A Qualitative research on knowledge, attitude, and practice of hand washing among BRAC volunteers and their experience on message dissemination in Cox's Bazar, Bangladesh.

Final Report of Summative Learning Project (SLP) presented to the BRAC James P

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Purpose: In Partial Fulfillment of the Requirements for the Degree of Master of Public Health (MPH)

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ABSTRACT

Introduction:

Covid-19 Volunteers played a vital role in absorbing the shock on the healthcare system to some extent during the pandemic by task shifting. They played a multifaceted role where healthcare students assisted in medical activities, and non-medical volunteers helped with surveillance, quarantine, providing psychological support, and preventive measure campaigns. On contrary, disseminating healthcare knowledge by a non-medical person to the community in this infodemic scenario is challenging. The practice of handwashing is considered to be one of the best ways to prevent covid-19 infection. The current study focused on knowledge, attitude, and practice of handwashing among BRAC volunteer and their experience in message dissemination and implementation of handwashing stations.

<u>Method:</u> This study was conducted in the Sadar and Ramu Upazila of cox's Bazar of Bangladesh. We used an exploratory qualitative study to conduct this research and purposive sampling was done to select the volunteer. 8 in-depth interview was conducted using semi-structured in-depth interview guidelines.

<u>Findings:</u> we found that volunteers were from different educational backgrounds and ages but they have good knowledge about covid-19 and handwashing. Induction training post-recruitment helped to attain this uniform knowledge among them. All-volunteer believed that covid-19 can be controlled by embracing proper covid-19 preventive measures, and handwashing. Various factors like financial allowance, security, power play, misconceptions, power play, inadequate logistical supply, and the design of the handwashing station acted as barriers and the BRAC brand, support from the local government and religious leader, and response from the community were the facilitator's factors for message dissemination.

<u>Conclusion:</u> From this study, we can say that volunteers have the proper knowledge to disseminate correct information to the community. During emergency periods volunteers can be trained to perform appropriate tasks. So as to absorb the shocks in the health system. In addition, involving key community stockholders in planning can make the message context-specific and easy to implement. Lately providing a human-centric designed handwashing station can promote hand washing in the community.

INTRODUCTION:

Coronavirus disease (Covid-19) is an infectious disease caused by the SARS-cov-2 virus (WHO, 2020). Transmission of the Covid-19 virus occurs through direct contact with infected people and indirect contact with a nearby environment or by the objects used by an infected person (WHO, 2022). The best way to prevent and slow down transmission majorly depends on non-pharmaceutical interventions like staying at least 1 – meter apart, wearing masks properly, and washing hands more frequently. The health sector with all the resources and equipment alone cannot tackle the problem without the support of people (Davarani et al., 2020). Therefore, the world health organization has considered public participation vital for the betterment of the healthcare system (Lawn et al., 2008). All the government and non-government institutions promoted these steps in all possible ways to make the people more aware. Thereby, exerting additional pressure on the public health system but volunteers helped to absorb the shock on the healthcare system due to the pandemic to some extent (Dayson & Woodward, 2021). Volunteerism during Covid-19 ranged from providing awareness messages, distributing masks, and helping in contact tracing (Mao et al., 2021). Similarly, during the Ebola outbreak in Sierra Leone, volunteers played an important role in conducting awareness campaigns to prevent the spread of diseases (Bedson et al., 2020). In a similar context, the Indian public health system largely depends on community health workers, Accredited Social Health Activists (ASHA), on the grassroots level in disseminating Covid-19 awareness messages to the community. But on contrary, only 10 % of ASHA had adequate knowledge about covid-19 (Chowdhury et al., 2021). So, this gap shows the requirement for skill development to disseminate proper awareness messages. Apart from these volunteers also faced difficulties like fear and worry of rejection, being different from other voluntary activities; experiencing failure and helplessness, and lack of adequate instruction on how to help which hindered their voluntarism activities (Irandoost et al., 2022).

Handwashing is a key step in breaking the transmission of coronavirus and fighting against the Covid-19 disease, especially in public spaces. The problem of improving the handwashing status is not new, it existed even before the pandemic. However, the major limiting factor for hand hygiene is the availability of water along with other facilities. Globally, due to the lack of basic hand hygiene facilities, the majority of the population of the least developed countries living in crowded environments are at immediate risk of infection with Covid-19

(UNICEF, 2020). It has already been proven that if resources from the supply side are ensured, there is an increase in handwashing status in household settings (Parvez et al., 2021). Bangladesh is a highly dense populous country and after the relaxation of the Covid-19 restriction, tourism activities increased in Cox's Bazaar (New Age Bangladesh, 2022), posing an additional external threat to the community and possibly becoming a super spreader zone (Adam et al., 2020). The WHO recommended universal access to public hand hygiene in all public and private spaces (WHO, 2020). In Bangladesh, BRAC, one of the biggest NGO addressed this issue through its community support team (CST) project along with other packages of interventions to curb the transmission of Covid-19. It provides handwashing awareness messages through BRAC-CST volunteers and established 400 washing stations in Cox's Bazar.

