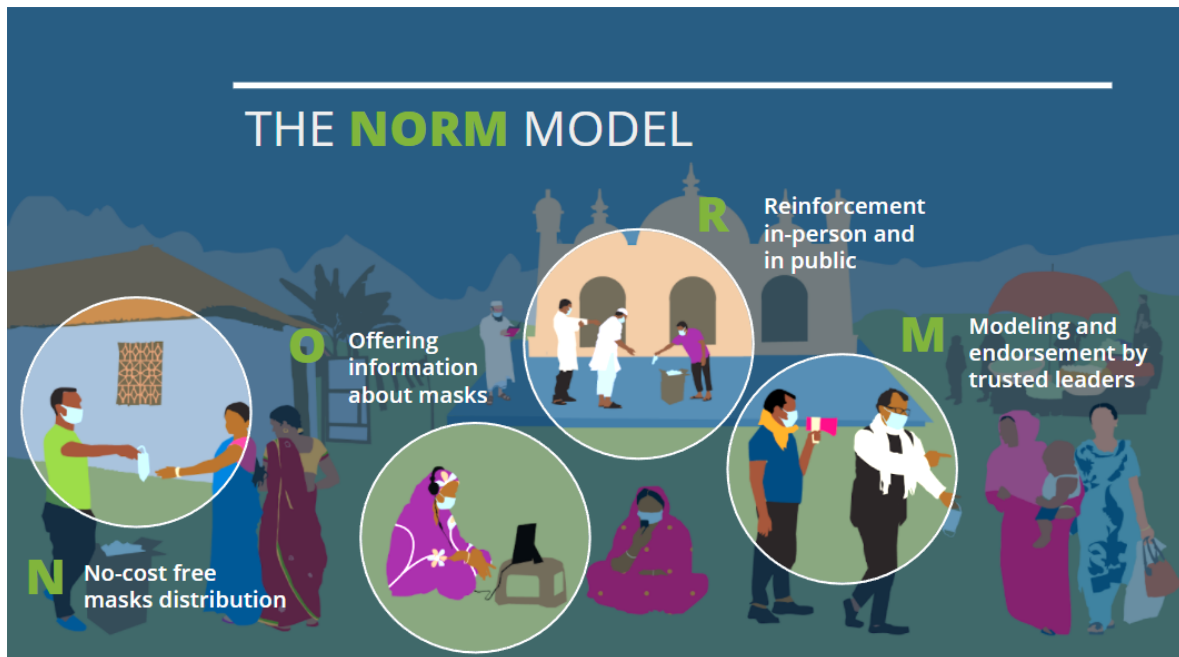


NORMalizing Mask-wearing in Urban Areas



Date Updated: 22 February 2022

Introduction

In mid-2020, IPA partnered with researchers from Yale University, Stanford University, and other organizations like Green Voice in Bangladesh to research different strategies to increase mask-wearing and measure its impact on COVID-19. They found that the now called NORM model, consisting of No-cost free masks distribution, offering information on mask-wearing, Reinforcement in-person and in public, and Modeling and endorsement by trusted leaders tripled mask-wearing, increased physical distancing and reduced COVID-19. IPA partnered with Shakti Foundation to tweak this rural model into an urban context for Dhaka North City Corporation (DNCC) and replicate the NORM program for an urban population. Overall, the intervention seemed to increase mask-wearing among middle-aged (30 to 50 years old) and men more. It has also been learning to understand the implementation impacts and challenges of the NORM module in urban areas, which has been designed in the rural setting.

Background of NORM Model

The NORMalizing mask-wearing program is an evidence-based approach that improved mask-wearing and reduced symptomatic COVID infections in rural Bangladesh in a large, randomized evaluation. The acronym NORM stands for No-cost mask distribution, Offering information, Reinforcement and Modeling by trusted leaders. This model demonstrates that by providing quality masks for free through households distribution or in public places, sharing information about the proper usage of masks, reinforcing in private and public as well as showcasing community leaders that people emulate, behavior can be shifted to increase mask-wearing.

