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Qualitative Exploration The End User Context of BCC Materials on COVID-19 Guidelines and Handwashing

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Qualitative Exploration

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Executive Summary

Introduction

As a partner of the "Hygiene and Behaviour Change Coalition (HBCC)," BRAC Institute of Governance and Development (BIGD) initiated a rapid formative research to identify gaps in people's existing hygiene knowledge and practice, as well as opportunities for intervention. In doing so, the study aimed to help BRAC design and develop new Behavioral Change and Communication (BCC) materials that can effectively address people's particular hygiene behaviour during the COVID-19 pandemic.

The two specific objectives of this study included investigating how users perceive the awareness messages and translate them into their everyday behavior, and finding out the facilitating factors and the barriers they face in following Coronavirus-related public health and social guidelines.

Methodology

Given the current state of crisis and the restrictions on social mobility and social mixing, we adopted various alternative ways of qualitative data collection using different digital technologies and virtual communication platforms, including in-depth telephone interviews, online focus group discussions (FGDs) through video conferencing, and shadow and visual content observation (e.g. photographs and videos). We interviewed 30 different respondents. Of them, 24 were from the list of a previous quantitative study conducted by BIGD. Since the previous study was on digital literacy, and we found that most of the 24 respondents were digitally literate, we were interested in obtaining their impressions on the virtual BCC contents of the BRAC Communications department. The rest of the six respondents were selected from the BRAC WASH programme's beneficiary group. Apart from these individuals, we also carried out interviews with four BRAC field workers to grasp shadow observations on the field context and virtual FGDs with the BRAC WASH beneficiary group.

Respondents were selected from Dhaka and Khulna. Selected respondents of the previous quantitative survey were from Dhaka and the BRAC WASH beneficiaries were from Khulna. In this study, we focused on the behavior and practices regarding the health guidelines of COVID19 (handwashing, mask use and social distancing).

Findings

It was revealed that respondents have different levels of knowledge and practices including correct, partially correct and misconception on three domains: hand washing, mask use and social distancing. The study also revealed the personal and structural barriers to comply with the guidelines:

Knowledge and practice

Under this theme, we gathered specific findings, which reflect the state of existing knowledge and perception regarding COVID-19 health guideline practices at the community level. We arranged the collected data on knowledge and practice sub-thematically: correct, partially correct, and misconceptions/lack of practice. Full compliance with the national and World Health Organization (WHO) guidelines was considered "correct", partial compliance as "partially correct", and complete noncompliance as "misconception". We found that people get information from both formal and informal sources. In this study, we defined formal sources of information as those that distribute information through the government, non-governmental organisations (NGOs), mass media, and other established

authorities. These sources include television channels, newspapers, radio, mobile operators, digital and virtual platforms, various awareness development initiatives (miking, monitoring, posters, banners, etc.) from national and local government authorities. Informal sources that did not belong in any formal institutions were considered as well. Along with social media (e.g. Facebook, Twitter, and YouTube, etc.), informal discussions in social peer groups, preaching from religious leaders, messages from social leaders, word-of-mouth, community discussions (e.g. social gatherings at tea stalls and even conversations among family members) are all informal sources of information.

We found that the knowledge and perception at the community level varied on different aspects of the national COIVD-19 guidelines.

In the case of knowledge and practices regarding handwashing, it was found that people were more or less aware of the necessity of washing their hands with soap to fight COVID-19. Women who perform household chores and cook said that they were more likely to use soap during the pandemic. Men in different occupations said that they are aware of the importance of using soap, but face difficulties due to a lack of handwashing facilities at their workplaces.

A similar scenario was found in the practice of mask use. We found that people learned about the necessity of wearing masks to prevent themselves from contracting COVID-19 through various sources of information such as television, newspapers, social media, and word of mouth. The majority acknowledged that using masks is an important factor in controlling COVID-19 infection rates in the community and keeping themselves and others safe. However, it was found that the regularity of mask use has gradually relaxed, compared to the early days of the outbreak. Noting places where they would wear masks, people displayed a mixed perception. People in the rural areas are reluctant to wear masks inside their village neighbourhoods, and even in crowded places. They believe that the rate of infection is higher in urban areas and they should use masks whenever they visit such areas. There is also a lack of awareness and information on how to properly wear a mask and dispose of it after use.

Many women from the Muslim community who veil themselves (e.g. *niqab and burkha*) were found not using masks when leaving home. They believe that since their faces are covered with the veil, masks are unnecessary. Moreover, there are also varying degrees of confusion, misunderstanding, and a lack of proper practices in terms of mask usage as recommended by the national health guidelines. Like handwashing and the use of masks, people also appear to know—through varied sources of information (formal and informal)—about social distancing. Some common knowledge about maintaining social distance to prevent COVID19 transmission was almost ubiquitous in the community. We found some people were taking necessary steps such as avoiding unnecessary social gatherings and not visiting relatives. However, in most of the cases, people were reluctant to maintain social distance consciously in their daily activities. It was also found that though the law enforcement agencies tried to make people strictly maintain social distance in their locality at the beginning of the virus outbreak, people have gradually resumed their regular social interactions. Although many of the respondents think that social distancing is important and some of them try to avoid crowded places, they cannot maintain this properly because most of the other people in their neighbourhood fail to follow the same rules. Most people in the rural area offered their perception: when the rate of infection is low in their locality, people do not feel the need to maintain social distancing. They freely interact with the villagers and only maintain distance from outsiders (especially from urban areas like Dhaka or abroad).

It was common across the narratives that the intensity of complying with Coronavirus-related health guidelines has weakened over time. There are misperceptions, inadequate and inappropriate practices, and confusion, most of which originated from the absence of proper and specific assessment of the community context.

Barriers

Behavioural practices targeting COVID19 prevention were not a single phenomenon; it was dependent on socio-economic, cultural aspects of daily life. In some cases, individual habits and comfort manipulated the practice of following health measures.

We found that there were manifold barriers from structural and personal levels and those barriers made the people in the community reluctant to follow health guidelines properly. Barriers on a

personal level indicated the lack of adequate knowledge, awareness and proper practices of an individual, and the structural barriers included infrastructural, socio-economic and cultural limitations.

It was also broadly found that people received information from various sources (formal and informal) and they were more or less aware of the COVID-19 health guidelines. However, there was some confusion, misconceptions and a lack of proper practices in terms of aligning the COVID-19 national guidelines at the community level.

Discussion

Landscape of Coronavirus perception and practice at the community level

According to the findings, people were receiving information and made aware of the COVID-19 crisis through both formal and informal sources of information, though awareness levels were not similar among the community people. Some were found aware of the health guidelines and some were not aware enough. It was even found that in some cases people were misguided and believed in incorrect information from different informal sources.. People exist in an "info-demic" situation in the Bangladeshi community during this contemporary Corona pandemic (Zaman et.al, 2020). We also found, a variety of channels were active in information diffusion mechanisms at the community level. A mixed perception about the COVID-19 crisis was found to exist among the community people. Sometimes some of this information—even that which comes from formal sources—is ambiguous and contradictory, resulting in confusion and misconceptions. For example, every day the Institute of Epidemiology Disease Control and Research (IEDCR) published the number of Coronavirus-induced deaths which was shown on national television and shared through social media. However, people could not relate this situation to their personal and local experiences. To grasp the actual gravity of the crisis, we found that the community people often crosschecked their community-level infection and death rates with the national-level daily updates. This entire scenario has created a mixed bag of perceptions, which is then reflected in people's everyday lives.

Potentials of existing positive practices

Our qualitative findings in this study showed us some existing practices and places of handwashing—including the use of soap before performing Oju (ablution) at the designated station at the mosque—as well as other Coronavirus-related health measures or guidelines at the community level. These existing practices, when up-scaled, have the potential to create a meaningful impact in a cost-effective way. One of the ways to up-scale these practices is to combine BCC awareness messages with very low logistic support (like soap and soap cases).

Recommendations

Considering the existing structural and personal barriers, we recommend the following points on individual, household, and community level:

Individual-level: targeting personal barriers

- The fact that many of the females who wear a niqab or *burkha* think that the veil is serving the purpose of the mask suggests a gap of information awareness among this group. To address this issue, messages conveying the importance of wearing a mask even if the veil is maintained should be sent to female members of the community who wear a niqab or *burkha*.

- People prefer demonstrations on handwashing to posters and flipcharts, as such demonstrations help them become more aware and learn how to wash hands correctly. Therefore, demonstrations on handwashing practices should be taken into consideration as a BCC intervention.

Household-level: targeting structural barriers

- Providing logistic and messaging interventions to slum dwellers or the lower-middle-income class to improve their common and shared handwashing facilities can improvise existing handwashing at such places.

- Targeting a group of households that share a common handwashing place can make the intervention more cost-effective. Group demonstrations can also be added within the intervention package (soap, posters, demonstration).

Community-level: targeting structural barriers

In certain places, like the Oju station at mosques, people were found to wash hands with soap before performing their Oju. In other places, people hung soaps in net bags near the water tap or the tube well for people to wash their hands. Intervention packages, combining logistic support (soap) and messaging materials (posters/leaflets), should be introduced in these places (posters could be set up in front of Oju stations) to raise awareness and encourage people to wash their hands.

1. Introduction

The COVID-19 pandemic emerged as a global health crisis, leading to the loss of countless lives and livelihoods, and brought unprecedented challenges to our daily lives. Until an effective vaccine is developed, coping with these challenges and staying safe from the virus will require making changes to our everyday behaviour, including washing hands more frequently, wearing masks, and maintaining social distance.