But very few studies were done in the context of Bangladesh about the knowledge, attitude, and practice of volunteer and implementation barriers in establishing public handwashing stations. If the community gets the proper knowledge about hand washing and increases the usage of public handwashing stations it can avert the possibility of being a super spreader zone. So, this study will focus on exploring knowledge, attitude, and practice of handwashing among volunteers. Additionally, their experience in message dissemination and implementation of handwashing stations. In the longer term, it will help to promote handwashing habits in the community. Thereby, resulting decrease in the occurrence of infectious diseases.

BRAC-CST PROJECT:

BRAC-CST is a comprehensive project involving different interventions to reduce the transmission of the covid-19. Through this project, it acknowledged school-going children and conducted an awareness campaign on covid-19 and its preventive measures. Finally, to assess their knowledge quiz was conducted. This step helped to initiate the relay of passing knowledge on covid-19 to their family and neighbors. Along with it this project also disseminated the awareness message directly to the public in the hotspot zone and it was executed by volunteers in the field and they play a key role in this project.

Recruitment of volunteers done with both written and viva exams. Following that induction training was conducted to strengthen their knowledge of covid-19. Induction training also involved brief detailing about their job roles and responsibility, management of crowd, the

proper way to disseminate information to the community, identification of hotspot zone, establishment and maintenance of handwashing stations. Each volunteer was given the responsibility to work in 2 unions of that Upazila and instructed to find out 22 hotspot zone from their allotted union. A list of Hot spot zone was created by visually inspecting all the public gatherings and selecting the place based on the highest number of footfalls. Volunteers visit hotspots on a rotational basis covering all hotspots in a week. During their visit, volunteers disseminate awareness messages on covid-19 through the mic and distribute cloth masks to the community people. In 11 out of 22 hotspots, they selected focal persons and established the handwashing station. The focal person was given authority to manage the handwashing station and generally, they are shop owners of saloons, tea shops or grocery shops, and hotels, and in some places, religious heads took the undertaking of managing the handwashing station. This handwashing station was bright colored medium-sized plastic made movable structure with one tap and water refill type. Volunteers demonstrated the 6 steps of handwashing to community people during message dissemination in established community handwashing stations. During their weekly visit to the hotspot, they observe the handwashing practice of the community, and if needed they teach them again.

They also provided soap, masks, pamphlets, and ICT materials to the focal person. Parallelly, they also help to coordinate in conducting the IPT, basically its form of raising community awareness through drama and entertainment.

RESEARCH QUESTION: What are the knowledge, attitude, and practice of hand washing among BRAC volunteers and their experience in handwashing message dissemination to the community including handwashing station implementation in Cox's Bazar, Bangladesh to prevent Covid-19?

GENERAL OBJECTIVE:

The study aims to explore BRAC volunteers' knowledge, attitude, and practice on handwashing and experience in the dissemination of handwashing messages to the community and the implementation of handwashing stations in Cox's Bazar, Bangladesh to prevent Covid-19.

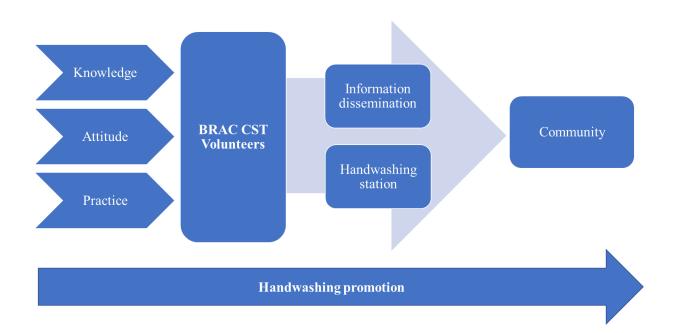
SPECIFIC OBJECTIVES:

- 1. To explore the knowledge, attitude, and practice of handwashing to stop the transmission of Covid-19 among BRAC volunteers in Cox's Bazar, Bangladesh.
- 2. To explore the experiences of BRAC volunteers in the dissemination of handwashing messages to the Cox's Bazar community in Bangladesh.
- 3. To understand the experience in the implementation of a handwashing station in Cox's Bazar, Bangladesh.

CONCEPTUAL FRAMEWORK:

Based on the evidence available from the other study and literature. Community handwashing status can be improved with the proper delivery of handwashing information and by providing resources i.e., establishing handwashing stations so they can use them. As volunteer plays important role in providing information to the community. So, it mandates checking the knowledge, attitude, and practice of handwashing among volunteers in order to deliver the proper message to the community.

FIGURE 1. HANDWASHING PROMOTION BY BRAC CST VOLUNTEERS TO CONTROL TRANSMISSION OF COVID-19



METHODOLOGY

<u>Study design</u>: Exploratory qualitative study design was used to explore the knowledge, attitude, practice of handwashing, and experience in the dissemination of awareness messages by BRAC-CST volunteers.

<u>Study site:</u> The study was conducted in the BRAC-CST intervention sites of Sadar and Ramu Upazila of Cox's Bazar.

Study population: The study population was 30 Volunteers from the BRAC-CST projects.

Inclusion criteria:

- BRAC-CST volunteer working for the last 4 months on this project.

Exclusion criteria:

 Volunteers of the BRAC-CST project who were recruited after the selection of handwashing station sites.

<u>Sampling methods</u>: Purposive sampling was used to select the study participants. A list of volunteers working close to the BRAC office was provided by the manager of the BRAC-CST project. As the BRAC-CST volunteers are the key person in delivering the awareness message to the community and hold all information about the implementation of the handwashing station.

