'being lazy' and 'gossiping on the job' while leaving the respondent waiting in pain.

"Also, there are some female staff members whose behaviour is not good. I feel bad that's why I don't prefer to go there."(IDI_R5)

"Before, they provided good medicine. We were new that's why they provided good medicine to us. When they made health facility in the camp, the staff just sit idle; they don't provide us with medicine." (IDI_R5)

Overall, findings indicate that there is not a major communication gap between respondents and doctors as they are able to understand each other's language to a large extent. A few respondents mentioned that the doctors have interpreters who help them if needed.

The next major indicator of quality of treatment was the availability and effectiveness of medicines. Formal health facilities within the camps provide services and medicines free of charge. Women in the ANC/PNC category said that health facilities gave free medicines for strength to pregnant women for nine months as well as diet and nutrition advice. Other IDI respondents with general illnesses said that they did not get enough medicine, for example, in some health facilities, they prescribed 5 types of medicines but provided only 2 or 3 types as per availability. So, they had to buy the remaining medicine from outside pharmacies or informal providers or remain sick as the last resort. Some others shared that the health facilities provided the same medicine for all diseases, so they did not recover from illness.

"We did not get well because they give the medicine which is needed (appropriate) but they do not provide as much as needed." (IDI_R4)

"Two kinds of medicines were already given. Next one was halved. They told us to bring a bottle from the house (respondent's home) and they poured half a bottle of cough medicine in that bottle." (IDI_R12)

"They provide same paracetamol for Diarrhoea as well as for fever." (IDI_R4)

The operating hours of different facilities was a part of the facility experience. There are not many 24-hour facilities and facilities open during the weekend, which forced some respondents to go from one place to another in search for places open for treatment. This is especially difficult in cases where emergency treatment is required after hours.

If the patient was not cured, those who had the ability to seek better treatment from outside the camp went to different places such as Ukhiya or Cox's Bazar. In such cases, they said they had to spend money ranging from 500 taka to 50,000 taka depending on the disease condition and the treatment or procedure required. During the female FGD, some women mentioned that their male family members may be involved in some work, through which they are able to save up for treatment cost.

7.5.1 Facility Experience

The health care seeking behaviours were driven by the proximity to the hospital. Distance and traveling time come at first point to seek health care from a facility. As mentioned, our respondents were chosen approximately within half a quarter mile radius from BRAC primary health facilities, it was expected that most respondents had easy access to BRAC. Five respondents talked about proximity of BRAC from their homes. Four of five respondents said that BRAC was within walking distance of their homes and this influenced the decision to go there atypically, one respondent had to walk two and a half hours to reach a BRAC health facility. This respondent said that even though they found good treatment at BRAC, they would still not go there due to the long distance and the need to pay auto fare of 20 taka each way reflecting that proximity was more important to them than quality of treatment.

Almost all respondents (10 out of 12) talked about token and waiting times when they went to the BRAC health facilities for treatment. Three respondents said that the health facilities they availed required them to get tokens at first and wait. Sometimes the health facility runs out of tokens, also, people sometimes demand tokens even after the token counter has closed for the day. It is not possible for the PHC staff to provide tokens to every visiting patient. According to one female respondent:

"My baby had a mouth ulcer, people around me have found good treatment from BRAC for it. That's why I went there. I went there and waited in line but they said that they had run out of tokens and that I should go back home." (IDI_R6)

However, the waiting environment at BRAC facilities was praised by three respondents who said that it was neat and clean, and they were given a place to sit while

they waited. Five respondents had a positive experience with waiting times at BRAC. Specifically, women who were pregnant (2 of 12) or had a baby with them (1 of 12) said that they had not needed to wait too long to see the healthcare provider. On the other hand, five other respondents said that they had to wait for a long time to see the doctor. This ranged from 30 minutes up to an hour and sometimes much longer due to long patients queue. Two respondents said that they understood that wait times are long due to the large number of people availing the free services of the health facilities, however, they would still like a shorter waiting period if possible. Others are not so understanding. One woman from IDI said that she was in a lot of pain, but the doctor had still made her wait for a long time, so much so that she had wanted to walk out at one point without taking treatment.

Most respondents (6 out of 12) who talked about behavior of healthcare providers and other facility staff have said that BRAC staff were courteous and respectful towards patients. Respondents, in general believed there was good communication between healthcare providers and themselves. The providers at BRAC overall understand the Rohingya dialect and are able to communicate adequately with the patients. One aged male respondent from IDI specifically mentioned that he liked BRAC because he was well-respected there and had built up amicable relationships with BRAC staff such as nurses who would warmly greet him when he went to a particular facility. Two female respondents mentioned that pregnant women are especially well taken care of and given a place to sit when they go to health facilities. BRAC also has door-to-door services where health workers go to regularly check-up on patients and sometimes give out medicine as well. However, a few respondents (2 of 12) have had negative experiences with facility staff. One respondent mentioned that she was driven away when she went to collect medicine as they had run out of tokens for the day. Another female respondent from IDI said that the facility staff always yelled at her and the doctors behaved very rudely with her as well which is why she will not be going back to BRAC.

7.5.2 Treatment Experience

Quality of treatment and satisfaction are mutually important for both Rohingya community and health facility. Four of twelve respondents said that they liked the overall quality of treatment that they had received at a BRAC PHC, while four respondents had mixed experiences. Three respondents had a negative experience with their treatment while one had no experience of going to BRAC at all. Of the IDI respondents that had a positive experience, one said that he liked the treatment at BRAC because the doctors were able to properly diagnose his tuberculosis and they saw him properly with medical instruments for a satisfactory length of time. This also

mentioned by other respondents that BRAC have good reputation to provide treatment for TB that's why other health facilities refer TB patients to BRAC.

A few respondents mentioned that the doctor was not available at the time they went because they had left already or had not come to the facility. One respondent mentioned that he was hoping to consult a particular doctor whom they have had a positive past experience with but who was unavailable on the day they visited the facility. In general, patients were satisfied with the way the doctors examined them and explained their condition and how to take medicines. As mentioned before respondents have mentioned that they like it when doctors see them with medical instruments as they feel they are being properly examined. Most respondents said that BRAC had the required instruments and diagnostic options available. However, some did mention that the doctors were in a hurry as they had many patients to see and so quickly prescribed medicine and sent them away.

According to a majority of the IDI respondents (9 of 12), the availability and effectiveness of medicines is an important indicator of satisfaction with the healthcare facility or provider. Among the respondents who talked about medicine, three had a positive experience at BRAC. One respondent mentioned that he was highly pleased with BRAC because they give medicine to him immediately when he goes there, and the medicines have worked to cure his illness (tuberculosis). Another respondent went to get medicine for a swollen throat and got prescribed good medicine which is why they recovered within one week and did not need to pay a repeat visit. A few others have had mixed experiences. One respondent said that they had given them the right kind of medicine but not an appropriate amount. Five of nine respondents said that they have been in a situation where the medicine prescribed was not available at BRAC, as such, they had to buy it from outside. As for effectiveness, four respondents have been prescribed medicine that ultimately did not work to cure their illness condition. One of these respondents were suffering from fever and went to BRAC five times, however, the paracetamol tablets they prescribed each time did not cure her fever and cough. Similarly, another respondent mentioned that even though they liked that the healthcare provider tried to change the medicine when they made repeat visits, ultimately it did not work to cure them, and they were told not to come again on their third and last visit. Two female FGD respondents also highlighted their dissatisfaction with the medicine provided saying that they did not like BRAC as they had not provided her any medicine and the latter mentioning that there was no benefit in making repeat visits to BRAC as the medicine provided only works to keep them healthy for a couple of days, after which their fever comes back.

CASE 1

Farida (pseudonym) is a 19 year old Rohingya woman who came to Bangladesh with her family as a refugee. She is married and has a boy who is under five. Farida can only read Arabic. She has been in a camp for a year and 3 months. According to her “I like it in the camp, they are keeping us in the camp in a good way.” Though she has access to a sanitary latrine and regular relief, she faces problems to collect water and fuel wood for her family. She has to stand in line for a long time to collect water.