This program was scaled to reach 100MM+ people across Bangladesh, India, Nepal, and Pakistan. The NORM team worked with local governments and implementing organizations by providing an implementation toolkit and technical support.

The NORM Model in Urban setting

No-cost
free masks distributed at select locations

Offering information
on value of mask-wearing

Reinforcement
repeated, in person and in public, even without mask distribution

Modeling
and endorsement by trusted leaders



The Urban Adaptation

1 Piloting Phase

Phase 1: Dhaka North City Corporation (Before Eid-ul-Fitr)

Shakti Foundation and IPA team started the Piloting of the NORM model between 10 May 2021 and 13 May 2021 in DNCC areas as a preparation for the evaluation phase. In this phase, the main goal was to observe the intervention implementation challenges faced during the implementation to be able to modify the protocol. This was conducted across six locations in

DNCC areas for **four** days. According to the implementing team, more than 50,000 masks were distributed during this piloting phase.

During the pilot, the implementing team with volunteers from Shakti Foundation, Young Bangla and BD Clean distributed masks—based on the study protocol and promoted the necessity of mask-wearing to both those who were not wearing masks and those who were improperly wearing them. In addition to the activities as explained in Sub-section 3 (NORM Model Implementation), the campaign was inaugurated by the Honourable Mayor of DNCC with active engagement from community leaders like ward councillors. This was a pilot to understand the implementation context in urban settings like Dhaka.

BRAC Institute of Governance and Development (BIGD) initiated rapid research on mask wearing behavior during the pilot in four of the eight sites with the objective to understand mask wearing behavior and people's response to the campaign. Qualitative researchers were deployed who used interviews and systematic observation method to carry out both spot and process observation to assess the dynamics of mask use in public spaces to fine tune the protocols. Some of the key findings in this study by qualitative research are:

- Although people in Dhaka, in general, complied with mask-wearing in public once they are asked, they would not wear them properly covering their nose and mouth. After the promotion, people wore them in front of promoters.
- Most people, even if they have interest, due to discomfort and humidity did not wear masks. Besides, people took off masks while speaking.
- During the pilot phase, people of higher socio-economic status were reluctant to wear masks. At the same time, women who wore niqab/ burqa were also not responsive to the campaign due to a false sense of security.
- Reinforcement of the message from multiple sources has brought better result in terms of using mask in public places. When the same message on mask wearing was delivered through promoters, miking and community members, compliance was higher. The threat of surveillance is also a good reinforcement mechanism. For example, on days when the mobile court is present at the shopping malls, compliance is high.

Phase 2: Cattle Market

Due to COVID-19 lockdown around the country, especially strict lockdown in Dhaka, the project team could not launch the Evaluation phase. Right before Eid ul-Adha, the team under the initiative of DNCC and Chattogram City Corporation launched the mask-wearing campaign of the NORM model in the cattle markets of DNCC and CCC. The campaign was inaugurated by national level leaders like Honourable Mayors of DNCC and CCC, Honourable State Minister for ICT, Honourable Deputy Minister of Ministry of Education which reflects the Role Modeling Part of NORM.



Figure: Promoters distributing free masks and encouraging in wearing them in the Cattle market

As these are densely populated areas, in addition to implementing the activities in Sub-section 3 (NORM Model Implementation), DNCC and Shakti team provided more reinforcement materials to increase campaign visibility. There were reinforcement materials like setting up kiosks with masks, hand mic to grab the attention of people etc. During this phase, according to the implementing team, 500 promoters distributed more than 400,000 masks in the cattle markets of the two city corporations. The honourable mayor of DNCC also visited during the promotion which helped with awareness building, engaging more community leaders, and media coverage to further reinforce awareness and dissemination of information.

Again, BIGD deployed a team of qualitative researchers through Focused Group Discussions (FGDs) in 3 of the cattle markets to understand the attitude of the cattle market buyers and sellers towards mask wearing and to observe their response to the campaign. Daily debriefing sessions between Shakti and BIGD team helped to identify the obstacles and how to overcome them to make the campaign more effective.