Data collection tools:

Semi-structured guidelines were used for conducting In-depth interviews (IDI). Guidelines consisted of socio-demographic data, the knowledge, attitude, and practice of handwashing, information on the BRAC-CST project on handwashing promotion, and dissemination challenges.

Data collection procedure:

The list of volunteers was collected from the BRAC-CST project manager. An appointment was fixed priorly for interviewing the volunteer. Guidelines on IDI were used during the interview to get the relevant information from the volunteers. Due to time constraints, 8 IDI were conducted and we ensured data saturation.

<u>Location of data collection:</u> The data was collected in the BRAC-CST office of Ramu and Sadar Upazila of Cox's Bazar.

<u>Data analysis plan:</u> All the recorded interviews were transcribed in English. All the transcripts were read thoroughly to familiarize me with the data. Based on prefixed apriori codes data was labeled and coded. A data display matrix was made to sort coded data into clusters. Further, these clusters were organized into broad categories, and a comparison among clusters was done to identify a pattern. At last, themes were produced and an interpretation of the pattern was reported.

Ethical consideration: The study protocol was submitted to the institutional review board of BRAC James P Grant School of Public Health for ethical clearance. Before recruiting the study participants, informed consent was taken and all risks and benefits were explained to them in the local language. Throughout the study, participants' anonymity and confidentiality were

maintained. It was a completely voluntary process. Participants had the right to refuse at any given time in the study. No compensation was provided for the study. All the collected data was only shared with the research team with password protection to maintain high confidentiality.

FINDING:

Knowledge of volunteers:

In total 8 volunteer interviews were done comprising of 7 males and 1 female belonging to varied ages ranging from 21-35 years. All the volunteer has completed their higher school education and among them, 4 have completed bachelor's degree in different field. They were selected as a volunteer-based on a written test consisting of basic knowledge of covid-19 and viva to know their interest in working in the field without hesitation. One of the volunteers said:

"When we were interviewed, they compared us with hawkers who sell nuts or onion fritters in the stations and told us that we have to work like them" (IDI-3).

Volunteers attended two sessions of training and demonstration about covid-19, proper handwashing techniques, crowd management during message dissemination, and identification of hotspots, and at the end of the session they were made to practice and demonstrate handwashing. One of the volunteers stated:

"How to wash our hands we showed it. They called one by one to show handwashing" (IDI-1).

It increased their confidence and knowledge. Many of the volunteers said they know about covid-19 preventive measures through social media and mass media but still they lacked clarity as said by one volunteer:

"We learned 6 steps of handwashing here. But we used to follow only a few steps before" (IDI-3).

Henceforth, this one-day training session helped them acquire proper knowledge so as to disseminate correct information to society.

All the Volunteers have very good knowledge about the covid-19 disease signs and symptoms, modes of transmission, methods of prevention, and measures to be taken in case of detection of covid positive in the family. It is also found that they have robust knowledge about

the Bangladesh covid-19 vaccine policy and well versed with different vaccine names, the eligible age for vaccination, common side effects, booking vaccine slots digitally, and the location of the vaccination center. Basically, they ensured to deliver 4 key messages as said by the volunteer:

"We had 4 main messages about covid-19. Firstly, wearing masks regularly, washing hands frequently with soap for 20 seconds, maintaining social distance, and getting 3 doses of vaccinations" (IDI-7).

Attitude of volunteers:

All the volunteers were confident that covid-19 can be prevented with the proper adoption of preventive measures. Following Proper handwashing, use of masks while going out, and maintaining social distancing as much as possible by the people can lead to preventing the covid-19. One of the volunteers explained the importance of handwashing with soap and said:

"Obviously possible. Cause, the cell wall of coronavirus is made of lipid/fat. And soap has a base. Base ruins the fat. So, the virus will obviously be destroyed" (1D1-2).

Also, they believed that vaccination doesn't prevent disease but it can definitely decrease the severity of infection with covid-19.

Volunteers vouched that the community handwashing station was a very good step to prevent the spread of covid-19. One of the volunteer said Placing the community handwashing station in public places created a space for handwashing in markets, tea shops, saloons, and religious places, which was not possible earlier. People coming to the market can handwash before going home. The also community applauded the idea of setting up community handwashing stations as they believed this will improve the habit of handwashing and can be used to promote handwashing in the community to prevent the spread of the infection. Awareness among people is important to create behavioral change and it's possible as said by a volunteer:

"If people are concerned then everything is possible. Once people didn't wear shoes correctly, people used to go to the washroom without Sandel, nowadays people don't go out without

Sandel, going to the washroom is not far away. So, people build this habit, so I think that Insha Allah it'll also happen" (IDI-5).

From the religious perspective, one volunteer believed that as in Islam washing hands before praying 5 times gives additional opportunity to follow handwashing along with 3 times washing hands before taking food.

Practice of handwashing among volunteers:

Volunteers expressed that their frequency of handwashing increased after they started working as volunteers. Passively showing the handwashing demonstration to the community increased the frequency of handwashing. As they work in crowded places, they are more prone to get infected which makes older and sick family members more vulnerable to disease. This made one of the volunteers whose father has a heart ailment to be extra cautious and handwash after returning to home from work. They also used alcohol hand rub provided by the employee organization. One of the volunteer said working under this project: "I wash hands every morning. Then when I go to the office. We were provided Hexisol (alcohol-based hand rub) by the office. I always carry Hexisol with me. I use it. When we return from the field to our house, we wash our hands. The frequency of handwashing was less before" (IDI-5).