Farida has had to seek health care service several times for herself and her child, from both formal and informal providers. When her child got cold and fever for the first time, she initially visited a BRAC PHC because she did not know any other health facility at that time. She heard from the neighbourhood that BRAC treats children properly. So, with her husband’s permission, she went to a BRAC health facility. The doctor examined the child for 10 minutes and informed her that he had a cold. The doctor provided medicine for three days, but it did not cure the fever/cold, nor did it cure the coughing. So, Farida revisited the BRAC health facility, where the doctor gave another medicine. But the child was still not cured. So, Farida went to the BRAC health facility again. Following the third visit, the doctor said that, ‘if the child cannot be cured by them, then they could not do nothing more.’ As a result of these experiences, Farida did not go to a BRAC health facility again.

After few days later, Farida also got sick. So her husband called a Burmese doctor. The Burmese doctor lives nearby and roams around for clients. After examining Farida and the child, the Burmese doctor gave them syrup and tablets for 5 days. He told Farida to crush the tablet, mix it with syrup, and then to take it. Farida’s husband paid money

for the treatment from the Burmese doctor. He charged 500 Taka the first time, 250 Taka for Farida and 250 Taka for the child. After taking the medicine provided by the Burmese doctor, the child got well, but Farida did not.

While on a visit to Farida’s in-laws house, Farida’s child fall sick again. As her child was constantly coughing and suffering a breathing problem, her in-laws suggested that she visit the MSF health complex near their house. As the child was very sick, they did not have to wait for a long time to receive care at the complex. The MSF doctor attended the child, the diagnosis was that he was suffering from pneumonia. The doctor said that treatment was not possible here, but provided a referral slip to another MSF hospital where they have specific injections for treatment. The MSF doctor also called an ambulance to take the child to the other MSF hospital. Farida was afraid at first because she had never seen this kind of facility, also, she heard from people that children were dying due to wrongly administered treatment and medicine. However, her experience was good in this hospital/health complex. The doctor and staff behaved well with her and took good care of her child. After five days, the child got well, and the doctors released him with a slip. That slip allowed Farida to collect a bottle of syrup from a nutrition center.

Now Farida uses warm water to bathe her child, she also gives him warm water to drink. She believes this will help the child to get well faster. Farida said that though everybody in her community goes to BRAC health centers, due to its proximity and good reputation. However, from now onwards, she will suggest her neighbours to take their children to the large MSF health complex in case of any emergency.

7.6 Informal Provider Experience

We asked respondents whether they sought care from any informal healthcare providers such as Burmese doctors, traditional or religious healers and others, why and how they came to such a decision as well as their experiences with informal providers.

7.6.1 Reasons for Choosing Informal health care Provider

Out of twelve, eight respondents from IDIs, and respondents from FGDs (male & female) talked about informal providers such as Burmese doctors, local pharmacies and traditional healers such as Kabiraj, Boiddo, religious leaders (Hujurs), homeopathic doctors and traditional birth attendants. Among eight IDI respondents, seven were positive regarding informal health care providers' services. The main reasons for visiting Burmese doctors and other informal health care providers were that they live close to the community or respondent's house and that they pay home-visits. The ability of the respondents to seek health care at night, during off-days or holidays when formal health facilities are closed, and also respondents being unaware of the existence of formal health facilities led them to informal providers. Two IDI respondents said that they preferred going to Burmese doctors when they had the money on hand, as the medicine provided by Burmese doctors worked better for them than the free medicines provided by health facilities.

"I went there (formal health facility). They gave me tablets, but because the tablets didn't work I went to the Burmese doctor's place to get an injection. That made it better. Now I don't have any money so I'm going to the health centre to get treatment" (IDI_R1)

"I had fever and coughing after the delivery. I went to an NGO hospital for 5 times. After going there for 5 times, they only gave paracetamol; no other medicines. They said that paracetamol will cure the disease but it was not working. Then I went to a hospital here. They also gave me paracetamol and sent me back. But my fever and coughing was not going away. Then I went to doctors who came from Burma, they gave me medicines and injections. After taking those, I was cured." (IDI_R9)

Among seven female FGD respondents, two agreed on this and said that they went to a Burmese doctor as they were previously acquainted with them and had prior experience of having medicine from them. They also added that medicine from Burmese doctors helps cure them.

"There are Burmese doctors whom we know (from before). So when we buy medicine from known Burmese doctors and have it, the condition gets better."(FGD_women)

FGD with male respondents revealed that sometimes women cannot share their problems, even with Burmese doctors because of shame and the taboo surrounding talking about sensitive female issues. This is especially the case when the doctor is of the opposite gender. As such, women can end up not receiving appropriate treatment. Atypically, a male onlooker during the same FGD reported that women are able to share their problems with Burmese doctors if the doctors are known to them. An IDI with a post-natal care (PNC) woman revealed that she went to the Burmese doctor as she did not know any formal health facilities at the time. After she got to know about the formal health facility, she decided that she would no longer go to the Burmese doctors.

"I took treatment from the Burmese doctor at first...He is also originally from Myanmar so he's right there beside us and so... I didn't know any NGOs then and didn't go out of the house very much ... That's why I asked the Burmese doctor... I didn't know (any hospitals) then. After that, when I got to know them I didn't go back to the Burmese doctor to get treatment." (IDI_R10)

The respondents from female FGD (4 out of 7) also said that they did not go to traditional healers like Boiddos as they do not trust them, though some people suffering from skin diseases go to them. Respondents alleged that Boiddos from Bangladesh are prone to stealing things from their houses – from food items to gold chains, everything. Male respondents from FGD shared that, people went to Boiddos to carry out magic rituals for mental health problems.

One of the IDI respondents said that they did not believe in Burmese Hujurs or their fu or Pani Pora (traditional healing rituals) as they are educated people and they do believe in medicine.

"Many people go from far away... No, I don't go there (to the Burmese hujurs). I do believe them less. We believe in medicine, not in that." (IDI_R4)

People go to the local and nearby pharmacy to treat fever and other diseases, as told by male respondents of FGD. Two of them also added that, if they did not get well with the medicine from the formal health facilities within the camps, then they went to pharmacy doctors outside of the camps. Other respondents talked about the overcrowded facilities, long waiting time and not getting the desired amount of medicine from formal health facilities as being other reasons why they sought care from informal health care providers and doctors from outside the camps.

Pregnant women also prefer having traditional birth attendants to assist in delivery as this is a common practice in Burma. Two participants (among 4 PNC participants) said that, as their delivery pain started at

night or in the evening, they could deliver at home easily with the help of the TBA, so they did not go to the hospital. They also added that they would have gone to a hospital if they had faced any difficulties.

"In Burma, we give birth to children at home not at hospitals... If it was not possible to do the delivery in Burma then we have to come to Cox's Bazar to do surgery. Treatments such as these are not available to us in Burma." (IDI_R9)

One of the PNC respondents shared that she had heard from her neighbors in Burma about difficulties with giving birth at the hospital. She had heard that during delivery, birth attendants tied patient's hands and feet and put a white cloth all over the body. According to the respondent, sometimes they did not keep the mother's clothing on her properly and did 'shameful things' to her. She was also afraid of foreign doctors carrying out the delivery. After she shared this with her husband, they mutually decided not to go to the hospital to deliver the baby and decided to deliver at home.

"I heard it when I was in Burma. When the doctors do the delivery, they commit shameful acts. I heard from people when I lived in Burma. That is why I got scared of it...that is why I did not want to go." (IDI_R9)

Some pregnant women call on their relatives who may be skilled, semi-skilled or unskilled birth attendants to assist in delivery because they are more comfortable with family members as opposed to strangers regarding issues which they feel embarrassed about otherwise.

7.6.2 Overall Experience with Informal Providers

Patients' experiences with informal providers were found to revolve around three major themes – treatment cost; relationship and type of treatment/medicine.

Informal providers, especially Burmese doctors and pharmacies typically charge money, however, many IDI respondents seemed to prefer paying for their services as they said the conditions they suffered from improved upon having medicine or taking injections from Burmese doctors and pharmacies.