As a partner of the "Hygiene and Behaviour Change Coalition (HBCC)," BRAC Institute of Governance and Development (BIGD), BRAC University initiated a rapid, formative research to identify gaps in people's existing hygiene knowledge and practice as well as opportunities for intervention. In doing so, this explorative qualitative study aims to inform BRAC about the end user context of their behavioural change and communication (BCC) materials, which are used at the grassroots level of Bangladesh during this global pandemic to inform and raise awareness among people about the national health guidelines.

This study also contributes to the previously completed content analysis of BRAC's BCC materials from the perspective of the end users.

2. Objective

The broad objective of this study is to help BRAC develop new BCC materials addressing specific hygiene behaviours during the COVID-19 pandemic. To meet this objective, the study will explore the contextual landscape of the end users to provide recommendations for customising and contextualising the existing materials.

There are two specific objectives in this study. These include:

1. investigating how the users perceive the awareness messages and translate them into their daily life behaviour during the ongoing pandemic, and
2. finding out the facilitating factors and the barriers in following the preventative public health and social guidelines against COVID-19.

3. Methodology

Given the current state of crisis and the restrictions on social mobility and social mixing, we adopted various alternative ways of qualitative data collection using different digital technologies and virtual communication platforms, including in-depth telephone interviews, online focus group discussions (FGDs), video conferencing, and shadow and visual content observation (e.g., photographs and videos). This "new type of modality" of remote qualitative fieldwork (data collection) is an innovative experience which has emerged from the context of COVID-19.

3.1. Research tools

A. In-depth telephone interviews: To find out how communities perceive the Coronavirus pandemic and the contextual landscape of BCC materials, we conducted 30 in-depth telephone interviews with different groups of community people from the list of respondents in a previous quantitative study conducted on digital literacy by BIGD in 2020 and the list of users of the printed BCC materials by BRAC. We explored their daily life activities targeting the behavioural practices to COVID-19 health guidelines through "Day lining".

B. Day line: In day line telephone interviews, we asked respondents about their typical daily activities and explored their personal hygiene behaviour. It also enabled us to gather insight into the facilitating factors and the barriers that the respondents faced in following the BCC advice regarding COVID-19 health guidelines. Each interview has been recorded along with written notes.

C. Visual data: At the end of the in-depth telephone interviews, we requested the respondents to capture some pictures and videos of their daily COVID-19 experiences and then asked them to send the visual content to the research team using social media platforms. These proxy visual observations included video clips on daily behavioural practices of handwashing, *Oju*, and social distancing practices along with photographs on mask usage, preservation, and disposal, as well as the infrastructural aspect of handwashing places. This visual data allowed us to further explore the respondent's and their family members' hygiene practices. Respondents sent the visual content to the research team and were provided with mobile data support by BIGD.

D. Virtual focus group discussions: We arranged two focus group discussions (FGDs) with BRAC WASH programme's traditional BCC material users (WASH committee or VO members/beneficiaries/participants) through live virtual video conferencing. Video conferencing allowed us to comprehend the respondents' understanding of the meaning of different BCC materials and to figure out the facilitating factors and the barriers they face in following these materials. In these online group discussions, we sought help from BRAC WASH field staff who presented existing BCC materials to the BRAC WASH participants, while we asked the respondents questions on those BCC materials.

E. Shadow observation: This study used shadow observations, through which we wanted to gather some insight from BRAC field workers' observation and perception. As a part of the shadow observation, we talked with the community-level BRAC WASH staff about their individual perceptions, reflections, and observations. Additionally, these shadow observations presented an opportunity to triangulate with the end users' responses. Since respondents sometimes have a general tendency for providing politically correct answers, in such cases, shadow observation was seen to be an effective tool to unveil the actual existing scenarios in the study area.

F. Resource mapping: Through resource mapping, we tried to explore the infrastructural state of the source of water and the supply of other hygiene materials, e.g. soap, hand

sanitizer, etc. Both verbal and visual data provided by the respondents helped us receive well-rounded insight into the existing structural settings of handwashing places at both community and household levels.

3.2. Use of digital technology

Due to the ongoing COVID-19 pandemic, we could not physically visit the research area. During the entire fieldwork and data analysis period of this study, we, therefore, used different digital technologies and virtual platforms as the most feasible solution for conducting this research. Hence, the researchers used different digital platforms to connect with the respondents as well as communicate among themselves.

External communication with respondents: For collecting data, in-depth interviews were conducted over the telephone. To conduct live video conferences and obtain visual data, we used various virtual communication apps, such as Gmail, WhatsApp, imo, and so on.

Internal communication among researchers: For inter-tool triangulation and discussion over the research strategies and findings, researchers arranged a number of research "adda" sessions on Google Meet, WhatsApp, and Facebook Messenger.

There were also some limitations of using digital technology in terms of weak internet connection in the field. Apart from this, in some cases, respondents faced difficulties in sending visual content due to a lack of smartphones, which were required as a part of visual observation.

3.3. Respondent description

We interviewed 30 respondents over the telephone. 24 of them were from a list of the previous quantitative study conducted by BIGD. Since the previous study was on digital literacy and we found that most of the 24 respondents were digitally literate, we were interested in receiving their impressions on the virtual BCC contents of the BRAC Communications department. The remaining six respondents were selected from the BRAC WASH programme's beneficiary group. Of these 30 interviewed respondents, 22 were male, and 18 were female. The average time duration of each interview was 50 minutes.

We also carried out shadow interviews (average time 40 to 50 minutes) with four BRAC field workers and virtual FGDs (average time 1 hour) with two more respondents from the BRAC WASH beneficiary group. The following table shows a numerical projection of the number of respondents.

Respondents were selected from Dhaka and Khulna regions of Bangladesh. Respondents of the previous quantitative survey were from Dhaka and the list of BRAC WASH beneficiaries were from Khulna.

Numerical projection of respondents

Tools	Description of the respondents	No. of interview/discussion
IDIs	Respondents from the digital literacy group	24
	BRAC wash beneficiary group	6
Virtual FGDs[1]	BRAC wash beneficiary group	2
Shadow interviews	BRAC field staff	4
Total number of interviews/discussions (individual and group)		36

[1] Every virtual FGD consisted of 3-4 respondents

3.4. Research area

This study aimed to obtain insight into the practices of hygiene and other COVID-19 health guidelines. We selected Dhaka and Khulna regions as our research fields. During research site selection, we emphasised the importance of understanding the contextual landscape of BCC, of geographical areas where BRAC is implementing pilot intervention targeting the COVID-19 crisis.

We had the intention to garner some insight into the existing handwashing practices at the community level in the pilot project area. We are also required to execute another rapid process evaluation of these pilot HWS.

3.5. Fieldwork and data analysis

A thematic approach was used to analyse the entire field data and the researchers' reflections. The final research findings emerged from the aggregation of the verbal interview data, visual observations, researchers' reflections, and the different levels of discussions among the researchers and/or with the respondent groups. Our research team members often discussed the themes, sub-themes, and findings informally in an *"adda"* atmosphere. We maintained an inter-tools triangulation of the findings from interviews, FGDs, shadow observations, and visual observations.

Moreover, we carefully went through the visual content collected from the respondents and categorised them according to the identified themes and sub-themes. These visual observations also helped us uncover the existing barriers that people face while complying with the COVID-19 health guidelines, while translating the BCC knowledge into their daily behavioural practices.

4. Findings

4.1. Sources of information

Delivered through all types of sources, the ongoing pandemic has created a surge of new information. We classified the different sources of information regarding COVID-19 updates, health guidelines-based on BCC knowledge, and even the misconceptions into two broad categories—formal and informal.

A. Formal sources of information

In this study, we defined formal sources of information as that which distribute information through the government, non-governmental organizations (NGOs), mass media, or such established authorities. These sources include television, newspapers, radio, mobile operators along with digital and virtual platforms (e.g. government and WHO websites), and awareness development initiatives of national and local government authorities. People were primarily exposed to updates about COVID-19 and related health guidelines through these formal sources. It was also perceived that the formal sources of information had some extent of authoritative capability and general authenticity, which made people trust these sources. Among the different formal sources of information, TV and announcements (miking) at the community level were found to be very popular, the former of which was the most used formal source of information among all groups of respondents. In addition, mobile operators also played a perceptible role in awareness development at an individual level by reminding them of the key points of national health guidelines before making a new call. In this regard, one male participant (46) said,

> *"When I call someone, the phone tells us what to do and who to call if we need help. The message plays on repeat until the other person answers the call."*

Television was found as the most used formal source of information among all groups of respondents.

B. Informal sources of information

Informal sources of information are those which distribute information through informal and unauthorised entities or institutions. Often communicated through social media sites like Facebook, Twitter, and YouTube, and informal discussion groups, these sources include social and religious leaders, word-of-mouth, community discussions (for example, social gatherings at tea stalls), and advice from the elderly or educated family members. The process of passing on information from one family member to another is best illustrated by the example of one of our respondents, a housewife, whose son is a graduate and runs a business in the local market. She said that her son was very careful and influenced all household members to wash their hands with soap. Convinced that her son is knowledgeable about how the world outside operates, she heeds his advice thoroughly.

Like educated adults, children were also found to be relatively more cautious in reminding their parents—especially the male members of the family, e.g., fathers who frequently commute outside their home—to follow Coronavirus-related health guidelines.

> *"When my husband returns home from the bazaar, my daughters repeatedly remind their father to wash his hands and legs in the tube well before entering the house. They keep on nudging him until he does so."*
>
> — A female participant (55)

Moreover, respondents who were scared of Coronavirus-induced deaths and getting infected themselves were found to be more aware of and careful in maintaining COVID-19 health guidelines. On the other hand, due to its ubiquitous availability and the ease of sharing unchecked information, social media like Facebook and YouTube contain an abundant pool of misinformation and misconceptions,

which were found to create confusion among the people and lead them to rather dangerous practices.