Barriers in message dissemination:

Financial:

To visit and deliver messages in 22 hotspots including 11 happy taps in 2 unions. Volunteers used CNG vehicles or two-wheelers with the allotted transportation allowance. One volunteer felt that the allotted allowance was less and she finds it difficult to travel to all the hotspots. Other male volunteer used their personal two-wheelers to travel.

Misconceptions and myths about covid:

Access to correct information was challenging during this pandemic. Rumors and fake information got widespread in the community. Some believe that coronavirus infects only once

leading to a mindset that if they a diagnosed with corona once they will not get it again and some still say that there is nothing like a corona. Volunteer also felt people from rural areas were not following covid-19 precaution measures at present as compared to the initial disease outbreak as shared by volunteer:

"People from rural areas are not that much conscious about COVID now. When we go to them, they realize that COVID is still there" (IDI-7).

And with the older aged people, it got more difficult to make them understand. Due to the old behavioral pattern and beliefs, older aged people don't want to wash their hands and use soap. They counter-argued that they used ashes instead of soap in their older period and it worked to prevent disease. As stated by the volunteer:

"People whose age is more than 55 years, as they're older. They think that earlier we used to have food without washing our hands, then we didn't wash our feet. They have this type of mindset that they use ashes to wash their hands, at that time they didn't have any soaps. They give this type of excuse" (IDI-7) & and another volunteer said:

"They say that there is nothing such as corona. Mostly aged people say that" (IDI 3).

Security:

Volunteers also disseminated the handwashing information through the (Interactive Popular Theatre) IPT program. Which generally happens after maghrib (late evening) so as to pull large audiences like students, daily wage workers, and women who are free in the evening after completing their daily chores. But due to more theft cases in that specific area, IPT was done during the daytime. Henceforth, it was not able to cover and disseminate the message to many people and people's coverage was reduced.

Power play:

As part of the job, a volunteer disseminates information through the microphone in public places and hotspots. On one occasion During message dissemination through a microphone in the public market, some influential person ordered the volunteer to stop the microphone as it was noisy and he believe and said there is the corona.IDI-2 recollected and shared the incident:

"A person from administration interrupted me, ordered me to stop miking (loudspeaker), and said,' What corona'? Then I stopped for a while and asked him to show me any document that says corona is gone from the country" (IDI 2)

<u>Inadequate supply of Soap and water:</u>

Increased handwashing practice in specific areas like restaurants and schools leads to more usage of soap during handwashing. It was also noticed that the supply of soap wasn't meeting the demand. As per the rules of the organization, monthly one soap was provided to the focal person but it was not sufficient to cover 30 days. So, in response people to the non-availability of the soap community, people called and complained to volunteer which is additional pressure on the volunteer. As said by the volunteer "called us and informed us that, brother the soap is finished," (IDI 5)

And another volunteer said:

"The number of soaps should increase because every day at least 50 people wash their hands so the soap is not sufficient. Sometimes we noticed that monthly 2 soap is not enough. So many people face problems" (IDI 7). To counter this issue some volunteers advised the focal person to cut the soap into 2 pieces and use it to make it last longer.

Lack of cooperation from the Focal person:

The caretaker of the handwashing station faced problems in the maintenance of the handwashing station, especially shopkeepers. With more people gathering for handwash near the shop it's difficult to maintain and the informed volunteer can't manage it. Apart from this due to the small water storage capacity of the washing station, the focal person has to fill the water more frequently which hampers their regular work. In addition, to maintenance frequent refilling is also a reason for shopkeepers to hesitate to maintain it, and sometimes people also inform the volunteer about the focal person not being able to refill the water. One of the incidents shared by:

"The stations are portable; it has to be put inside the store at night and needs to be taken out in the morning. It requires refilling the water as well. So, some people refuse to take responsibility. The people who were willing to take responsibility were given it." (IDI-6)

Barriers to volunteer from inefficient handwashing station design:

As already discussed above less water storage plays an important role in promoting hand washing. With one tap outlet in one hotspot makes it difficult to accommodate many people at the same time. So, some hesitate to stand in queue for handwashing and choose to leave rather than wait as it takes more time. Volunteer described:

"Due to long line Some wait and some people leave. That why people ask for more taps." (IDI-4) community people also asked the volunteer to increase the number of handwashing stations instead of one per hotspot but as per organization policy it mandates volunteers to provide one per hotspot. As the happy tap is small in size and easily movable from one place to another. For security, the shopkeepers keep the handwashing station inside the shop during the closure of the shop. So indirectly the practice of handwashing depends on the opening time of the shop. As shared by a volunteer "shop remains closed sometimes but if anyone wants to wash their hands at that time, they can't do anything" (IDI-5).