However, some do prefer the free services and medicines offered at formal healthcare facilities in the camps and only go to informal providers when they do not have a choice as mentioned by a female FGD participant:

"I took the pills from MSF. Now it's finished, so I have to buy the pills from the pharmacy. We can buy it for 20 taka or for 10 taka also." (FGD_Women)

The total cost for seeing Burmese doctors ranged from 250 BDT to 1000 BDT per session. Cost was mainly

attributed to the price of injections and medicine given as illustrated by the following examples:

"We didn't know anything. We have Burmese doctors over there, we did it (the treatment) there. They take 600 taka too. Sometimes they take 600 taka, sometimes they take 1000 taka." (IDI_R2)

Many informal providers such as traditional healers and Burmese doctors are located within the Rohingya communities, as such, respondents said that they sought a Burmese doctor because they knew them before from Myanmar or from their block or neighboring blocks in the camps. However, there is sometimes the need to travel long distances to obtain services from pharmacies and other informal healthcare services. This is associated with some transportation costs:

"I1: Did it cost any money to get there by car (public transport)? How much did it cost? R: 40 taka. R: If you take the car (public transport) from the intersection of the three roads and get off at the Bazaar, it takes 20 taka. So, in total they took 40 taka." (IDI_R6)

Other informal providers such as traditional healers can also charge money for their services. One respondent from IDI mentioned that this can range from 150-200 taka. Cost was attributed to the rituals carried out and to herbal medicines and sacred objects sold, among others. If the informal provider is related to the patient, however, they sometimes give their services for free.

"I1: When you went to the Hujur (religious leader) first, how much money did he take? And how much did the Boiddo (traditional healer) take? R: (Sometimes) 150 taka, (sometimes) 50 taka. If they see you earlier, then 10 taka. And then, they give you holy water (Pani Pora). They will give you Tabiz (sacred object that has a prayer on it to keep away evil spirits), Suta (similar sacred object, thread). And then they will take 100 taka, 200 taka... Something like that" (IDI_R6)

"I1: Then did you go to your Bhabi (brother's wife) to get the sacred oil (Tel Pora). Did you have to pay her? R: No I1: You didn't have to pay anything. And then how much did the Majhi's mother take? R: Didn't take any money." (IDI_R6)

People went to informal providers for many types of illnesses. They went for fever, cough, diabetes, diarrhea, pregnancy-related health issues as well as to get rid of evil eye or bad spirits. Different Informal providers treated the patients in different ways. Burmese doctors provided various kinds of medical services to the patients. They gave injections and medicines (tablets, syrup and saline) for the patients according to their illness.

“I1: What did the Burmese doctor do? R: They gave injection. If they need to give saline, they give saline. If they need to give injection, they give injection.” (IDI_R1)

Burmese doctors often have their own pharmacies where people go to take health service or call them home if needed, but in that case, they charge more money. People who have limited mobility, who are severely ill or who feel shy to go to the health facilities are the ones who usually call on Burmese doctors at home.

Traditional healers usually treat the patient with holy water, oil or wheat (suji). They take these food and drink items and sometimes other objects and purify them with prayers. Sometimes the traditional healer can be a religious person from the mosque or sometimes they can be full time professional healers called Boiddos. One respondent outlines the process of how a Boiddo treated her when she went for her child’s diarrhoea:

“R: He said to wash the (baby’s) chest with the holy water (Pani Pora). To give the baby the water to drink. After washing the baby with holy water, he said to displace the washed water at the head of the three roads.” (IDI_R6)

As such, the experiences with informal providers can be of a varying nature with many different types of providers and treatment types.

7.7 Self-Treatment Experience

Although most respondents did seek formal and/or informal healthcare at some point, a few respondents mentioned self-treating of some diseases that they felt they could identify on their own or had some previous knowledge of. One female respondent from under-five

category (IDI_R6) said she had fed medicine to her child without a prescription for the baby’s mouth ulcer. Her relative’s child was also suffering from the same problem, from whom the respondent borrowed medicine. Another respondent in this category bought Paracetamol and saline by herself from the pharmacy and fed this to her child when they had suffered from fever and diarrhoea respectively. The respondent mentioned that she was used to feeding saline in Burma when anybody was suffering from diarrhoea. A male respondent from the FGD also mentioned self-treating for fever:

“I2: Even though you have doctors and free medicine, you have to spend that much money? They don’t give you medicine? R5: When I have a high fever, I go to the hospital. But when I feel a little bit feverish, I buy medicine on my own I1: that means sometimes you carry out your own treatment? R4: yes” (FGD Men)

Thus far we have talked about overall treatment pathways, decision making, reasons for choosing different types of health care providers and respondents’ experiences. In the following section, we are going to discuss common barriers to seeking treatment and recommendations and suggestions provided by respondents.

7.8 Barriers

We explored the common barriers respondents faced to seeking formal and informal healthcare from providers and health facilities. Nine key barriers were identified – **knowledge of health facilities, facility operating hours, treatment cost, geographical, permission, accompanying-persons, gender and identity of the health provider and language.** Table 7.5 gives an overview of the barriers.

Sl. No	Barrier	Frequency in IDI (N=12)	Frequency in FGD
1	Geographical	8	1 (female, out of 7)
2	Facility operating hours	3	-
3	Identity of the doctor (foreigner_ local)	1	-
4	Gender- providers	1	3 (male, out of 6)
5	Language	1	2 (female, out of 7) 3 (male, out of 6)
6	Cost	7	3 (male, out of 6)
7	Knowledge of health facility	3	-
8	Accompanied person to the facility	2	-
9	Permission	2	1 (female, out of 7)

Three respondents talked about knowledge or lack thereof on health facilities being barriers to seeking treatment. One respondent mentioned going to informal providers because they did not know of any health facilities before. Another said she had heard false rumors about treatment at health facilities which prevented her from seeking treatment. Despite free treatment provided at health facilities, restricting facility operating hours means that they are not always accessible. Most formal health facilities are closed at night, as such, in the event of emergencies, people have to go the informal providers or existing 24-hour facilities located far away due to lack of options. Closure on Friday means that patients sometimes need to wait up to a day to seek treatment. Treatment cost was cited as being a barrier by seven IDI respondents. When people seek after-hours or emergency treatment, buy medicine from pharmacies, informal providers or go outside the camp for treatment, they are required to spend money. Respondents managed money by selling ration items, borrowing money, going to informal providers who do not charge (such as some known traditional healers) or not seeking treatment at all.

"The child is becoming weak slowly. So what to do? I said that and took the lentil packet, rice packet and sold them (sold half of the 30 kg). Then... can I see (my son) in this situation (and sit silently)?" (IDI_R4)

"After going there (BRAC)...one thing is they did not provide good medicine for the Diarrhoea, so we had to buy medicine from outside and fed him. We don't have anything here to treat him (He meant, he doesn't have any money to treat his children)." (IDI_R4)

Eight IDI respondents shared that geographical barrier was one of their main barriers. All elderly respondents mentioned it was their primary barrier due to their inability to walk longer distances when their health condition was bad. Adding to that was the difficult terrain of camps and lack of transportation systems within them. Going outside camps to seek treatment or procedures unavailable within the camps is also difficult because one needs to obtain a pass or permit. One has to submit their Rohingya registration card and World food program (WFP) card to the camp in charge (CIC) office to get the pass and authorities do not provide movement slips for more than one member of the family. They are also not allowed outside the camp after 10 PM.

"When we have the bad health condition and don't get good treatment here then we have to go outside. If you have the slip you can show at the check post to avoid hassle. But they don't provide two slips. For my mother in law, we need two people to accompany. I cannot hold her, I am also sick. That's why I have to wait for her return." (IDI_R5)

Two respondents from IDI mentioned being unable to go to a health facility due to unavailability of a helping

person. One mentioned that he was unable to carry his elderly mother without the support of an accompanying person and the other said she did not have a helping hand to look after her children at home.

"I am the only one person, I could not manage more people (to carry her to the health facility) so I could not take her (his mother) before. I took one of my nephews." (IDI_R8)

Gender and identity of the healthcare provider can sometimes become barriers to treatment. Women mentioned they did not want a male or foreign doctor to deliver their baby. Women felt shy sharing their health problems openly when the doctor was not female although they have permission to visit male doctors from family members mostly from the male persons. Women also preferred delivering at home because of these reasons.

"Going to hospitals for delivery is a shameful act. They don't keep the cloth on your body properly." (IDI_R9)

Finally, in the FGD with females, two women opined that they had found language to be one of the primary barriers when they had first come to Bangladesh as they could not speak Bengali and thus could not understand where to go to avail affordable, quality treatment. They also suffered as they could not explain their problem to the doctor and vice versa could not understand what the doctor was prescribing to them. On a positive note, respondents mentioned that they are now overcoming this barrier by learning Bengali slowly.