Information collected via different qualitative tools showed that a mixed perception existed in the minds of the community people.

4.2. Handwashing

To mitigate the spread of the virus, the government has laid out some specific COVID-19 health guidelines for people to follow. Among them, handwashing is one of the most important daily life behavioural practices. The following sections describe what people think of and know about handwashing (i.e. knowledge), whether and how they wash hands in their everyday lives (i.e. practice), and what, if any, the difficulties they face in order to do so (i.e. barriers).

4.2.1. Knowledge

Examining the state of existing knowledge and perception regarding handwashing practices at the community level, we found that some of the ideas people have on this subject are correct, some are partly correct, while others are entirely inaccurate. Based on the level of the accuracy of people's knowledge of hand washing, we divided this section into three subsections:

a. Correct knowledge

b. Partially correct knowledge

c. Misconceptions

We considered knowledge that follows national health guidelines and standards (based on UN standards) to combat COVID-19 infection rates as correct. Knowledge that partially complies with the national guidelines was considered partially correct, and knowledge that does not comply with any national standard guidelines was labeled as misconceptions.

a. Correct knowledge

Through the use of different qualitative tools, several ideas, beliefs, and notions came into light, which could be classified as correct knowledge. Interestingly, a large percentage of the non-homogeneous groups of respondents had an adequate understanding of the importance of following the handwashing-oriented protocols and health guidelines. Nearly all the respondents displayed their awareness about handwashing practices before taking meals and after using toilets. Drawing on the COVID-19 crisis, they also expressed extra concern and the importance of handwashing in this regard. One housewife from a peri-urban area explained,

> *"Normally, we used to wash our right hand before taking our meals three times a day, but nowadays we are trying to wash both hands and use soap every time we do so. I am also more conscious about my children when they eat something without washing their hands first."*

Apart from this, many respondents were found to be careful about washing their hands before entering their homes after being exposed to crowds or returning from a trip to the market. Several respondents were aware of the fact that using soap when washing their hands was imperative during such a pandemic, as soap can kill the Coronavirus. One of the male respondents noted,

> *"Coronavirus enters our bodies through our hands. Just as you need to eat rice to survive, you need to wash your hands to survive. Just as people cannot live without rice, people will not live without washing their hands. It is necessary to do so in order to survive."*

Some of them also recognised that washing both hands with soap not only protects them from COVID-19, but also from many other diseases, such as diarrhoea, typhoid, etc.

As an alternative to soap, a few people preferred the idea of using hand sanitizers, especially where soap and handwashing facilities are not readily available. Though the majority of the participants had an understanding of washing both hands with soap and/or sanitizers for a certain amount of time, the exact time is not familiar to many of them.

Female respondents, particularly those who were more involved in household chores than men, shared that whenever something unclean, such as cow dung, garbage, animal waste, or anything that looks dirty, was touched, one should wash their hands with soap.

A few female respondents from *Sanatan Dharma* (Hinduism) who performed Pooja (prayers) daily,

suspected that unless soap is used for cleaning, simply changing clothes and bathing before performing *Pooja* may not remove the risk of getting infected.

In the Muslim community, on the other hand, one is required to perform *Oju* before performing every *Namaj* (saying prayers), i.e. five times a day. As *Oju* requires washing hands intensely along with other parts of the body, most of the Muslim respondents had a positive impression regarding *Oju* in terms of cleanliness. In this regard one male respondent said,

> *"The possibility of removing other germs, including Coronavirus, is more likely during Oju than it is from normal handwashing, as during Oju we wash not only our hands but several other parts of our body ritually. Not to mention, using soap is more beneficial because it removes germs compared to using just water., People don't usually use soap while performing Oju."*

There were narratives in which female respondents were believed to be more cautious than the male members of their family, as they tend to wash their hands more frequently while cooking, cleaning utensils, and washing clothes. From the community insight, we noticed that the nature of work, working environment, and structural facilities (for handwashing compliance) at workplaces have a significant impact on how frequently people wash their hands. Here the gender division of daily life activities allows women the opportunity to wash hands frequently while working inside the household. At this point we found that many women were informed about COVID-19 and the health measures through various sources of information. However, different levels of obstacles were being faced as per their socio-economic and cultural context. In most of the cases, we found that women were aware and using soap whenever they washed their hands. Contrarily, the majority of men were usually familiar with the necessity of handwashing, especially if they worked outside their homes in crowded public places, such as markets and roads. Some of the male respondents were also found to be aware of using hand sanitizers outside their homes. On the other hand, violations of the suggested handwashing protocols were also common, as workplaces had little to no handwashing facilities and the majority of males did not have the option to wash their hands.

In this regard, a rural farmer pointed out,

> *"I work at my farming plots where there are no crowds. I feel safe there. After the Coronavirus outbreak, I kept a piece of soap in my water pump house so that we could wash our hands after finishing our daily work in the field. But when I went to the market to sell my crops, I didn't get the opportunity to wash my hands with soap. I finally washed and cleaned myself at my tube well after returning home."*

b. Partially correct knowledge

While interviewing the respondents, it was found that some of their beliefs, ideas, and notions regarding the practices of handwashing and complying with Coronavirus-related health guidelines were not precise, yet not entirely inaccurate either.

Some respondents were aware of washing both hands with soap for a certain amount of time, but many of them did not know the exact duration.

> *"You have to wash your hands very well and you have to wash your hands for five to six minutes."*
>
> — A male participant

Contrarily, a female respondent was informed that she had to wash her hands for 20 seconds. She said,

> *"It is not possible to maintain 20 seconds of handwashing with soap every time. I wash my hands with water frequently, and as I don't leave my house that often, it's okay to sometimes skip handwashing with soap."*

A similar idea is shared by many other respondents who believe that frequent handwashing is only important if you visit crowded places outside of the home, like a bazaar.

The people interviewed perceived gloves as a protective measure or shield for hands against germs that they could easily be exposed to while travelling outside. However, rather than using gloves as another layer of protection, they believed them to be a substitute for handwashing.

There were a few respondents who thought that frequent use of soap could cause rashes and lead to dry skin.

We also found several participants who were aware of being infected by another individual, but totally unaware of the fact that transmission is also possible through objects.

c. Misconceptions

The following section is categorised as misconceptions, since these beliefs and ideas go completely against the national guidelines for COVID-19.

People who perform *Oju* five times a day before their prayers believe that they do not need to wash their hands frequently. Some of them also believe that frequent handwashing is pointless, as they are performing *Oju* properly. One of the male participants explained,

> *"During Oju people usually wash their hands, face, nose, legs, etc. intensely as a part of the religious ritual. So I believe it cleans us. Performing Oju five times a day can protect us from the Coronavirus."*

People did not have the fear of COVID-19 transmission when they were with family members and neighbours. They felt that there was no need to wash their hands inside their homes and at local gatherings with neighbours and relatives, who stop by for a quick chat. Some respondents believed that frequent handwashing would make them catch a cold, which would result in being infected with COVID-19.

One of the respondents argued,

> *"Excessive handwashing and water use can cause us to catch a cold, which may turn into the Coronavirus."*

Confusion and misconceptions regarding the presence of the virus on objects were also observed. One male respondent said,

> *"Through the internet, we have seen if the virus gets on clothes, it takes 25 minutes to die, so we don't wash the clothes anymore. I leave the clothes aside for the virus to die. I just wash my hands after returning home."*

4.2.2. Practices

We observed some positive practices of handwashing among the respondents. The frequency of handwashing, for example, has increased. Given that we are going through an unnerving crisis and the situation demands various changes to our behaviour, many respondents perceived this change in handwashing positively. Some of them strongly believed that it could protect them from the fatal virus. One male respondent noted,

> *"There is a fear in our minds of getting infected by the virus, which is why we are careful and try to stay safe from this deadly infection."*

A female respondent also shared similar thoughts, saying even though everybody dies someday, dying from the Coronavirus would be a rather ill-fated death, which she expressed in Bengali as *"ku-mora"*. The perception of *"ku-mora"* emerged from the *"new funeral practice of death from Coronavirus"* where not even one's own family members, relatives, neighbours, etc. can attend the funeral and is deemed very unfortunate for an individual from the socio-emotional perspective.

> *"I want just one thing from God: please do not give me a 'ku-mora'," she added. "I don't want 'ku-mora'; I want 'su-mora'. That's why I try to stay safe and practice washing my hands regularly. It was rather annoying to do so in the beginning, but now it's a habit"*

According to a member of BRAC staff, once people grasp the information, they understand the importance of hygiene and cleanliness. Since handwashing was already a part of their regular activities, it was not too challenging for people to wash their hands frequently with soap after the COVID-19 outbreak.

In addition, several people shared that they were using soap more frequently during the COVID-19 crisis and washed their hands with soap before and after having meals. People stored water and soap at the doorsteps of their houses so they could wash their hands before entering. Respondents from rural settings were also seen hanging soap in a net bag next to the tube well for easy access.

Some of the beneficiaries of the BRAC WASH programme informed us that they tried to wash

their hands at tube wells, and changed clothes after returning home.

Based on the narratives, it was understood that people were following the new practices based on the health guidelines in order to stay physically sound.