Coping strategy:

Proper message dissemination is a crucial step in increasing awareness in the community. Due to resistance to change by the community volunteer often face some barriers. To counter this resistance volunteer takes an effort to persuade the community about the additional benefits of handwashing. A volunteer described a similar situation:

"They told us, 'What corona? There is no corona here'. I told them that I agreed with them. But there are also other germs and bacteria other than corona, aren't there? They agreed with me. Then I said to them that if they wore masks, they could also prevent other germs than corona also. This would also prevent dust from entering body thus also preventing asthma or respiratory distress. Then they thanked me for making them understand. Then I told them that I wanted to give them some information about corona. I changed their mind. Then I made them understand why should we wash our hands because they could not guarantee that there were no germs in their hands. We can't see or realize if there are germs in our hand. So, we should wash our hands more often. Eventually, they agreed with me. That's how we aware people' (IDI-2).

Handwashing can prevent other infectious diseases also not only corona. Volunteers also provide free cloth-based masks which indirectly makes the community people listen to the campaign messages. A volunteer described the incident:

"Many people ask that now we don't have Corona so why do we need to use the masks? Why do we need to wash our hands? Then I told them, if our hand is clean before we eat the food, then we will not have any abdominal problems, we will not feel sick, and we will not have any disease. If we wash our hands after coming from the washroom then the germs will remove. Then after coming back from school, college, the bazaar, or the shopping mall if we wash our hands, the germs will remove." (IDI-7)

Facilitators in message dissemination:

Goodwill of BRAC:

The volunteer felt that the brand BRAC helped them win the trust of people. As BRAC does a lot of social upliftment projects benefitting the niche section of society. This brand name helped volunteers to pass messages easily and the pink vest worn by the volunteer during their fieldwork made them easily identifiable by the community as BRAC-associated volunteers. As narrated by two volunteers:

"When they heard BRAC, that time they said that BRAC is helpful, helps the people, (IDI-7) and "We are given a vest from BRAC, by which people can understand that we are from BRAC and working with covid-19". (IDI-6)

<u>Positive support from local government:</u>

Local administration authority was very helpful they gave time to volunteer to disseminate the message in "Uthan Baithak"- (a yard meeting involving all the local population) which led to better dissemination of the message. They also assured to help as said by volunteer:

"The chairman and ward commissioner helped me. We had a meeting with them, the community mobilizer, they helped us, they said if you had any problem inward, confirm me. Then I will solve the problem. They helped us a lot" (IDI-2). The support from local government machinery helped in the smooth delivery of the campaign.

Positive Support from a religious leader:

Imam the in-charge of the mosque helped accepted the request of volunteers and allotted time after Friday prayer to disseminate the messages. Volunteer Shared the experience:

"So, during the noon we request the imam, please kindly inform everyone as you're the imam, and everyone will listen to you, after completing the Namaz I took only 5 minutes. Later after the ending of the Namaz the imam informed that he is from BRAC, he will talk to you guys. Later I gave a mask to everyone, and after distributing the mask I share the information with them" (IDI-5). He also shared that "all Mosque means, where I visited, I noticed soaps. For example, in the Eidgor Mosque, we noticed Dettol or Lifebuoy soap" (IDI-5). So, it gives space for using soap during wudu- (a form of ritual washing of the forearms, head, and feet, required after a minor impurity, frequently performed immediately before prayer). Similarly, it was done in Friday prayer in the mandir (Hindu worship place). Many people visit the pagoda, in-charge of the pagoda allotted space and took responsibility to maintain the happy tap.

<u>Positive community response:</u>

Most of the volunteers were selected from the same community where the project was initiated. So, it was easy for the volunteer to connect with the community. Meanwhile, community people encouraged the volunteer's work and they ask for information about covid-19, and masks and requested the volunteer to increase the no. Handwashing station. As described by the volunteer:

"There people wrote applications for happy taps and requested us for happy taps in the orphanage because many children live there. Especially children of 3-12 years are there. So, they want us to set up happy taps there" (IDI-2). Due to overwhelming support, encouragement, and providing feedback from the community increased the enthusiasm of the volunteer to work relentlessly to support their community people. One incident which showed community ownership was when the soap was finished as shared by a volunteer "there is soap Dettol soap that costs 10 takas. They purchased the soap" (IDI-5).

Focal persons were responsible for maintaining the handwashing station allotted to them. Although they didn't get monetary benefits for maintaining the handwashing station but for the benefit of their customer and community people. They took responsibility and

were involved in this process. Meanwhile, the volunteer shared about the additional benefit for the focal person:

"His benefit is his sales are increasing. As I am distributing masks in his shop, more people are coming to his shop to receive those masks" (IDI-2).

Due to free distribution of masks and handwashing stations in the hotel increased sales which is a benefit for the focal person. Henceforth, a nearby hotel owner asked for setting up a handwashing station on their premises.

Proactive steps:

As the project was running during Qurbani's time, a volunteer took a proactive step and disseminated the message to the community in the cow market along with the mask.

DISCUSSION:

This study explored the knowledge, attitude, and practice of handwashing among volunteer along with it explored the experience of message dissemination and implementation of community handwashing. The finding indicated that all the volunteers had adequate knowledge of covid-19, mode of spread, signs of covid-19, and preventive measures, and all the volunteers were able to show proper 6- step handwashing demonstration perfectly with it all volunteers have updated knowledge of the national vaccination policy and mechanism to access vaccination in the health center. All the volunteers had basic knowledge about covid-19 but got clarity and in-depth details on their induction training. Henceforth, we found that volunteers were from varied ages and educational backgrounds but the training helped to equip them with adequate knowledge and confidence for disseminating awareness messages to the community. From this, we can understand that with proper training of volunteers from the local community, it can be beneficial to penetrate the awareness message at the grass root level and this can be an actual example of task shifting in healthcare awareness.