"They were one way back then, they are a different way now. We never saw Bangladesh before then. We were wondering where to go, the doctors who were nearby charged a lot of money. We were all so ill then, we couldn't raise our voices." (FGD_ Women)

7.9 Suggestions

We asked respondents what health services or providers they would recommend to others in their area or those who were suffering from similar illnesses that they have been suffering from. Additionally, they were also asked what improvements they would like to see from the formal health facilities that they had visited. In this section, we have presented their responses.

7.9.1 Suggestion to Others

Among the 11 IDI respondents, 4 respondents said, if asked to recommend a good health care facility then they would suggest BRAC. Two respondents said they would ask them to go to MSF, BRAC or Pushtikhana (nutrition centre), because all of these health centres are good. One respondent said he would recommend Mercy Malaysia hospital, as they provide good service. Two respondents particularly from IDI, said they would recommend MSF. Another respondent mentioned that she would suggest other people to go to Turkish Hospital.

Among people who said they would suggest BRAC, most of them said it was because BRAC is the nearer hospital in their locality. (IDI_R4). According to one respondent, though she found that BRAC did not provide good medicine, they would still go because of the referral to other health facilities if needed. BRAC is also preferred by pregnant women as they are given priority in terms of shorter waiting times and the ability to see a doctor immediately.

“R: If she gets pregnant then BRAC is nearer. BRAC tells you to come after one hour. IOM takes like 2-3 days. That is why I would suggest her to go to BRAC.” (IDI_R9)

Among the two respondents who chose to recommend MSF, one of them chose it for pneumonia patients while the other said their saline is best for children suffering from diarrhoea but does not work for older people. Though patients have to wait in a long queue at MSF, they opine that it is still a good hospital.

7.9.2 Overall Suggestions

Six IDI respondents and respondents from the 2 FGDs expressed their thoughts on what they think needs improving at different health centres. They expressed that they would like the doctor to deal with patients in a calm and collected manner and not be quick-tempered. Another respondent (IDI_R4) from the IDI said, BRAC should give good medicine and they also should check the patient nicely. They would appreciate if doctors could call seriously ill patients first from the queue. Most patients like it if the doctors talk to them nicely, listen in detail about their illness condition and prefer if the doctors examine them with medical instruments. One of 3 IDI respondents who talked about being examined with medical instruments noted:

“R: When we visit the Burmese doctor. He examines us with instruments and with care. He examines with his hands, touches the affected parts and he will prescribe effective medicines. If these are there it would have been better.” (IDI_R9)

“R4: when a patient comes, the doctor should call them, ask them about their problem. They don’t do that.” (FGD_MEN)

Medicine is another important need for the patients. They would like all types of medicine to be available at the health facilities. From the FGD with males, respondents expressed that they needed more medicine. This is

because they feel that they get less than the appropriate amount of medicine from the health facilities, which seldom works to cure their illness.

“R4: doctor should diagnose the disease then they should give the proper medicine. Most of the cases, they are giving paracetamol only.” (FGD_MEN)

Another IDI respondent recounted an experience with a doctor at BRAC who said they could only see 10-12 patients per day, but were not giving enough time to the patients. She suggests that they need more than one doctor in the health facility.

“I: which kind of changes will be good for you?”

R: (They) have to counsel well, they have to provide tokens and there should be 2 to 3 doctors. If there is just one doctor for so many people, then it will take a lot of time. If there is more than one doctor then they can treat the patients well.

“I2: any other recommendation?”

R: (They) have to provide good medicine, which works for the disease. They scold us a lot. There are some girls over there, they scold a lot. If they treat us well and make us understand the situation in a nice way, then people will have no problem to wait. Patients go there with a problem. If they facility staff and doctors don’t behave well, this makes patients sadder. They just scold and shout at us. They drive us away.” (IDI_R5)

Behaviour of providers and environment of the facilities were other concerns for patients. If the staff of the health centre behave well with them, then respondents feel better. With regards to suggestions in improving environment, one respondent mentioned that providing cooling systems such as fans in the waiting area of the health complex helps them when there are long waiting queue

Results from the qualitative interviews revealed in-depth information and provided added explanations to the statistics obtained from our quantitative survey. Notably, we understood the reasons behind choice of providers and discovered that many providers are sought one after the other during health-seeking among the Rohingya population in the camps. Qualitative interviews also revealed details about respondents’ experiences at formal and informal facilities and the many factors that govern positive and negative experiences at health facilities and with informal providers.

CASE 2

Shukh mia (alias) is a 68 year-old Rohingya man. We met him in November 2018. He lives here with his family of five – his wife, a daughter and two grandchildren. Shukh mia has not had any education and at his current age, is too old to take on labour work. For 28 years of his life, he has been suffering from relapsed Tuberculosis (TB) for which he has sought treatment on and off again in Bangladesh.

Back in 1993, when Shukh mia was young, he came to Bangladesh to seek treatment as there were no hospitals where they were located in Myanmar. He had a chronic cough and intermittent fever, and no medicine was being able to cure him. When they tested his sputum here in Bangladesh, they confirmed that it was TB. After staying for treatment in Bangladesh for six months, he went back to Myanmar and sought treatment from hospitals that had opened there.

He returned to Bangladesh during the influx in 2017, and has been residing in the camp ever since. About his condition, he says, “The illness stays on, it doesn’t get cured completely. It stays hidden.” Till now, Shukh mia has visited five hospitals/health centres for his illness – BRAC, MSF, IOM, Turkish Hospital and Ukhiya Upazila Health Complex. The family usually relies on referral from doctors when it comes to decision-making for health seeking. Sometimes, Shukh Mia’s nephew who lives nearby also advises on what to do. The nephews also carry him on their backs to the hospital or health centre when he is too weak to travel on his own.

In the beginning, when there were no health centres in the camps, they went to Burmese doctors who charged 500-1,000 Taka for treatment. They received financial assistance from religious leaders or Hujurs, and also borrowed money from relatives. Later, when health workers from BRAC went door to door, they identified Shukh Mia as a TB patient, referring him to the Primary Health Centre (PHC). The health worker showed him where the BRAC PHC was located. Once at the PHC, the doctor took his history of illness and gave him 2 empty cups for sputum collection—once in the evening after Isha (evening) prayer on a full stomach and another after waking up on an empty stomach. Shukh mia was very pleased with the cordial treatment from the nurses, doctors and other staff at the BRAC PHC. They told him they were able to diagnose the illness (TB) and prescribed medicine to take twice daily for his rapid breathing. He was also regularly visited by

health workers at his home. He took the medicines for 6 months and was asked to take 4 sputum tests subsequently within the next 6 months.

When he started coughing up blood again, he went to BRAC and they referred him to go outside the camp to the Ukhiya Upazila Health Complex. He spent about 400–500 Taka in total for his treatment, food and travel costs; he also had to pay for his attendant. There, they wanted to test his sputum, but as no cough was coming out, they carried out an X-ray and declared that it was not TB. After this, he went to the IOM health centre from where they referred him to MSF. At MSF, the doctors examined him very well and said that his TB was cured after testing his sputum. They also gave him free medicine for 14 days; 2 tablets to take per day. Taking these medicines made him feel better and the bleeding with his cough had stopped for a while.

After this, when he felt sick again, he visited BRAC and the Turkish hospital several times. He primarily sought treatment at BRAC PHCs as he finds good treatment there. He likes the fact that they give him medicines without delay, and even if the waiting time is sometimes long, he understands that one must wait their turn to see a doctor. So, he has gone there 4–5 times. Most recently, he also gave a sputum test at BRAC. The doctor saw him well with a medical instrument and re-confirmed that his TB had been cured. At BRAC, they prescribed paracetamol for his fever and asked him to take it 3 times a day for 2 consecutive days. They also gave Vitamin B-Complex tablets for strength, and asked him to have 2 per day on a full stomach, but they did not specify for how long. However, after doing as instructed, he was well for 2 months until the illness relapsed.

Although both BRAC and Turkish hospital are located nearby, the Turkish Hospital is the nearest in proximity. Also, the medicine he had received from there made him feel better. Now, he will return to Turkish Hospital as he has been feeling ill for the past two days.