People who were familiar with hand sanitizers were found to be using them. In urban settings, people sanitized both hands frequently, when surrounded by crowds in their workplace and outdoors. A few people kept hand sanitizer in their offices and carried it along when travelling and used it when required. Certain elderly people did not use hand sanitizers, but they appreciated this new practice and motivated others, especially the new generation, to continue doing so. One elderly male participant said:

> *"Everybody is trying to stay safe. I live near a high school, so nowadays I have noticed children and teenagers carrying hand sanitizers with them. They just take the small bottle out from their pocket or bag and use it quickly to clean their hands right after paying cash to the van rider or after talking to their fellow mates. This is new and I feel good when I see this."*

The mosque committee provided soap at the designated *Oju* stations so people could wash their hands before performing their ablutions. Via visual observation, it was seen that a bar of soap in a green net bag (often used as a carrier bag) was hung on the water pipe to promote frequent proper handwashing practices.. It was found that quite a lot of people had become more solemn about saying their prayers during the Coronavirus pandemic situation. Some Muslim respondents believed that prayers might protect them from getting infected since they were performing *Oju* before every prayer (at least five times a day). One of the participants said,

> *"Normally we do not wash our hands five times a day, but before we pray, we perform Oju, we wash our hands, faces, and legs. So if I pray five times a day, my hands also automatically get cleaned five times."*

Positive practices were initiated not only due to the willingness and motivation of the community people but also the fear of getting infected by a virus invisible to the naked eye. Some respondents thought religious beliefs and practices such as *Oju*, played supportive roles in maintaining hygiene and cleanliness.

Another female participant shared that it is important to wash clothes right after returning from work. This is why she only wears a saree made of synthetic fabrics such as Georgette, as they are easy to wash and dry quickly. Wearing the same saree to work every day is not an issue for her.

4.2.3. Barriers

Even though the practice of frequent handwashing had increased in the communities, there were still a wide range of barriers that prevented people from engaging in this essential practice more widely. The identified barriers can be classified into two categories: a. personal and b. structural. Personal barriers are those which can be overcome by bringing changes in personal beliefs and/or behaviour, whereas structural barriers are those which lie beyond the control of an individual.

a. Personal barriers

Our study shows that the personal barriers that people face in washing hands more frequently are largely behavioural, which is influenced by a wide range of constituents—from one's socio-cultural upbringing to personal beliefs to reluctance or lack of motivation to perform extra tasks in order to stay clean and hygienic.

Habitual traits of not washing hands made people reluctant to wash their hands frequently with soap. Moreover, forgetfulness in following the Coronavirus-related health guidelines remains an issue, as one male participant noted,

> *"The truth is I don't always remember to wash my hands every day and all the time. If I came from outside and I remembered to wash my hands, I did so. But I don't always remember to wash my hands with soap. I wash my hands with water before eating. Washing my hands with soap all the time is impossible."*

Even those tasked with providing health guideline-related training to people often fall victim to the same habitual forgetfulness. As one of the respondents from BRAC who provided health guidelines on the Coronavirus explained,

"I always suggest other people follow health guidelines. I believe it is my duty to create awareness. I consider myself a part of BRAC too. But to be honest, maintaining all the guidelines for Coronavirus and hygiene is not always possible. I don't remember all the steps, as I am not used to it. Even if I don't follow all the guidelines, I suggest others follow it."

On the other hand, a few respondents found it difficult to adopt and exercise this practice, as according to them, certain activities such as picking their noses or rubbing their eyes were completely involuntary and habitual. It was difficult for them to stay cautious about not regularly engaging in these actions. One female participant mentioned,

"It is very difficult to restrain from regular practices which have become kind of involuntary such as picking my nose or rubbing my eyes. So whenever I do that, my daughters discuss my actions in front of others. This is very embarrassing and causes me to rush and wash my hands."

Moreover, a few *Shastho Kormi*[2] (SK) also perceived that no matter how much people tried, it was not possible to follow the exact handwashing process and steps shown in the flowcharts provided by BRAC in real life.

In other cases, once they witnessed a patient catch the virus, they were momentarily frightened and were more cautious about handwashing practices. One of the female participants shared,

"A few months ago, a person in our village tested positive for COVID-19. I can't explain how scared we were. At that time I washed my hands frequently. Now the patient is well and I don't wash my hands as much now. I can't actually explain why I have reduced the frequency."

From her narratives, it became clear that with time, people who had started to wash their hands with soap frequently forget the severity of the crisis and eventually return to their previous routine.

[2] A frontline worker of BRAC's health programme who provides basic healthcare services in the community.

b. Structural barriers

Even if one overcomes the personal barriers mentioned above, there still exists a large set of structural barriers that originate from different socio-economic settings. These include:
Lack of handwashing space facility:

Informal workplaces of different occupations (shop keeping, driving, etc.) do not offer people the facilities of handwashing and cleanliness.

"I don't use hand sanitizer. Usually, I don't wash my hands when I am outside. There are no handwashing facilities at the place that I work. We also don't wear masks at my workplace, to tell you the truth."

Financial constraints: Purchasing soap and hand sanitizer lead to additional expenditures for middle and low-income people and it is rather challenging for them to afford these products in their daily life. One female participant said,

"I am not financially well off so I can't buy too many bars of soap. I wear gloves when I go outside. I reuse the gloves after washing them. We can't do what we are told because of financial constraints. So, I just wash my hands twice, once after entering the office and once again after returning home."

Her narratives suggest that even if the people want to abide by the new health guidelines, many of them are held back by their financial constraints, as they cannot afford soaps and hand sanitizers to keep their hands clean. There were also participants who said that they could not use as much soap as they needed. As soaps are expensive, the practice of using one bar of soap per every household was also found among those that shared a common water source. One female participant said,

"We do not keep soap beside the source of water (tap) because five households use it. Everybody takes their soap back with them after using it. No one shares their soap."

People were usually unenthusiastic about using hand sanitizer outside of their homes. Some of them have never heard of it. The lack of basin facilities and the distance between the house and the handwashing area also deter people from frequent handwashing at home.

Perception of the context: According to several locals, the rigidity of the rules and regulations imposed by the government and the local authority has gradually been set to a subtle and relaxed mode. People were going back to work to earn a living. One male participant said,

> *"What will people do? For example, a person who is a van puller will starve to death if he is not allowed to work. If we do not follow the guidelines, people will die. If we follow the guidelines, people will die. Follow them or don't follow them, people will die no matter what!"*

Some of the local people also said that the monitoring initiatives were not strong enough so they did not feel the pressure to follow the handwashing protocols. Another male participant remarked,

> *"There is no initiative from local administration to monitor if we are following the rules and regulations. There is no one to remind or ask us if we are washing our hands or not."*

As the findings show, reluctance and forgetfulness might pair up to lower the number of people washing both hands with soap for 20 seconds, but the structural barriers are also playing an undeniable role here.

Despite the various obstacles to regular handwashing, the tendency of ordinary people washing their hands during the COVID-19 period has increased more than ever before. However, it is alarmingly noteworthy that torn between the necessity to make a living and the need to adhere to handwashing hygiene, the relatively less educated, less aware, and poorer factions of the society are still lagging behind in developing this vital habit.

4.3. Use of Masks

Like handwashing, wearing masks in public is another vital protective measure in our fight against the Coronavirus. Similar to the previous sections, we divided the following sections into three subsections based on what people think of and know about face masks (i.e. knowledge), whether they wear masks (i.e. practice), and what, if any, are the difficulties they face in wearing one (i.e. barriers).

4.3.1. Knowledge

Similar to the findings of handwashing, we also found that people's knowledge of masks varies across their level of accuracy. Therefore, based on the level of accuracy of people's knowledge of masks, we divided this section into three subsections: a. correct knowledge, b. partially correct knowledge, and c. misconceptions

a. Correct knowledge

While speaking to the local people it came to light that they knew about masks and also the fact that masks should be worn while they were outside of the home. One male participant said,

> *"Everybody knows that we have to wear a mask when we go out."*

In addition, some people also thought that since masks were being increasingly recognised as important to keep themselves safe from the Coronavirus, people started to accept that speaking to an outsider, especially to the elders, while wearing a mask was not a sign of disrespect. One female participant said,

> *"I don't think speaking to someone while wearing a mask is disrespectful in any way as this has now become a practice maintained by most."*

On the contrary, some people also believed that it was all right to avoid wearing masks when they were socialising with a small group of friends, acquaintances, or neighbours.

The idea of washing masks using soap or soapy water after it had been used was also visible in the narratives of the participants. When participants were asked about the procedure of removing their masks, a few participants explained the procedure very admirably. They mentioned using one or two fingers to remove the mask by only touching the ear loops and not the front of the mask that was exposed to their surroundings. A few participants were also found aware of one-time masks and a few among them identified it by the *"colours white and blue"* or the masks *"used by doctors"* and the rest called it *"surgical masks"*.

People know about the legal actions that might be initiated by the government for not wearing masks. One participant said,

> *"I have seen the police charge fines for not wearing masks. But now the police are not doing that."*

Some people believed that the use of masks not only protects from the Coronavirus but also from dust which might cause them to be susceptible to lung diseases, such as asthma, allergies, or bronchitis. Some of them regularly used masks when they travelled, even if they did not have any previous health conditions. Several people who did not use one-time masks and instead used masks that were made of *"genji kapor"* (thick, soft fabric) believed that those were washable and could be reused if washed with soap.

b. Partially correct knowledge

In our study, several participants thought that wearing a mask at home was not necessary; rather, if an outsider visited their home for any reason only then should they wear a mask. Numerous people knew about wearing masks when they needed to go to places, such as bazaars, which are filled with crowds.

During shadow observation, some of the participants shared that through several sources, both formal and informal, they had learned that they needed to use masks whenever they were leaving their homes. However, they professed that they were only aware of the fact that they needed to wear masks but they were not aware of the correct use of masks and mask management. With the partial knowledge of mask use, they said that they did not know that the front of the mask should not be touched and the mask should be removed from the back.