Attitude is a little thing that makes a big difference. All the Volunteers working in the field amidst of pandemic believed that covid-19 pandemic can be controlled by religiously following preventive measures and vaccination. Although community handwashing station has some scope to improve in implementation and designing still volunteer believed it is very useful for the

community to increase their handwashing practice. Adopting this behavior will be time taking process but doable. As More people get awareness messages the better will be the adoption of new behaviors and habits.

All volunteer practice handwashing on a more frequent basis after starting working as volunteers than before. Apart from this fear of passing the infection to their family member is also a factor to practice it more. Similarly, now they are following 6 steps of handwashing for a minimum of 20 seconds. Earlier all of their source of information for covid-19 were mass media and social media. Where it passed broad information to do handwash but it failed to pass the information on how to do it and how much time to do it. This gap was addressed during induction training. The working organization also provided hand rub to volunteers which also helped them in practicing handwashing.

There were both facilitators and barriers in the process of message dissemination to the community. We found that misconceptions and breaking the myths about covid-19 were difficult and got more challenging to canvas the older aged people. As it's difficult for them to understand and break their old practice to adopt new behavior practices. A similar study in the Bangladesh context found that Newspapers and other digital media are ineffective in the bursting myth of covid-19 among older aged people and recommended community-based youth volunteers or religious leaders to increase awareness (Islam et al., 2020). Along with the authentic information about covid-19, a lot of other irrelevant misinformation got widespread during the pandemic leading to the Infodemic. Unfortunately, people believe this misinformation to an extent that leads them to say there is no corona. Similarly, a study conducted in Nepal found through social media many rumors spread among the people, and to dispel rumors very few actions were taken by institutions to acknowledge this issue (Regmi et al., 2022). Which is additional pressure on the healthcare worker and volunteers to tackle the misinformation.

Volunteers whose working place was near their residences were able to adjust to the allotted transportation allowance whereas the volunteer who have to cover larger work areas felt deficient in allowance which hampered their delivery of work. So, it implies the need for flexible allowance based on the area to cover for message dissemination. Security to the volunteer is also an important factor in one scenario timing of IPT was changed to ensure a safe atmosphere for the theatre artist. Likewise, a volunteer was also subjected to threats due to message

dissemination through the mike from influential persons. Indeed, community handwashing stations promoted the handwashing practice in the community but it also requires some necessary changes to make it a more sustainable solution by Ensuring the availability of soap and water. Similar research proved that providing a necessary resource for handwashing increased the practice of hand hygiene (Luby et al., 2009). From a technical perspective increasing the water storage capacity, adding additional taps, and establishing a permanent handwashing structure in the longer term can address the safety issues of the current portable handwashing station. A similar study in the Bangladesh context found that ease of use, water storage capacity, and quality of material for handwashing stations were the determining factor for the acceptability and feasibility of handwashing stations (Hulland et al., 2013). With the available resource, the volunteer tried to address the barriers. They took additional efforts to make older aged people understand the importance of handwashing, the vulnerability attached to their age and were persuaded to wash their hands properly. Likewise, the volunteer suggested cutting the soap in a two-piece to make it last longer. By using this coping measure volunteers were able to address the problem but there are factors that helped volunteers to facilitate the message dissimilation process.

The brand name of BRAC and the goodwill it earned over the long period by doing social service have helped to win the trust and beliefs of people. Before disseminating information, volunteers always introduce themselves with the identity of BRAC. It helped to initiate the conversation on a good note. Likewise, community people were able to identify and recognize them as BRAC organization volunteer with their pink vest. The benefit of visual identification with their vest can be leveraged in future projects and campaigns. Support from the local government and providing a platform in yard meetings to disseminate the message helped to create awareness among the larger section of people and they also assured to further help in case of requirement. Correspondingly, the imam also provided space to deliver message information. Imam is considered to be a gatekeeper in the Muslim community and the community obeys his words. So, message dissemination with the support of the imam can influence people to practice handwashing. Other religious leaders also extended their support in establishing the handwashing station and its maintenance. Volunteers also find that positive responses made them feel good and work more. As volunteers belong to the same community with the recognition and respect, they earn from their own community creates a sense of

self-satisfaction. These factors also show the importance of a bottom-up approach and community involvement during an emergency period. While comparing with the management of previous disease outbreaks like Ebola, zika, SARS, and MERS community stakeholders like local leaders, faith-based institutions, and community groups played a vital role in design and planning, community entry and trust building, social and behavior change communication, and administration (Gilmore et al., 2020). People also responded back and took ownership and replaced soap and gave feedback for establishing a new handwashing station. The selfless attitude of the focal person to take responsibility for the handwashing station without any monetary benefit shows their tendency to help the community and customers. Volunteers also took the proactive step to acknowledge the gathering in the cow market during the festival period is very much appreciable.