Shukh mia recommends TB patients to go to BRAC as he thinks they have good treatment options for this illness and because they respected and examined him properly. In general, he likes the treatment at BRAC, Turkish Hospital and MSF but will not return to IOM as it is too far.

8. RESULTS FROM DELPHI STUDY

In round 1, all participants provided 3 verbatim priorities each, in total there were 66 priorities. Among these, 20 of the priorities were identified as common, and were collapsed into one response category. This resulted in 46 unique priorities, the top selected priorities from round 2 are presented in Table 8.1. There was an emphasis on maternal, new-born and child health (MNCH) as well as sexual and reproductive health (SRH) services. The over-

representation of these areas is mostly a result of our chosen snowball sampling method in the recruitment of participants. This is because we were able to approach participants through the SRH working group of the humanitarian response unit in Cox's Bazar. However, participants also outlined other areas of concern, which include the improvement of health systems delivery.

Also, based on the verbatim priorities, we identified 10 broad areas of improvement which are outlined in the table below:

Area	Area Description
Area 1	Sexual, Reproductive and Neonatal Health
Area 2	Mental Health
Area 3	Nutrition
Area 4	Non-communicable disease
Area 5	Gender based violence
Area 6	Health care delivery system
Area 7	Community Engagement & Awareness building
Area 8	Financing and resource mobilization
Area 9	Capacity Building of Health Care Providers
Area 10	Preventative Services

In round 2, participants scale order ranked all 46 priorities and 10 broad areas. Using weighted averages, we found the participants' top 10 ranked priorities as follows:

Priorities	Priorities (in verbatim)	Responses				
		Highest (n)	High (n)	Medium (n)	Low (n)	Least (n)
1	Improve maternal & new born health	81.8 (18)	13.6 (3)	4.5 (1)	0.0 (0)	0.0 (0)
28	Improve emergency obstetric referrals	77.3 (17)	22.7 (5)	0.0 (0)	0.0 (0)	0.0 (0)
2	Reduction of maternal & new born mortality and morbidity/ Reduce morbidity and mortality	65.0 (13)	30.0 (6)	0.0 (0)	5.0 (1)	0.0 (0)
4	Improved institutional delivery over home delivery	54.5 (12)	31.8 (7)	13.6 (3)	0.0 (0)	0.0 (0)
7	Ensure family planning services	47.6 (10)	38.1 (8)	14.3 (3)	0.0 (0)	0.0 (0)
27	Improved referral for saving maternal & new born and adolescents lives. Help them exercise their sexual and reproductive health and rights	59.1 (13)	22.7 (5)	13.6 (3)	4.5 (1)	0.0 (0)
3	Reduction of child (up to 6 years) morbidity & mortality	40.9 (9)	50.0 (11)	9.1 (2)	0.0 (0)	0.0 (0)
45	Improved immunization coverage	45.5 (10)	40.9 (9)	13.6 (3)	0.0 (0)	0.0 (0)
26	Ensure quality referral mechanism/ Adequate & appropriate management of referral pathway	54.5 (12)	22.7 (5)	18.2 (4)	4.5 (1)	0.0 (0)

39	Improve capacity & holding accountability of HCP/ Improve training of HCP/Capacity building of staff (field level & management) on technical & non-technical subjects/ Provider's skill development through training /Capacity building among frontline health workers on Humanitarian standards and principles	40.9 (9)	40.9 (9)	18.2 (4)	0.0 (0)	0.0 (0)
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Furthermore, using the same scale order rank, we asked the participants to select their most prioritized areas. Participants' top 6 priority areas were also found using weighted averages and are outlined in the table below.

Prioritized Area	Responses (n)
Area 1: Sexual, reproductive and neonatal health	50.0 (11)
Area 6: Health care delivery system	22.7 (5)
Area 7: Community engagement & awareness building	9.1 (2)
Area 8: Financing and resource mobilization	9.1 (2)
Area 2: Mental health	4.5 (1)
Area 9: Capacity building of health care providers	4.5 (1)

In round three, 20 participants ranked the 10 priorities. Similarly, their top 5 priorities were found using weighted averages. These are shown in the table below.

Top Priorities	Weighted Average	Rank
1 Improve maternal and new born health	4.83	1
2 Improve emergency obstetric referrals	3.54	2
3 Improved institutional delivery instead of home delivery	3.08	3
4 Reduction of maternal & new born mortality and morbidity	2.86	4
5 Improved referral for saving maternal, new born & adolescents lives. Additionally, enable them to exercise their sexual and reproductive health and rights	2.80	5

They also ranked the 5 prioritized areas, and weighted averages revealed the top 3 areas to be as follows:

Top Prioritized Areas	Weighted Average	Rank
1 Sexual, reproductive and neonatal health	2.56	1
2 Health care delivery system	2.38	2
3 Capacity building of health care providers	1.88	3

From this second phase of our study, it is apparent that participants considered the health and wellbeing of mother and child to be a major priority. As per a UNICEF (2018) study and a situational report estimate (34) there were over 60,000 pregnant women in the Rohingya camps of Cox's Bazar, many of whom were in the age bracket of 15-19 years. More than 16,000 Rohingya babies (60 babies per day) were estimated to have been born within the camps (UNICEF 2018). Within a year after the influx, 52 maternal deaths out of 82 pregnancy related deaths had occurred (39). Recent estimates suggest that for every 100,000 live births, 179 mothers die from preventable causes related to pregnancy and childbirth in Rohingya refugee camps- almost two and half times higher than the worldwide target for maternal mortality of under 70 per 100,000 live births (40)

In response, there has been a concerted effort to meet SRH needs of Rohingya refugees and host communities by the Inter-Agency Working Group on Reproductive Health in Crisis (IAWG), the Bangladesh government and different implementing agencies and donors (41). A Minimum Initial Services Package (MISP) has been developed to ensure access to SRH services that have the greatest impact in reducing the reproductive health-related morbidity and mortality, particularly in a humanitarian crisis situation (Myers et al, 2018).

Despite this, the utilization of facility-level care for SRH services has not been at the desired level. A study conducted by ICDDR,B (Chowdhury, 2018) found that only half of the pregnant Rohingya refugee women received at least one ANC due to poor access to pregnancy care facilities (42). Additionally, only 22 of pregnant Rohingya women and adolescent girls gave birth in health facilities (43). Our mixed methods findings also confirm that 81% of mothers still resort to home delivery due to cultural practices and comfort level. Of all the newborns in the camps from September 2017 till present, it was estimated that 3,000 or only 1 in 5 were delivered at the health facilities. According to the ICDDR, B report on the needs assessment of maternal and child health (MCH)—in June 2018, among 370 pregnant women, 54.1 had no preparation for the place of delivery. Only 10 of the surveyed pregnant women were willing to deliver at a health facility and the rest (35.9%) expressed their interest to deliver at home (34). However, women delivering in health facilities has risen from 22 in 2017 to 40 in 2019, indicating Rohingya women's wish to deliver their baby at health facilities (UNFPA, UNHCR, 2019).

9. DISCUSSION

It is important to focus on the findings by recalling literature on the approaches of health seeking behaviour. A study in 2017 conducted by (33) focused on surveying Rohingya refugees on the problems they face; results found in the study include, 45.6% of participants reporting multiple problems, followed by 16.8% participants reporting specific problems like musculoskeletal pain, visual problems and peptic ulcer. The study also found urinary tract infection as the leading individual health problem. Though this study presents reported problems, it does not address the characteristics of the population, the health facilities visited, and the feedback of individuals on health care services. Other studies point towards the persistence of communicable diseases. These include Respiratory Tract Infections (RTIs), diarrhoea, various skin diseases and measles (20). Among communicable diseases, diarrhoea and its symptoms have persisted, both for children and adults (34, 44). Though studies like the one conducted by Milton et al. (2017) provide insights into the some of the experiences of individuals, no other study combines details of illness, service utilization, and experience of the FDMNs.

By considering the socio-ecological structure and the framework underlying life in the camps (see figures 3 & 4), our study takes a more holistic approach, considering household characteristics, individual and group responses, as well as health and the emerging health systems. Here we define 'formal care' as any registered facility, and, 'informal care' as any other facility/service sought in or out the camps, i.e. pharmacies, private doctors, doctors from Myanmar, traditional healers. Health seeking is often emphasized into 'endpoint' and 'process', that is, focusing on the utilization of a formal system (health care seeking behaviour), and emphasizing the illness response (health seeking behaviour)(45). Our study falls at the intersection of these two approaches; the health system of the Rohingya refugee camps (with a very ad-hoc service delivery system operating with poor facility infrastructure) and the health seeking responses of individuals in the camps. This framework allows us to consider cultural, social, economic, geographical and organizational factors when assessing our data. Hence, our key focus areas will involve general reported illnesses, health care seeking patterns, household expenditure, and satisfaction regarding the health care provision in the camps.