During the visual observation, we also found that being unaware of mask management, people hung their used masks on a rope or kept it on the bed. According to them, there was no specific suggestion from the information source to tell them where the masks should be stored. Furthermore, the local people displayed confusion regarding what should be done before or after wearing a mask. They did not know if they should wash both hands thoroughly before wearing a mask and after removal of the mask. In the case of washable masks, there were findings which showed that people knew about washable masks which could be reused, but they seemed unaware of the fact that they might be required to wash the mask right after using it, rather than interchanging and wearing them until they were too dirty to use.

> *"I use masks made of cloth (cotton) and have 8/10 masks in store. I keep using them until they are dirty and need to be washed."*

Moreover, people believed that washing the masks was important and it did not matter if they were washed with other clothes while bathing. This idea is also associated with the belief that it is all right to wash other people's used masks. As a result, along with clothes, one person washed all their family member's masks together. There were also findings that suggest that people knew about mask use but did not have knowledge of the disposal of used one-time masks.

c. Misconceptions

Female participants, who were followers of Islam and wore niqabs and *burkhas* to cover their bodies as a part of their religious beliefs, were found to think that as they were using the niqab to cover most of their face except the eyes, they would be protected from the Coronavirus and did not need to wear masks. One female participant said,

> *"I wear a niqab, so I don't need to wear a mask."*

This idea is not only supported by the participant who wears a niqab; her husband and other family members also endorse it. One such husband argued,

> *"My wife wears a burkha and it works as a mask for her, so she does not need to wear an extra mask for protection. Her face is already covered."*

Several participants also believed that they did not need to wear a mask in front of people they knew well, such as cousins, neighbours, friends, co-workers, or at small community gatherings in places like tea stalls. They felt a sense of safety with familiar people and felt that they probably did not carry a deadly virus.

In our findings, many people were unaware and incapable of identifying one-time masks and did not know when to dispose of them. Consequently, it created the misconception that they can use one-time masks for several days until it is unusable.

There were local people who knew that they were supposed to wear masks while going outside. But they defined "outside" as the area that lies beyond their own village and considered every area within the village to be a safe environment where they did not need to wear a mask.

Furthermore, there were participants, especially those who worked on night shifts, who believed that it was not obligatory to wear masks at all times during work hours. Among those who shared this belief, some conveyed that this was due to less people being around, while the rest did not have any particular reason behind believing so, but did so nevertheless.

Several other misconceptions, often found on the internet, were observed among the respondents, such as the Coronavirus does not survive in hot weather, it does not spread during the day and hence cannot cause any harm. One female participant said,

> *"I dry my mask in the sun as Coronavirus dies in hot temperatures."*

Some respondents also held the belief that wearing a mask consistently was not mandatory if their surroundings were clean. To add to this, a few female participants from rural communities expressed that they washed their hands and covered their faces while touching anything considered dirty, such as cow dung, animal and bird faeces, and ropes with which cows are tied.

A number of people expressed that since there were no Coronavirus patients in his/her village, they did not need to be too serious about mask use while outside. Some also said that as they had not seen Coronavirus patients yet, they could not wholeheartedly believe and maintain the use of masks and other health guidelines. Furthermore, there were numerous Muslim participants who believed that contracting Coronavirus depends on Allah's will and thus, mask use does not make a big difference. Some were seen not to take the health guidelines too seriously, and only wear masks at will. One participant said,

> *"I just follow the health guidelines because the administration people have asked everyone to. It depends on my will actually. I feel like wearing a mask now. When I do not feel like wearing one, I will stop."*

4.3.2. Practices

Practices that align with the ones suggested in the Coronavirus-related health guidelines (i.e. positive practices) and the lack thereof are both observed among the respondents. This section provides a detailed description of the scenario.

a. Positive practices

We found people discussing awareness. While some of them conveyed that even if others show reluctance in using masks, they tried to abide by their Coronavirus-related health guidelines, such as the practice of wearing a mask while travelling or attending social gatherings. One female participant said,

> *"Frequent handwashing is a must in order to stay alive. Everybody has a fear of death but only those who are aware, wear masks in a bazaar. My husband talks about many people not wearing masks but he tries to maintain the health guidelines, as he is a teacher."*

According to the narrative above, her husband's profession was highlighted to demonstrate their intent in following the guidelines. Teachers are usually considered influential in society as they provide education to children. She believed that her husband's students look up to him, which leads him to follow health guidelines as much as possible.

When an SK from BRAC was asked regarding her mask management process she said,

> *"After washing and drying the mask in the sun I preserve it in a separate airtight bag. I keep it away from other clothes as it might contain the Coronavirus."*

The two female participants interviewed were both SKs from BRAC. They both wore masks and gloves while they were travelling to the field or to the patients' houses or to work. Among them, the participant who was a follower of Islam wore a *burkha* and a *niqab* whenever she headed outside. She also wore masks along with the niqab, explaining that they had been asked to do so in the training session provided by BRAC. She also elaborated by saying that a niqab did not filter the virus, making the mask necessary. There were community people who are observed taking extra measures while travelling outside their villages or regions. One male participant said,

> *"When I leave my village, especially when travelling to Dhaka, I take extra precaution. Dhaka is in the red zone and there is a possibility of being infected if I am not careful."*

His narrative suggests that the participant feels that Dhaka had a larger number of Coronavirus-infected patients than they had in his village. Therefore, it was important to take steps in order to avoid infection when travelling to Dhaka. There were additional findings, which suggested that some people used masks because of the strictness of the government law enforcement agencies.

b. Lack of practice

The sense of safety that respondents reportedly felt with people they know well, has led them to only wear a mask when travelling outside. We also found that due to a lack of adequate and proper information on the difference between and usage of one-time and reusable masks, people used one-time masks repeatedly instead of disposing of them. One male participant said,

> *"I continuously use the mask that is used by doctors for 3/4 days unless it is damaged."*

When asked about where the masks were stored, one male respondent shamefully admitted he had no dedicated or separate place to store his masks. He added,

> *"I am a little embarrassed to say that I don't have a dedicated place to store my masks. Most of the time I leave it in the basin and on the table. Sometimes I forget about it completely."*

In another case, a male respondent stated,

> *"I keep the mask in the pocket of my pants. That is the safest place to keep it. This allows me to remember to carry the mask when I go out, as I will be wearing the same pants. I don't think a separate place is required."*

During the visual observation it was also seen that people left their used masks here and there, such as the bed, table, basin, beside the tube well, inside garbage cans without lids, and on the streets. There was no covered dustbin in their home for disposing one-time masks. Low-income households, where all members of the family share one or two rooms, found it difficult to assign different places to store their previously used masks. As a result, all the family member's masks of are often stored in the same spot. There are also female participants who did not wear masks when people visited their house. They believed they could cover their face with their veils instead of masks.

> *"Several people come to my house. I don't wear a mask inside my house when people come to visit. What I do is cover my face with the veil of my dress."*

According to some participant's statements, people in rural areas have nearly stopped wearing masks altogether. They only wear masks where it is mandatory to do so, in places such as the electricity office and banks. Very few people who are educated and health-conscious still practice regular mask use.

4.3.3. Barriers

There are many barriers that prevent people from wearing masks more often, as per the national health guidelines. Similar to the barriers in handwashing, they can be classified into two groups: a. personal barriers and b. structural barriers. Since the former can be overcome by the individual themselves, the latter requires collective effort and changes from the society and the different bodies within.

a. Personal barriers

The personal barriers identified in this study that prevent people from wearing masks properly are largely habitual and behavioural. These include:

Physical discomfort: Several participants expressed concerns regarding mask use, especially in the summer. They complained about excessive sweating in the area of the face covered by the mask. A few participants also felt uncomfortable wearing masks for a longer period of time as they felt it caused difficulty breathing.

Uncertain perception (lack of information): Some of the respondents had the impression that wearing a mask might lead to other health-related problems. One male participant explained,

> *"While wearing a mask, when someone inhales oxygen, hot air comes out while exhaling. This hot air touches the nose and the face. The air that I am exhaling is re-entering through my nose and travelling to my stomach. I have no clue if this is causing any problems in my body."*

A similar perception was offered by one of the other participants who believed that the masks

that they used were not good for health and could cause diseases like asthma.

Socio-cultural daily life (behavioural practices): There were findings that portrayed that several people remove their masks when they speak to others, as they believed that masks create problems while speaking. They feel that wearing a mask while speaking looks odd and they cannot be heard properly. One male participant said,

> *"Masks hamper the beauty of speaking."*

Meanwhile, some of the local people believed that everything depends on the Almighty's will. So, according to them, it doesn't matter if they wear masks or not.

b. *Structural barriers*

The aforementioned barriers are worsened by the existing structural barriers, which are rather difficult for an individual to overcome. Some of these structural barriers are as follows:

Weakness in overall BCC awareness messaging: During the shadow observation, participants reported that they had come to learn that they needed to use masks if they travelled outside their home, through different sources, including formal and informal. They claimed, furthermore, that they were only conscious of the fact that they needed to use masks but were not aware of the appropriate use of masks and its management. This gap in knowledge about proper mask usage prevents them from knowing whether they should or should not touch the front of their mask and how they should remove it. According to them, there is no specific suggestion from the information source that could clarify in detail the steps that must be followed regarding mask management. Dissemination of inadequate information has created the emergence of partial knowledge among the local people leading to some malpractices.