CONCLUSION:

From this study, we can conclude that volunteers took the responsibility of creating public awareness enthusiastically although it had barriers. They rightly know that changing behavior or introducing a new behavior is time taking process, it's not an event. In a broader context in concordance with the transtheoretical model for change and thereby promoting handwashing. Volunteers' strategy to raise awareness and motivate the community addressed the people in the pre-contemplation and contemplation stages of change and thereby by providing resources for practicing handwashing in public spaces they also acknowledged the preparation stage of the transtheoretical stage of the model. Hereby in the future, there is a need for a study to evaluate the uptake of community handwashing intervention, barriers to accessing the community handwashing station, and the feasibility to include local government for logistical support may ensure the intervention is sustainable. Engagement with various stakeholders like local government, religious leaders, focal persons, and the end-user community is vital for better message dissemination and creating awareness. Community response and feeling the sense of ownership was welcoming which shows the community is ready to participate within their capacity if it is really beneficial to them. Currently, with the availability of different types and designs of handwashing stations in the market, the authority should consider the size of the

establishment, expected no. People to use the facility, storage capacity of water, and water source for a handwashing station during procurement of the handwashing station. If needed to scale up, water and sanitation board can collaborate for ensuring an uninterrupted supply of water and it can be done at the local government level.

This study completely focused on the volunteer perspective on the experience of message dissemination and further research is needed to evaluate the benefits and barriers in accessing community handwashing from the user end -The community. Due to time constraint, fewer in-depth interview was done so there is a chance to miss some information.

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ANNEXURE:

CODES:

Code	Definition	Example
Recruitment and training	All the information about recruitment and training	The process of recruitment consisted of both viva and written test
Knowledge on covid 19	Respondent's knowledge of covid-19 and its prevention measures	Covid-19 is caused by a virus. Fever, cough, cold, and body pain are signs of covid-19 infection.
Attitude	Respondents' Beliefs on Preventing the Covid-19	By following the covid-19 preventive measure the spread of covid-19 infection can be controlled.
Personnel handwashing practice	Respondents' own practice of handwashing	How frequently is handwashing practiced, whether soap or hand rub used for hand hygrine and what factors responsible for handwashing
Message dissemination	All the responses related to the process of dissemination of messages to the community	Message disseminated by showing a demonstration of handwashing of steps, poster, pamphlet, and microphone.
Barriers	Situations Or Events Which Affected the Process of Dissemination in A Negative Aspect	Focal person didn't agree to establish a handwashing station. Insufficient supply of soap and water
Facilitators	Situations Or Events Which helped the Process of Dissemination in A Positive Aspect	Community support, response from key community stakeholders and gatekeepers

	Strategy Used by Volunteers to Overcome the Barriers	Persuade the people about the additional benefits of handwashing as it prevents another infectious disease not only covid-19.
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CONSENT FORM-BANGLA

অবগত করার সম্মতি ফর্ম

অধ্যয়নের শিরোনাম: বাংলাদেশের কক্সবাজারে ব্র্যাক স্বেচ্ছাসেবকদের মধ্যে জ্ঞান, মনোভাব এবং হাত ধোয়ার চর্চা এবং বার্তা প্রচারের বিষয়ে তাদের অভিজ্ঞতার উপর একটি গুণগত গবেষণা।

তদন্তকারীর নাম: ন গণেশ রাজান

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প্রতিষ্ঠানঃ ব্রাক জেমস পি গ্রান্ট স্কুল অফ পাবলিক হেল্খ

ভূমিকাঃ

হ্যালো, আমি ন গণেশ রাজান। আমি একজন BRAC JPGSPH, ঢাকা'র ছাত্র যে এখন মাস্টার্স করছি পাবলিক হেল্থের উপরে। আমি আপনাকে আমন্ত্রন জানাচ্ছি আমার থিসিসে অংশগ্রহণের জন্য। আপনি কি কিছু সম্য আমার সাথে কথা বলতে পারবেন?

গবেষণার উদ্দেশ্যঃ

আমরা আপনাকে এই গবেষণায় অংশগ্রহণ করার জন্য অনুরোধ করছি কারণ আপনি BRAC-CST প্রকল্পের একজন স্বেচ্ছাসেবক। আমরা স্বেচ্ছাসেবকদের মধ্যে জ্ঞান, দৃষ্টিভঙ্গি এবং হাত ধোয়ার চর্চার উপর একটি গবেষণা পরিচালনা করছি এবং সম্প্রদায়ের কাছে বার্তা প্রচারে স্বেচ্ছাসেবকদের অভিজ্ঞতা জানতে চেয়েছি। আমরা একটি হ্যান্ডওয়াশিং স্টেশন স্থাপনে স্বেচ্ছাসেবকের অভিজ্ঞতা সম্পর্কেও তথ্য চাই।

এই গবেষণাম অংশগ্রহণ করলে কি হবে?