9.1 General illnesses

At the time of data collection for this study, a WHO report (12) on epidemiology of diseases identified the leading illnesses as acute respiratory infections (ARI) (15.9%), unexplained fever (8.9%) and acute watery diarrhoea (5.4%). Our household survey revealed that fever (54.5%), cough/cold (26.4%), diarrhoea (11.7%), stomach cramps

and dysentery (10.3%) were the most reported acute illnesses. Diarrhoea was also the most common reported illness in the qualitative interviews. In our study some of those who reported to have “cough/cold” maybe suffering from ARIs or maybe the underlying symptom of other conditions and comorbidities.

9.2 Referral Pathways and Health Seeking Patterns

In terms of health care seeking, 85.8% of individuals (who were last ill) in households sought some form of formal health care; the qualitative findings confirm this finding, as all interview respondents stated that they sought formal care. However, both quantitative and qualitative studies revealed that care is sought from various providers, and is not exclusive to facilities in the camps. For example, the qualitative analysis revealed that the treatment seeking pathway consists of visits to many different health care providers. This involves traditional healers, camp health centres, and private facilities outside of the camps. These findings indicate that the traditional approach of KABP (Knowledge, Attitude, Belief, Practice), which assumes individual behaviour is built on rational decision making based on knowledge, may not provide a complete picture of the situation. However, in the context of the individual's experience, the decision can be rational. Therefore, it is important to recognize individual health decisions (particularly under emergencies and for those who are displaced) are mediated by the immediate environment, social roots, previous care seeking behaviour, and general life situations. It became clear from the qualitative interviews that respondents shift from contact point to contact point when seeking care; exceptions are for TB and diarrhoea, where the pathway is much longer (see Figure 3). Taking this into account, the decisions regarding utilization of health facilities by Rohingya refugees becomes clearer. From the survey, we see the reasons for not seeking healthcare include, self-treatment (22%), ‘Others’ (16.4%), negative experiences/word of mouth (15.4%), and Symptoms were not serious enough (11.4%). Though the survey asked respondents the last facility/provider they sought care from, the qualitative interviews revealed respondents seek care from a range of formal and informal providers, often seeking care from multiple providers on the same day. Our quantitative survey indicates that the main reasons for seeking care include quality of treatment (32.6%), proximity (30.1%), and reputation (16.2%) of the facility or provider. This is similar to the study conducted by Asbroek and colleagues on HSB for TB treatment in Nepal, where perceived quality, costs and service level of a provider were influencing factors (32). Qualitative analysis provides an insight into these numbers; neighbours are often the first source of information for respondents, followed by relatives, Majhis (community leaders) and health workers in the community. Hence, health care reputation is built around this social circle, influencing the perception of treatment quality and reputation of the provider.

Respondents in our FGDs mentioned that formal providers are usually sought through a referral system, this is the case if the nearest facility does not provide a particular service. However, this may not always be the case, as the PHC facilities are often considered to be the first point of contact for general illness. Another reason is that those who seek formal care believe that Burmese doctors (Doctors from Myanmar) in the community do not provide adequate care.

Data from the FGDs explain the lack of money as a restraint towards care seeking. Though formal facilities provide free health care, respondents mentioned that if they do have money, they would rather seek care from Burmese doctors (Doctors from Myanmar), who provide flexible services, as they are able to visit them at home, or, are able to treat them on short notice, especially on public holidays and out of regular hours. Respondents also said that they provide better care as compared to the free medicine provided at the formal health facilities; two respondents mentioned that if they have money, they prefer to visit Burmese doctors. Also, if treatment at camp facilities is delayed by long waiting times and crowds, or, deemed to be ineffective, respondents will seek care from doctors/pharmacies outside of the camps. Those who engaged in self-care reported that they received training to treat illnesses such as diarrhoea.

9.3 Facility Utilization Overview

Health facility utilization was organized by illness and maternal health services. For illnesses, the most visited health facilities were from BRAC (22.8%), pharmacies/private doctors (20.2%), MSF (17.1%), Doctors from Myanmar (13.1%) and other NGOs (12.8%). As mentioned, the treatment pathway has multiple contact points and health care facilities; those choosing formal facilities, do so as a part of selecting multiple options, depending on what has been said and references. As a result, they go because of better available facilities, or because they are close in proximity. For services around maternal health, BRAC is the first choice for both ANC (43.1%) and PNC (33.5%) services, followed closely by MSF (20.7% & 22.9%). However, in terms of delivery services, informal services/methods dominate, that is 81% of the respondents have had a home delivery within 2 months of this survey. This is influenced by traditional/historical factors, as home delivery is normal practice for Rohingyas in Myanmar. Also, there is a fear of doctors committing indecent acts during delivery; a respondent stated that this was a rumour that was first heard in Burma. The rumour is supported by the fact that many Rohingya women have been harassed in Myanmar, especially in IDP camps, and by the border security group (NaSaKa) (23). These factors coupled with the preference for a local doctor can explain the rate of home delivery in camps. Utilization rates for PNC services are similar to that of ANC services, with BRAC (33.5%) and MSF (22.9%) leading the way, followed by doctors from Myanmar (20.9%) and pharmacies/private doctors (15.3%).

Satisfaction regarding treatment and health facilities were measured by using a standard five point Likert scale. Overall, most respondents selected good for both treatment and services provided (see Table 6.10). A closer look into satisfaction of treatment by provider (See Table 6.17) shows of the 22.9% ill persons that sought treatment at BRAC, around 48% of them rated treatment between 'very poor' and 'poor', with 29.6% rating as 'acceptable', and 44.2% selecting between 'good' and 'very good'. Similarly, of the 17% ill persons that sought treatment at MSF, around 20% of them rated treatment as 'poor', with 29.6% rating as 'acceptable', and 24.5% selecting between 'good' and 'very good'. With regards to other treatment by Burmese doctors (13% utilized) and pharmacies/private doctors (19.7% utilized), ratings were favourable. With 29.8% of respondents rating their treatment with Burmese doctors as 'good' or 'very good', 7.4% as 'Acceptable'. Similarly, treatment by pharmacies and private doctors were mostly rated as 'good' and 'very good' (48%).

A closer look into satisfaction of facility by provider (See Table 6.18) shows similar ratings. BRAC facilities were rated 'very poor' to 'poor' (34.1%), acceptable (28.6%), and 'good' to 'very good' (49.7%). For MSF, facility ratings were rated 'very poor' to 'poor' (61.4%), acceptable (28.6%), and 'good' to 'very good' (28.1%). From the qualitative data, we see that respondents were positive about formal treatment in terms of behaviour, examination, explanation and advice; respondents stated that they feel good when a doctor gives them time, and when they examine using medical devices. Respondents of our quantitative study had complaints about the behaviour of some staff and health workers, they also expressed dissatisfaction with waiting times, which was around ten minutes to four hours, the average of all camps being 50.16 minutes for illness (See Table 6.12). In contrast, they said that informal providers were able to facilitate better relationships, thus making them more comfortable. Even though informal providers charge for services, they are willing to pay to reap these benefits; this is also highlighted in table 6.16 and 6.17, which show a steady demand for informal providers, regardless of the expenditure bracket of respondents. Qualitative interviews indicate that some also show preference for traditional/religious healers. Whereas, Burmese doctors provide mixed treatments and injections, which seems to be the preference among the respondents. That is, those respondents perceive a mixture of treatments to be superior.