Socio-economic aspect of affordability: A farmer by profession, one of the respondents from the rural area stated that good masks were expensive and beyond his affordability. Therefore, he had to settle for low-quality masks, which were uncomfortable and not as effective in preventing the risk of infection as the more expensive ones. He explained,

> *"The masks that we use are not good for the breathing system as they make the face sweat more and can cause asthma. Comfortable masks which are good for breathing are very expensive and unaffordable to us."*

Comfortable but expensive: On the other hand, another respondent who is a public university student said that surgical masks for one-time use were comfortable. However, they were an unbearable burden on his everyday expenses. He stated,

> *"I think one-time masks (surgical) are comfortable but I cannot use them regularly because spending BDT 20 per day for a mask is quite expensive. Usually, when I am in my village territory, I wear a mask made of thick cotton. It feels uncomfortable and I do not use it all the time. I wear the mask when I go outside for tuition and to the market. But I use a surgical mask when I have to go to Dhaka to attend to emergencies."*

Loose administrative effort in making people practice: Slack monitoring, imposing charges, and taking legal action from the administration regarding Coronavirus-related health guidelines, especially the use of masks outside, might have caused people to relax and disobey the instructions.

In the early days of the Coronavirus pandemic, the habit of wearing masks while travelling outside of one's local area and surveillance from the administration was noticeable. As the administrative strictness continues to decline for reasons like the life versus livelihood debate, socio-cultural events, and so on, this picture is becoming less and less noticeable. Note that the information about the proper guidelines of mask usage that is reaching people, considering the living patterns of people of different socio-economic classes, are also insufficient in some cases. Overall, we find that the habit of wearing a mask outside the house is relatively low at present.

4.4. Social distancing

Besides washing hands and wearing a mask, maintaining social distance is one of the most effective measures against COVID-19. Our study findings show that though the majority of the participants know about social distancing,

they have diverse perceptions of it. Moreover, their knowledge of social distancing sometimes differs from their practice, while some of them face various impediments trying to do so. Which is why similar to the other sections, we have divided this section into three subsections: knowledge, practice, and barriers. While the first subsection describes what people know and understand about social distancing, the second subsection details how they practice it, while the third lists the barriers that prevent people from practicing social distancing.

4.4.1. Knowledge

As in the domains of handwashing and masks, people have knowledge about social distancing. Some of this knowledge is (a) correct, some are (b) partially correct, while others are entirely (c) misconceptions.

a. Correct knowledge

It emerged from the interviews that several participants knew about the importance of maintaining social distancing. A participant said,

> *"I think social distancing should be maintained for staying safe from Coronavirus."*

By the same token, they were also found to have the understanding that social distancing means maintaining a distance of three feet from each other while they are outside. They were observed to measure three feet distance as three-hand distance (the length of three hands). One male participant said,

> *"We understand maintaining social distance as maintaining a distance of two to three hands"*

According to numerous participants, everyone should maintain a safe distance from each other during this crisis, which they believed could limit the spread of the virus.

Based on our collected data, many local people are familiar with the legal actions for failing to comply with social distancing guidelines in the office space. They are aware that they have to wear masks and maintain social distance in places, such as banks, electricity offices, etc. where it is compulsory to maintain social distancing, A participant voiced that during this pandemic he should not wander around outside. He said,

> *"The situation in the country is not very good, so it is better not to roam around."*

It also appeared that some of the participants have an understanding of avoiding crowded places during this pandemic. According to them, the probability of transmission of the Coronavirus is high at mass gatherings. A few of them also shared their awareness regarding the significance of maintaining social distance in order to protect themselves from other people's sneezes and coughs.

b. Partially correct knowledge

We found that people receive information about social distancing guidelines from several sources. But we observed that in some rural contexts, "home" means one's own village and "outside" is understood as the area that lies beyond the village. This has led several local people to translate social distancing as the practice of maintaining distance from an outsider who does not live in the village. They do not feel the need to maintain such distance from insiders (i.e. people who live in the village and are well known).

There are several findings which show that people consider crowded areas as the only places where they should maintain social distancing, but there seems to be a gap in their understanding, such as that crowded places are not the only areas where it is obligatory to maintain social distancing. They display confusion and partial knowledge to the fact that Coronavirus could also be transmitted in a non-crowded place and from an infected individual. Though it was evident that people can comprehend maintaining social distancing as a requisite for staying safe from the Coronavirus, some of them, nevertheless, do not have an adequate idea regarding why social distancing is effective and how it works.

c. Misconceptions

One of the participants thought that maintaining social distance in *Jamat* (the act of saying prayers together) is unnecessary since they did not follow such rules prior to the pandemic.

> *"Nowadays everyone has to obey the new government rules, but there are no rules over Allah's rules. There is no need to think about social distancing in Jamat when it's time to pray to Allah. Many people*

maintain a little distance during Jamat, but I don't believe in such practices. Because Allah's law is not like that."

In this regard, another participant remarked that it was not possible to maintain social distancing from close people, as most of them believed that they would get infected only if Allah wanted them to.

A very few number of participants residing in a rural area mentioned that they did not think it was necessary to exercise social distancing with anyone in their region, as the chairman had taken steps to place outsiders under quarantine for at least 14 days.

4.4.2. Practice

In some contexts, the practice of social distancing appears to be positive, i.e. is consistent with the national guidelines. But in others, no such practices are observed.

a. Positive practice

Besides discouraging casual visits to a neighbour's house, participants from some rural communities spoke about the discontinuation of *haat* (A market in a rural area).

"Nobody goes to each other's houses anymore like they used to. Even haat is also not taking place. Our Member of Parliament (MP) has declared that mass gatherings increase the risk of infection."

Some of the participants who have financial constraints spoke about the demerits they are facing due to the closure of haat as they could buy things at a relatively lower price. Nevertheless, they agreed with the fact that *haat* is usually more crowded as not only villagers, but outsiders gather to purchase goods. So, in order to avoid large crowds, there was no other option than to cancel the *haat*.

According to the participants, visiting neighbour's houses in the evening was a common practice. But after the pandemic started, people have limited their visits and stay inside their houses and spend more time with their family members. One female participant said,

*"Neighbours used to seek suggestions from me, as they considered me knowledgeable regarding healt*h issues and how to treat sick people. I used to enjoy giving advice, but now this has stopped."

To add to the point above, a few people have also changed their regular habit of staying outside unnecessarily, as mentioned by a respondent who used to go out to sit at tea stalls, but has stopped after the COVID-19 breakout—although he has seen people going there and not maintaining any social distance. Another female participant said that she completely avoids social gatherings to such an extent that she did not allow her maternal uncle to enter her house. Moreover, no unknown person is allowed inside her home; if someone comes, they stand in front of the gate and speak from there.

While travelling to the bazaar, a few locals mentioned that people are now congenial with short greetings and small talk like "hi", "hello", and "how have you been?" As both parties follow this practice, there is no question of disappointment or dissatisfaction. Another female participant said,

"No one is visiting anyone's houses, so everybody has accepted it. If anyone is suffering from fever, others warn us to maintain a safe distance from their house. Nobody really minds these days."

A few people are really aware and cautious of the Coronavirus, and try to maintain social distancing outside their homes. For example, one participant said that he tries to maintain a minimum distance from people in the bazaars and markets. In contrast, another female participant mentioned that it is not possible to follow social distancing in places of mass gatherings, such as bazaars.

According to a significant number of the local people, they try to maintain social distancing in places such as banks, electric offices, government and/or non-government offices, where it is mandatory to do so and try to maintain a distance of at least three feet with officers at the desk. One of the participants conveyed that part of his duty is to re-arrange the seating arrangements for the staff and customers in accordance with social distancing guidelines to avoid punishment from the local administration.

The fear of getting infected by the Coronavirus made a few participants stop visiting their relatives' houses. One of the female respondents, who is a teacher, tried to make her students grasp the importance of maintaining social distancing. She believed that if she could

make her students aware, the knowledge might also spread among their families.
During the early phase of the pandemic, the local administration used to draw circles three feet apart from one another in front of shops, pharmacies, banks, etc. for people to stand inside, and ensure social distancing. Currently, however, this kind action by the local government is no longer seen.

b. Lack of practice

Participants claimed that it has become a regular phenomenon, as it was prior to the pandemic, to move freely in public places without any measures taken to follow Coronavirus-related health guidelines. In addition to in-depth interviews, it was found in the shadow and visual observations that throughout the early days of the Coronavirus crisis, people were terrified and tried to strictly abide by the safety guidelines, including social distancing. At present, their level of concern seems to have decreased significantly. One participant said,

> *"When I see the movement of people in the bazaars, it seems there is no Coronavirus in the country."*

As there is a lower number of people infected by the Coronavirus in rural areas, compared to the capital city, the practice of maintaining social distance is almost nonexistent and locals do not seem to be too aware of maintaining social distance anymore. When a participant was asked why people did not maintain social distancing, he replied,

> *"Other countries are following the rules but our country is not. Things don't work like this here. Nobody maintains the guidelines, what to do?"*

Another participant said,

> *"People in Bangladesh are like that. They won't listen even if you ask them to."*

Seeing others ignore the health guidelines, especially social distancing, also discourages people from following the rules, as they feel that it is of no use if they do it alone. One of them said,

> *"Nobody follows the rules, so I don't either."*

He also mentioned that when strict restrictions were imposed, he saw women wearing *burkhas* strolling, window-shopping, and buying things everywhere he went. The police could not say much to them, as they were women. Many participants also said that villagers often come within close proximity to speak to each other during a conversation as they are habituated to this manner of discourse.

Moreover, a lack of administrative monitoring was observed within the communities. There were some initiatives taken by the local administration to maintain social distancing in local markets, which do not seem to be in place currently. One respondent said,

> *"Law enforcement agencies hardly come and try ensure that people maintain social distance."*

Through shadow observation, we also found that when people do not see any Coronavirus patients around them, they become reluctant to follow hygiene practices as well as maintain social distancing in some cases. Some are also reluctant to maintain social distancing as they have gotten over the fear of the virus. One female participant said,

> *"Now people do not fear Coronavirus because they think they will recover even if they get infected."*

4.4.3. Barriers

The reason why increasingly fewer people are maintaining social distancing guidelines is because of the various barriers that prevent or discourage them from doing so. These barriers can be classified into two groups: a. personal and b. structural.

a. Personal barriers

Though people are conscious about maintaining social distance from unknown people, when meeting familiar people, they feel a sense of safety and trust, leading them to believe that they will not get affected by the virus. A participant shared his thoughts,

> *"I do not care about maintaining social distance when I meet my friends in the village, but I am cautious when I meet someone I don't know. I try to keep a distance (two-three feet) from that person. I*

do it to prevent myself from getting infected by the Coronavirus."