আপনি যদি আমাদের অধ্যয়নে অংশ নেওয়ার সিদ্ধান্ত নেন, আমরা আপনাকে স্বেচ্ছামেবক হিসাবে আপনার কার্যকলাপ সম্পর্কিত কিছু প্রশ্ন জিজ্ঞাসা করব এবং সমস্ত কথোপকখন রেকর্ড করা হবে। আমরা আপনার মূল্যবান সময় থেকে ৩০ মিনিটের বেশী নিব না।

ঝুকিঃ

আপনি যদি এই গবেষণায় অংশগ্রহণ করেন তাহলে কোনো শারীরিক বা মানসিক ঝুঁকি নেই।

সুবিধাঃ

এই অধ্যয়নটি আপনার সরাসরি কোন উপকার নাও করতে পারে। এই অধ্যয়নটি উপরে বর্ণিত উদ্দেশ্যগুলি বুঝতে সাহাম্য করবে মা ভবিষ্যতে প্রক্রিয়াটিকে উন্নত করতে এবং হাতের স্বাস্থ্যবিধি প্রচারে অবদান রাখতে পারে।

গোপনীয়তাঃ

আপনার অনুমতি নিয়ে সমস্ত কথোপকখন রেকর্ড করা হবে। সমস্ত সংগৃহীত ডেটা এবং রেকর্ডিং একটি পাসওয়ার্ড-সুরক্ষিত ফাইলে একটি অনন্য আইডি দিয়ে গোপনীয় রাখা হবে। অধ্যয়ন দলের সদস্যরা ছাড়া অন্য কেউ এটি অ্যাক্সেস করতে পারবে না। ডেটা বিশ্লেষণ শেষ হওয়ার পরে ডিজিটালি সংগ্রহ করা ডেটা মুছে ফেলা হবে। আমরা শুধুমাত্র অধ্যয়নের জন্য তথ্য ব্যবহার করব, এবং এই অধ্যয়নের ফলাফল শেয়ার করা এবং প্রকাশ করার জন্য আমরা আপনার নাম ব্যবহার করব না।

তথ্যের ভবিষ্যৎ ব্যবহার:

যদি ভবিষ্যতে জনসাধারণের সুবিধার জন্য এই ডেটার প্রয়োজন হয়, তবে আমরা শুধুমাত্র গোপনীয়তা, নাম প্রকাশ না করে তথ্য প্রদান করব।

অংশগ্রহণ বা অংশগ্রহণ প্রত্যাহার করার অধিকার:

অধ্যয়নে আপনার অংশগ্রহণ স্বেচ্ছায়। আপনার সমস্ত ঝুঁকি, পদ্ধতি, সুবিধা এবং অধ্যয়নের উদ্দেশ্য সম্পর্কে জানার অধিকার রয়েছে। আপনি যদি স্বাচ্ছন্দ্য বোধ না করেন, আপনি যেকোনো প্রশ্ন এড়িয়ে যেতে পারেন বা যেকোনো সময় অধ্যয়ন ছেড়ে যেতে পারেন। আমরা আপনার সিদ্ধান্ত মেনে চলব এবং আপনার উদ্বেগের সম্মান করব।

ষ্ষতিপূরণঃ এই গবেষণায় অংশগ্রনের জন্য কোন আর্থিক লাভ নেই।

আপনার প্রশ্নের উত্তর / যোগাযোগ করার জন্য:

আমাদের অধ্যয়ন সম্পর্কে আপনার আরও প্রশ্ন এবং প্রয়োজনীয় স্পষ্টীকরণের জন্য, আপনি যে কোনও সময় নিম্নলিখিত মনোনীত যোগাযোগ নম্বরগুলিতে আমাদের সাথে যোগাযোগ করতে পারেন:

আইআর বি: ০১৯৯৩৩৭৯৫১২

ডঃ হুমাইরা বিনতে আনোয়ার: +৮৮০১৭৭০১৫১৫২৩

IN-DEPTH INTERVIEW GUIDELINE:

A Qualitative Research on Knowledge, Attitude, and Practice of hand washing among BRAC Volunteers and Their Experience on Message Dissemination in Cox's Bazar, Bangladesh

In-depth Interview Guideline

Socio-demographic Information:

Name:	
Age/sex:	
Location of job:	
What is your Highest Level of Education:	
What is your Duration of work in	
BRAC-CST:	
What is your job responsibility in the	
BRAC-CST project:	

Did you get any training after joining
BRAC- CST project? If yes, what type of
training?

Specific Questions:

Theme	Questions	Probe
	What do you know about Covid-19?	Signs and symptoms?How Covid-19 spread?How did you get this information?
Knowledge	What are the ways to prevent Covid-19?	Please explain the ways. (Non-pharmaceutical interventions, traditional interventions, where did you learn)
	What do you know about the Covid-19 vaccine?	How did you know?Who can get the vaccine?Where the vaccine is available?
	What do you know about handwashing?	Handwashing steps?Duration of handwashing?Frequency of handwashing?Where did you learn?
Attitude	Do you think Covid-19 is preventable?	 If yes, why? If no, why not?

	Do you think Covid-19 preventive (Masks, social distancing, handwashing) measures are effective at all?	 If yes, why? If no, why not?
	Do you think these handwashing stations are effective in preventing Covid-19?	 If yes, why? If no, why not?
Practice	How do you do handwashing?	How often?When?What do you use?
	Is there any change in your handwashing practice after Joining the BRAC program?	 If yes, what factor drove for this change? If no, why? what's the factor? (Resource)
Message	How did you disseminate the message to the people?	Where?When?To Whom?
dissemination	What were your experiences while sharing handwashing information with the community?	• Example.
	Do you think people accept the messages?	Yes, how?If no, what do you do?

	Can you share your experiences in setting up of handwashing station?	 How did you select the sites for the handwashing station? What is your role in setting up the handwashing station? What were the Enabling and hindering factors?
Handwashing station	What is the response you got from the community?	ExampleIf positive/negative response, why?
	What do you recommend for improving the functionality of community handwashing stations?	