9.5 Experience with BRAC Health Facilities

Through the qualitative interviews, a more detailed account of the experiences with BRAC health facilities were uncovered. Most respondents had easy access to BRAC, with very short travelling times. With regards to treatment and behaviour, most said that staff at BRAC health facilities were courteous and respectful. However, they also described negative experiences, where they

complained of rude behaviour from staff and doctors. In terms of quality of treatment, there were mixed responses; some expressed dissatisfaction with doctor availability, and the amount of time doctors consulted them for; oftentimes doctors were in a hurry. Others complained that the treatment provided in terms of medicine was insufficient, either the same medication was prescribed multiple times, or, the medication provided was ineffective. As a result, they saw no point in making revisits. Respondents also complained about the opening hours of BRAC health facilities; facilities would close as early as 3 pm, and were not open on Fridays. These factors have an effect on the perception of BRAC facilities, especially things like bad behaviour and opening times, which can often overshadow the positives.

9.6 Barriers

The most important barrier according to qualitative interviews are costs, this was also evident from the quantitative findings, as 10.8% of respondents stated 'having no money for treatment' as one the reasons for not seeking care. This again highlights the demand for private health services. This is because they will be able to avoid long waiting times at most camp based providers, additionally, receive more focused treatment and greater supplies of medicine. Other barriers include, lack of awareness regarding treatment options, shame associated with seeking care in facilities, language, identities of the doctors. With regards to shame and identities of doctors, females do not feel comfortable seeking maternal health care, as word has gotten around that delivery is done without clothes. Regarding doctor identity, Rohingya women feel shy to share specific problems with a male doctor. Other barriers revolve around geography and time; the preference is for facilities that are close by, as many camps are situated in hilly areas, also, most facilities have limited opening hours which prevent many prospective patients from seeking care.

9.7 Observations during Data Collection

When collecting data, oftentimes the environment in and around the household provided various challenges. Usually space was limited in most households, though for male respondents, data collectors were able to move locations. In addition, family and friends would gather around the interview, asking additional questions to the data collectors, this added to the interview process. The language barrier was not as significant as we predicted; there are similarities between the dialects of Cox Bazar and the Rohingya.

In terms of answering questions, respondents were reluctant to disclose income related information; one example, a respondent claimed he had no source of income, and was dependent on relief provided, however after the interview, the team had witnessed the same respondent selling food outside his household. It is possible similar cases exist throughout the sample of respondents,

therefore it is important to note this information when analysing and presenting economic data. Section two of our survey provided challenges in the form of illness identification, explanation of differences between chronic and acute disease, and, health care rating. With regards to illnesses, though a list of chronic and acute illnesses were provided via respective questions, during interviews it became evident that explaining the differences between acute and chronic diseases was a challenge for the data collector; from the respondent's point of view, the questions added confusion when answering. However, in most cases, data collectors had to work with reported symptoms, this provided the basis for collecting information on types of illnesses. With regards to section three, some respondents struggled to recall the number of Antenatal Care (ANC) and Post-natal Care (PNC) treatment sessions they received. However, an initial inspection of the data indicates that numbers are mostly conservative. Surveyors also encountered certain cases where mothers of the households had to undergo abortion, or had problems with miscarriage; in these cases some respondents sought treatment in the form of dilation and curettage (D&C). This may be important to consider in future studies with the Rohingya population. Section four provided some cases where children were immunized after the age of 5. Some households reported that their children, who are above the age of 5, were vaccinated after coming to the camp, which was approximately one to one and a half years ago. Interviews could not reveal whether or not these were boosters, catch ups, or first time vaccinations. A look into alternative vaccination schedules may help to further explore this area.

9.7.1 Informal Discussions Before and After Interviews

In general, most respondents would express feelings of sadness when recalling memories of Burma/Myanmar. Many of the respondents' day to day activities revolve around religion and their local traditions, hence, prayer and religious leaders have an important role in daily life. Some respondents and their family members expressed gratitude towards the care provided in the camps. However, some respondent who had been economically well off in Burma/Myanmar, were desperate to go back. Many of them had businesses back in Burma/Myanmar, some of which are still in operation.

Many respondents and their family members provided accounts of their negative experiences with BRAC health facilities and staff. The general complaints were that paracetamol was given out for almost many symptoms, and that health centres would shut down too early. One household complained that they were provided nasal drops for their son's diarrhoea. Another family expressed dissatisfaction towards the limited treatment times BRAC provides. According to them, BRAC usually stops seeing patients at 2pm, although most of the PHCs remain open until 4pm.

9.8 In Summary

A discussion of the quantitative and qualitative data provides a step towards deriving a holistic picture of the health situation in the Rohingya camps, both in terms of the health system and the individuals seeking care. Some of our findings are in agreement with previous literature on health seeking behaviour, which is perceived quality of care is influenced by familiarity, facility waiting times, and most importantly provider behaviour. Also, diarrhoea and RTIs have persisted in the camps, as indicated by our study and those referenced in our literature review. This is indicative of a wider infrastructure problem.

While the results from our Delphi study indicate that health sector priorities are mainly focused on maternal and child health, the health sector may also need to focus on a sustainable infrastructure in the long run. Going forward, it is important to recognise our limitations, and further process our information to develop recommendations for application.

10. LIMITATIONS

The study has shed light on many dimensions of health care and health seeking from the perspective of Rohingya population who live in areas around BRAC health facilities. However, as with most studies, there are limitations. It is also important to recognize the current situation, which makes this study unique to other health related research in non-crises settings. Our limitations are in the form of time, geography, setting, and cultural sensitivities. The major limitations are:

- **Time and data coverage:** Due to the time limits and settings, data on illnesses and health care seeking behaviour of all the members in a family/household could not be retrieved. The structure of the family only allowed us to interview one person, where, a limited number of questions on reproductive health and maternal were asked to females of the household. But even this was not possible in every case. Also, our sampling strategy did not allow to have a representative sample of the total pregnant women, or women of reproductive age.
- **Study of Complete Care Pathway:** We also did not collect information on the complete pathways of care seeking patterns in our quantitative study.
- **Cost of Care:** Section one of our survey enabled us to collect some economic information regarding the camps, however, we did not expect the high number of respondents seeking private health care. Therefore, we were unable to retrieve cost of travel, consultation and other associated fees.
- **Full picture of disease prevalence among the study population:** We were able to get the number of people that were sick in the household, therefore, enabling us to find the rate of reported illness. However, we were unable to provide a full profile of the illnesses of

every individual in a household. Also, since we took the last person who was ill, in many cases we may have had to forego the person with the most severe illness.

- **Historical and cultural precedents:** Health seeking models dictate the importance of cultural practices that precede health decisions; our study, through qualitative analysis was able to uncover certain aspects of Rohingya norms and customs. However, a more detailed account would be needed to fully understand the population and their health care concerns.
- **An ongoing crises:** As a humanitarian situation is unpredictable with a very small degree of control, operations in field sometimes have to be compromised. In some cases, we were unable to retrieve written consent from respondents, in such cases we obtained verbal consent.

11. RECOMMENDATIONS

Building on our limitations, appreciating the practicalities of a humanitarian situation, we present the following recommendations.

- **Review of BRAC health facility operations:** Many complaints from the respondents were regarding time and availability of services, taking this into account, an incorporation of emergency services would be required. Providing services after standard working hours need to be examined. Furthermore, there needs to be an improvement in consultation times, this will require a review of human resources and allocation constraints.
- **Facilitate health communication in coverage areas:** Many respondents are either unaware of appropriate treatment options, or have very high expectations of primary health care facilities. This knowledge gap can be mitigated by providing sessions on health care options through community leaders (Majihis), health workers and facility staff. This will also require a review of logistics in camps, and training in terms of health worker communication for BRAC's community health workers.
- **Implementation research to understand private health care options:** As our results indicate, Rohingyas seek treatment from a number of private health providers, most notably Burmese doctors (Doctors from Myanmar), private doctors and pharmacies in and around the camps. Therefore, to gain an appreciation for the health system as a whole, we recommend; a study on Burmese doctors to understand their credentials, methods and motivations; a study on the coverage of pharmacies, their legality, quality of care and standard in and around the camps, including the presence of other private doctors. This may also be supplemented with an economic study of the costs associated with seeking care outside of the camps.

- **A camp wise disease specific study:** As we collected data on reported illnesses and symptoms, it limited us in scope, especially in terms of identifying all the types of illnesses that are prevalent. Non-communicable diseases (NCDs) would be an appropriate area to start with, as many conditions reported (See Table 6.6) involved chronic diseases. For this we suggest a study where exit interviews can be utilized at the facility level, allowing us to utilize real time data. This would enable the program managers to identify and set accurate priorities in accordance to the camp in which they operate.
- **Improve home deliveries through the utilization of birth attendants:** Empower traditional birth attendants by providing extensive training. Additionally, ensure adequate supply of sterile equipment needed for safe birth.