Other participants also shared similar narratives that they do not maintain social distancing from their family members or relatives who come to visit them. According to respondents, it is not possible to maintain social distance from family members, even though they come from outside. People living in areas where the number of Coronavirus-infected patients is relatively lower or insignificant compared to that of the capital city are also reluctant to follow social distancing guidelines. A participant said,

"I have not seen any patient who is infected by the Coronavirus. I have just heard of it."

b. Structural barriers

Besides personal reluctance to maintain social distancing, various structural barriers also prevent people from following this essential guideline. According to a male participant, maintaining social distance in a densely populated country like Bangladesh is an unrealistic concept and impossible for anyone to follow. A female teacher (home tutor), also voiced a similar opinion,

"I can't practice social distancing while teaching students due to space limitations and also because of the unawareness of the students."

Non-compliance from people also affects the decision-making and thought process of other people and leads them to ignore social distancing guidelines. Based on their narratives, as most of the people on the roads and markets are unaware of and unwilling to follow social distancing guidelines, someone who is trying to maintain social distance inevitably runs into such people.

As explained by a respondent, when he goes to a store he needs to hold the things he buys, take it from somebody's hand, exchange money, and come into contact with other buyers. If the seller or any of these other buyers are not practicing social distancing, he added, it is not possible to maintain distance for them either.

To some male participants, it does not seem feasible or possible to stay inside the house all day, so they need to go outside. But as almost no one maintains social distance, it is difficult for them to always maintain it in a crowded place as well. One of the findings also conveys that social distancing cannot be maintained at banks, as people have to wait in the queue in close proximity with other people to enter the bank as well as to receive services.

Social distancing is one of the most effective preventative measures against COVID-19. Yet, it is evident that even though people know about social distancing guidelines, very few people in the local community maintain them. Other people's reluctance to follow the guidelines makes it difficult, if not impossible, for the people willing to follow them. Further impediments that people face in maintaining social distancing include the lack of adequate knowledge about social distance guidelines. Moreover, local people find it much more challenging to bring such a vast change in their habits and behaviour, hence the reluctance in following the protocol is apparent in their narratives.

4.5. Knowledge and Perception of "Germs" in Practising Health Guidelines

Based on the interviews, FGDs, and shadow observations, we found that people hold different perceptions of germs. These perceptions differ according to one's socio-economic, cultural, educational, access to information, and habitual context. An educated respondent who follows daily Coronavirus-related updates on TV and social media said,

"Coronavirus is a disease which spreads through contamination. It spreads through breathing."

On the other end of the spectrum, exist those who believe that Coronavirus is not a disease, let alone contagious. They think that it is merely a rumour and people are afraid for no reason whatsoever.

Some participants had a rough idea about the health guidelines for the Coronavirus, but did not have a clear and concrete understanding of the concept of germs.

There were also those who knew about germs but displayed confusion regarding the concept and also about the use of masks. One participant said,

"When I sweat, I take off the mask and let my face cool down and let the mask air dry, even when I am outside. The sweat attracts more germs, so if a wet mask touches my face, I may catch something"

Before consuming meals, several respondents washed their hands with soap and water to kill germs, but the same people did not cover their faces with a mask to protect themselves from getting infected by the virus.

A few of the local people we spoke to thought that money might carry germs as it travels through countless hands on a regular basis. However, they also did not have any choice but to touch the money. Another participant was familiar with germs and explained it with a reference to diarrhoea and saying,

"Dirt and waste cause different kinds of disease, for example, diarrhoea is caused by germs and germs are spread through dirt."

Interestingly, a participant was found to believe that Coronavirus is present in all of us, more or less, and the extent to which this virus spreads depends on awareness. There were findings that suggest that people consider Coronavirus a germ that can be transmitted through coughs and sneezes and believe that improper disposal of waste can spread germs and virus. A participant said,

"Sneezing, coughing, and physical contact with COVID-19 patients can spread the germs. To be honest I don't know too much about the germs, but I think that proper cleanliness can minimise the risk of exposure to many diseases."

Some of the other participants also shared a similar opinion and thought that cleanliness is important to guard themselves from different types of diseases, which is why they tried to keep their surroundings clean, particularly after the outbreak.

From the shadow observations with BRAC WASH staff, it was found that a very few villagers who are not very educated or well-off, actually do not have a proper understanding of germs, how it spreads, or how it infects the masses. Nevertheless, they have the understanding that they have to stay clean and hygienic to stay safe.

4.6. Effectiveness of BRAC WASH BCC Materials

Findings from the shadow observations with BRAC WASH staff show that typical BRAC WASH BCC materials, such as flipcharts, flashcards, etc. are not as effective as they once were. Several explanations were placed to support this finding. As one of the respondents said,

"Now flashcards/flipcharts are not working as well, since people can get this information from television, media, Facebook, miking, and various promotions. We have also created awareness through BRAC WASH. People are receiving knowledge through various means."

Another respondent said,

"Especially due to the advent of the internet, more people are aware."

It was found that people often get agitated and less motivated when they are presented with the same materials for years. In this regard, another participant said,

"People start to pay less attention when they see the same contents year after year,"

As a result, suggestions were made to put emphasis on creating new, motivating, and thought-provoking contents to communicate with people, by taking their context into account. During virtual FGDs with BRAC WASH beneficiaries, community people also shared their thoughts on the same concern. Villagers were found to be very fond of watching video materials on a big screen through a projector. Rural people suggested Audio-visual (AV) BCC contents for awareness development at the community level. They said,

"People in rural Bengal enjoy watching videos/bioscopes on projectors a lot."

User end comments on the typical printed BCC materials

In our study, we found that the users of BRAC WASH BCC materials at group sessions faced difficulties, such as unclear visibility of the contents, overloaded messaging, irrelevant messaging, uninteresting presentation, etc., in internalising the information. Based on these difficulties, suggestions were made by the users on how to improve communication materials

with flipcharts and flashcards. These include:

- If the size of the flipcharts or flashcards images is larger in size than before, it would be more convenient to connect and communicate with the beneficiaries.
- At present, as no one defecates in an open space in their area, it is unnecessary to advise them not to do so.
- It is assumed that if anything is discussed repeatedly, it is going to stick, and thus, significant messages should be conveyed to the community multiple times.
- When people get annoyed by listening to the same message, those messages have to be communicated indirectly rather than directly.

Effectiveness of demonstrations in developing BCC awareness

Some of the participants expressed their thoughts on the importance of demonstrations in conveying messages or ideas. According to them, people do not become aware of something by viewing photos (flipcharts/ flashcards) alone. During group meetings, several topics are raised and discussed; however, people can only remember so much.

On the other hand, they explained, if something is demonstrated in front of a group (local people), people can remember it well.

> *"In reality, what is shown is better remembered. For example, Sajedul Bhai demonstrated how to wash hands by washing his own hands. It helped us to learn proper handwashing practices quickly."*

Another BRAC WASH staff also expressed his opinion on taking initiatives on something practical, for instance, on frequent handwashing. He emphasised establishing handwashing stations and said,

> *"I have been doing my best to make the flashcards work, but now you need a place to actually wash your hands. You need realistic initiatives, such as the one that BRAC has taken to establish handwashing stations in different locations."*

In addition, another participant mentioned,

> *"We will set up handwashing stations where more people gather. They will have easy access to soap and water there."*

According to the BRAC WASH staff we interviewed, the lack of handwashing facilities in places like the local market keeps people from washing their hands even if they want to. When a handwashing station is set up, at least a few people will wash their hands regularly. This is why he believes that the handwashing station project will be a success.

4.6.1. BRAC WASH BCC Material in Awareness Development

We found that participants of BRAC's WASH programme had the understanding that they may fall sick if they did not maintain hygiene in their daily life. Based on the flip charts display, people acknowledged that they should properly wash their hands with soap and water before feeding their children. Nonetheless, they also mentioned that this seldom happens in villages.

> *"In rural areas, it is very rare to wash hands before feeding children"*

Through BRAC WASH initiatives, another participant discussed the visible changes. He elaborated,

> *"There has been a significant amount of change that is visible to all of us after the sanitation-related initiatives of BRAC. People now wash their hands after using the toilet. Children, in particular, know about handwashing and use different sandals and soap in the toilet. Everybody has a sanitary latrine at their house. People are given proper explanations and they understand the importance of hygiene and cleanliness"*

Learning from BRAC WASH flip charts and flashcards has not only brought some positive changes in the behavioural aspects of the BRAC beneficiaries, but findings also depict how to improve these contents so that community people become more enthusiastic and interested in changing their habits. It was also found that if regular visits to the community could be paired with new types of communication techniques, the results would be more fruitful and create a greater appeal to the community.

5. Discussion

This study aims to explore the end user response to the Behavioral Change and Communication (BCC) materials on COVID-19 prevention guidelines in the grassroots of Bangladesh. It also aims to complement the previously done content analysis of BRAC BCC materials from the perspective of the end user.

Due to the ongoing pandemic, we have adopted various alternative ways of collecting qualitative data, including digital technology, telephone interviewing, and shadow observation.

Compliance with the health guideline

In the case of knowledge and practices regarding handwashing, it was found that people were more or less aware of the necessity of washing their hands with soap to fight COVID-19. Women who perform household chores and cook said that they were more likely to use soap during the pandemic. Men in different occupations, said that they are aware of the importance of using soap but they face difficulties due to a lack of handwashing facilities at their workplaces.

A similar scenario was found in the practice of mask use. We found that people learned about the necessity of wearing masks to prevent themselves from contracting COVID-19 through various sources of information such as television, newspaper, social media, and word of mouth. The majority acknowledged that using masks is important in controlling COVID-19 infection rates in the community and keeping themselves and others safe. However, it was found that the regularity of mask use has gradually relaxed, compared to the early days of the outbreak. Noting places where they would wear masks, people displayed a mixed perception. People in the rural areas are reluctant to wear masks inside their village neighbourhoods and even in crowded places. They believe that the rate of infection is higher in urban areas and they should use masks whenever they visit such areas. There is also a lack of awareness and information on how to properly wear a mask and dispose of it after use.

Many women from the Muslim community who veil themselves (e.g. niqab and burkha) were found not using masks when leaving home. They believe that since their faces are covered with the veil, masks are unnecessary. Moreover, there are also varying degrees of confusion, misunderstandings, and a lack of proper practices in terms of mask usage as recommended by the national health guidelines.

Like handwashing and the use of masks, people also appear to know—through varied sources of information (formal and informal)—about social distancing. Some common knowledge about maintaining social distance to prevent COVID19 transmission was almost ubiquitous in the community. We found some people were taking necessary steps such as avoiding unnecessary social gatherings and not visiting relatives. However, in most of the cases, people were reluctant to maintain social distance consciously in their daily activities. It was also found that though the law enforcement agencies tried to make people strictly maintain social distance in their locality at the beginning of the virus outbreak, people have gradually resumed their regular social interaction. Although many of the respondents think that social distancing is important and some of them try to avoid crowded places, they cannot maintain this properly because most of the other people in their neighbourhood fail to follow the same rules. Most people in the rural area offered their perception: when the rate of infection is low in their locality, people do not feel the need to maintain social distancing. They freely interact with the villagers and maintain distance only from outsiders (especially from urban areas like Dhaka or abroad).

It was common across the narratives that the intensity of complying with Coronavirus-related health guidelines has weakened over time. There are misperceptions, inadequate and

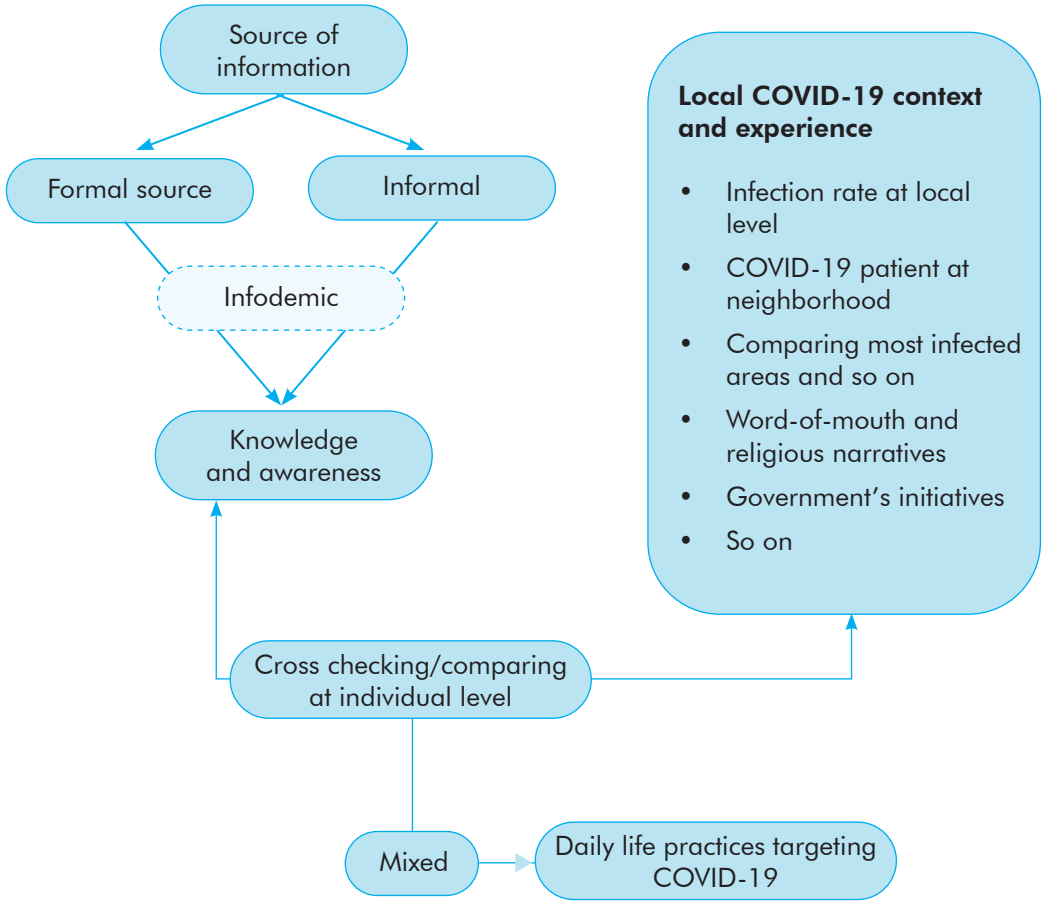
inappropriate practices, and confusion, most of which originated from the absence of proper and specific assessment of the community context.

Landscape of Coronavirus perception and practice at the community level

According to the impression of our collected data we found that people were receiving information and made aware or even in some cases misguided about the COVID-19 crisis situation as well as about their behavioural practices targeting the fight against COVID-19. People exist in an "info-demic" situation in the Bangladeshi community during this contemporary Corona pandemic (Zaman et.al, 2020)[3].

We also found a variety of channels were active in information diffusion mechanisms at community level. A mixed perception about the COVID-19 crisis was found to exist among the community people. Sometimes some of this information—even that which comes from formal sources—are ambiguous and contradictory, resulting in confusion and misconceptions. For example, every day the Institute of Epidemiology Disease Control And Research (IEDCR) published the number of Coronavirus-induced deaths, which was shown on national television and shared through social media. But the general people could not relate this situation to their personal and local experiences. To grasp the actual gravity of the crisis, we found that community people often crosschecked their community-level infection and death rates with the national-level daily updates.

Mixed perceptions and daily life practices



[3] Zaman, S., Rahman, S., Rabbani, M., & Matin, I. (2020). Crisis of Communication During COVID-19: A Rapid Formative Research. Dhaka: BRAC Institute of Governance and Development (BIGD), BRAC University.

This entire scenario has created a mixed bag of perceptions, which is then reflected in people's everyday lives. The following diagram illustrates how mixed perceptions regarding COVID-19 are developed at the community level and later how these perceptions translate into practice.

We also found people univocally acknowledging that the intensity of the conscious level of compliance with health guideline measures in the locality has been gradually reduced. Majority of the respondents shared that people are not as scared or worried about getting infected by the Coronavirus as they were at the beginning of the COVID-19 outbreak. As a result, there is a certain amount of reluctance among people to comply with the national health guidelines. This reluctance is stronger and more visible among the rural people than those living in urban areas.

Potentials of existing positive practices

Our qualitative findings in this study showed us some existing practices and places of handwashing—including the soap usage before performing Oju at the designated areas—as well as other Coronavirus-related health measures or guidelines at the community level. These existing practices, when up-scaled, have the potential to create a meaningful impact in a cost-effective way. One of the ways to up-scale these practices is to combine BCC awareness messages with very low logistic support (like soap and soap cases).

Moreover, our qualitative insight also shed light on the gender perspective of daily life practices.

6. Conclusion

This study gave us insight into the context of the end-user perspective of BCC landscape at the community level. People's daily behavioural practices targeting the health guidelines during this COVID-19 pandemic also came to light through this qualitative exploration. It was found that people at the community level have a mixed perception of the overall COVID-19 context. Moreover, there exist various kinds of barriers, preventing people from properly complying with the national health guidelines. We also gained insight into the users' perception of the typical BCC materials of BRAC WASH used for community awareness. By providing an understanding of the contextual landscape of the community people, we believe that this study will be helpful in designing and/or modifying BCC interventions that aim to help communities understand and follow the national COVID-19 health guidelines.

7. Recommendations

Considering the existing structural and personal barriers, we recommend the following points on individual, household, and community level:

Individual-level: Targeting personal barriers

- The fact that many of the females who wear a niqab or burkha think that the veil is serving the purpose of the mask suggests a gap of information awareness among this group. To address this issue, messages conveying the importance of wearing a mask even if the veil is maintained should be sent to female members of the community who wear a niqab or burkha.

- People prefer demonstrations on handwashing to posters and flipcharts, as such demonstrations help them become more aware and learn how to wash hands correctly. Therefore, demonstrations on handwashing practices should be taken into consideration as a BCC intervention.

Household-level: Targeting structural barriers

- Providing logistic and messaging interventions to slum dwellers or the lower-middle-income class to improve their common and shared handwashing facilities can improvise existing handwashing at such places.

- Targeting a group of households that share a common handwashing place can make the intervention more cost-effective. Group demonstrations can also be added within the intervention package (soap, posters, demonstration).

Community-level: targeting structural barriers

In certain places, like the Oju station at the mosques, people were found to wash hands with soap before performing their Oju. In other places, people hung soaps in net bags near the water tap or the tube well for people to wash their hands. Intervention packages, combining logistic support (soap) and messaging materials (posters/leaflets), should be introduced in these places (posters could be set up in front of Oju stations) to raise awareness and encourage people to wash their hands.

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