12. CONCLUSION

The relevance of individual decisions, economic conditions, practical environment, perception of health care and satisfaction regarding healthcare services on the utilization of camp facilities is very clear. Findings indicate a limitation in facility operating hours deter Rohingyas, prompting them to seek private care. In addition, negative experiences at specific facilities influence the social channel of health care perception among them. In terms of disease prevalence, the most reported diseases include diarrhoea, fevers, and acute respiratory tract infections, with similar results on chronic illnesses. Though medically consulted symptom checking is beyond the scope of the study, the results stress the importance of cultural background, reaction to the environment, structure of the health system as important factors in understanding the incidence of disease, and the decisions made when seeking care. From our Delphi study, we found that healthcare implementers' suggestions were in line with our findings, where they prioritized maternal, neonatal and child health, overall improvement of the health system and training of service providers. Previously, little was known about the health profile of the Rohingya; utilizing this study we can gain an appreciation for the complexities that the situation presents us with. Therefore, it is important to implement solutions by building on the findings and recommendations presented, with the possibility of further exploration to mitigate future challenges.

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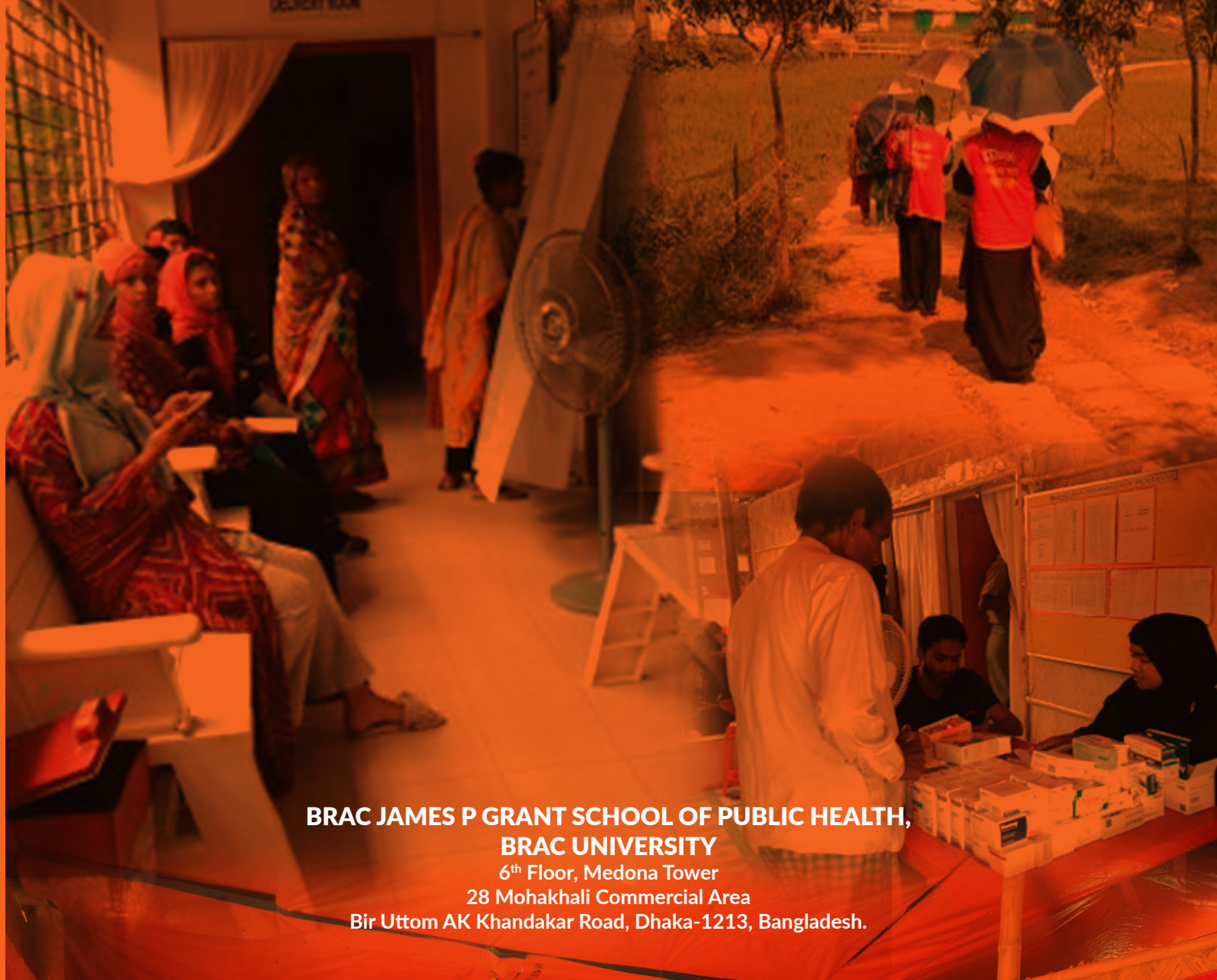
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APPENDIX

Table 1: FDMN camp populations & health coverage details

#	Camp name	Upazila	Total HH	Total individual (Both women & men)	Working area of (BRAC/Other)
1	Camp 1W	Ukhiya	9,342	40,480	Other/s
2	Camp 1E	Ukhiya	9,086	39,481	BRAC
3	Camp 2W	Ukhiya	5,748	25,130	Other/s
4	Camp 2E	Ukhiya	6,949	28,882	Other/s
5	Camp 3	Ukhiya	9,021	38,810	Other/s
6	Camp 4	Ukhiya	7,531	30,600	Other/s
7	Camp 4 Ext	Ukhiya	1,046	4,328	Other/s
8	Camp 5	Ukhiya	6,028	25,075	Other/s
9	Camp 6	Ukhiya	5,721	24,564	Other/s
10	Camp 7	Ukhiya	9,156	38,488	BRAC
11	Camp 8W	Ukhiya	7,519	32,672	Other/s
12	Camp 8E	Ukhiya	7,291	31,624	BRAC
13	Camp 9	Ukhiya	8,601	36,475	BRAC
14	Camp 10	Ukhiya	7,575	32,667	Other/s
15	Camp 11	Ukhiya	7,069	31,164	BRAC; 2 PHC
16	Camp 12	Ukhiya	4,905	22,136	Other/s
17	Camp 13	Ukhiya	9,618	41,056	BRAC
18	Camp 14	Ukhiya	6,904	31,357	BRAC
19	Camp 15	Ukhiya	11,174	49,442	BRAC
20	Camp 16	Ukhiya	4,839	21,639	BRAC
21	Camp 17	Ukhiya	3,649	15,472	Other/s
22	Camp 18	Ukhiya	6,655	27,220	Other/s
23	Camp 19	Ukhiya	4,816	20,852	Other/s
24	Camp 20	Ukhiya	1,735	7,180	Other/s
25	Camp 20 Ext	Ukhiya	976	3,992	Other/s
26	Kutubpalong RC	Ukhiya	3,786	19,007	Other/s
27	Camp 21	Tekhnaf	3,011	12,281	Other/s
28	Camp 22	Tekhnaf	4,583	22,206	BRAC
29	Camp 23	Tekhnaf	2,672	11,012	Other/s
30	Camp 24	Tekhnaf	7,800	33,714	Other/s
31	Camp 25	Tekhnaf	2,183	9,697	Other/s
32	Camp 26	Tekhnaf	9,493	41,475	Other/s
33	Camp 27	Tekhnaf	3,172	14,354	Other/s
34	Nayapara RC	Tekhnaf	5,732	27,032	Other/s
35	No camp		944	4,067	
	Total		206,330	895,631	

Sources: Bangladesh Refugee Emergency Population Factsheet (Dated 30 September 2018) | Camp Details provided by BRAC Programme Personnel (Humanitarian Response, Disaster Management, HNPP)



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Services of Breastfeeding Corner

- Provide privacy and space to safely breastfeed
- Skilled Infant and Young Child Feeding Counselling
- Group nutrition education sessions
- Care for Pregnant and Lactating mothers
- Re-initiation of Lactation
- Wet nursing support/support for non-breastfed children
- Referral to other services
- Dissemination of IYCF Messages
- Other services as needed

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