Figure: Participation and Endorsement of DNCC Mayor with NORM mask campaign



Figure: Placing Kiosks of masks to increase the visibility of the campaign

2 Evaluation Phase

On 18 August 2021, the Shakti Foundation and IPA began to implement the NORM model in Dhaka. To measure whether the model works in an urban environment and what variations were needed, researchers randomly assigned twelve locations with higher COVID-19 transmission— suggested by Dhaka North City Corporation (DNCC)—to either receive or not the NORM program. The team closely monitored mask-wearing in all twelve of the locations, although only half received the intervention (intervention and comparison groups).

As Table 1 shows, there were **six types of locations** selected: city bus stands, inter-district bus terminals, markets (which attracts more lower-middle to middle-class populations), shopping complexes (which have their own mask-wearing rules and tend to attract middle-to-upper class populations), and Kacha Bazar (for groceries). Therefore, the intervention reached various profiles and communities of people.

The team distributed masks—based on the original study protocol for **19 days, divided over a period of four weeks**. In addition, the team distributed and promoted masks in bus stands for four days. These activities overlapped with the last week of usual promotional activities.

3 NORM Model Implementation

The types of modules that were implemented in six intervention areas of Table 1 of Appendix were:

I. No cost-Free mask distribution:

- Promoters from Shakti Foundation, Young Bangla and BD Clean distributed free surgical masks in the randomly selected locations for six hours a day during 19 days to people passing by, transport drivers, vendors, people in the market, and those working in the locations (like bus stands) etc.

II. Offering Information:

- Promoters handed out free masks to those who were not wearing masks and informed them of the importance of mask-wearing. Additionally, those who were *improperly* wearing masks (not covering nose to the chin like in the image below) were also informed about the importance of mask-wearing to keep themselves and others safe;
- The information was offered verbally by promoters only during active promotional hours.



III. Reinforcement:

- Promoters offered the messaging outlining importance of mask-wearing in hotspot areas;
- There was no door-to-door reinforcement or messaging activities outside mask distribution hours.

IV. Role-modeling:

- Promoters visited one prominent mosque in each of the six intervention areas and talked to Imams about including mask-wearing as a part of Friday *Khutba*. Promoters also handed out a message/script, which had verses from Al-Quran as a reference of keeping each other safe;

- Community leaders such as the transport leader for the city bus stand and bus terminal, the market leader for the shopping complex and vendors in the Kacha Bazar were included in the distribution and promotion process to promote role-modeling in the areas. Additionally, the team reached out to Ward councilors and local influential people;
- Scripts or messaging were tailored carefully to each of the leader types to have more impact.

4 Other Interventions: Behavioral Nudges

In addition to the 19 days of hotspot location activities, the team also conducted a *pilot* on the **city bus stands** for **four days**. The team conducted mask distribution and disseminated messaging of the importance of wearing masks among passengers, bus drivers and ticket collectors covering 24 buses each day for four hours each. The bus pilot intervention overlapped with the main intervention activities and timeline.

Bus drivers and ticket collectors were also encouraged to support the initiative. Ticket collectors asked passengers to wear masks when they were getting on.

Quantitative Findings and Discussions Points

Through the NORM core promotional activities (evaluation phase), the team distributed around 390,000 masks in DNCC in four weeks while promoting mask-wearing with its importance to nine million people approximately. In addition, it reached 6 Imams, 21 Market leaders, 5 Transport leaders, 10 Ward councilors and 5 Non-political leaders according to the data received from promoters during the intervention. *Note: Data received from promoters may differ from data collected from partners.*

Core Interventions Findings:

Mask distribution, Promotion and Modeling

- **The urban adaptation of the NORM model increased proper mask-wearing by 12 percentage points in intervention areas** and decreased by 4 percentage points in the comparison group, for an overall intervention impact of 16 percentage points.

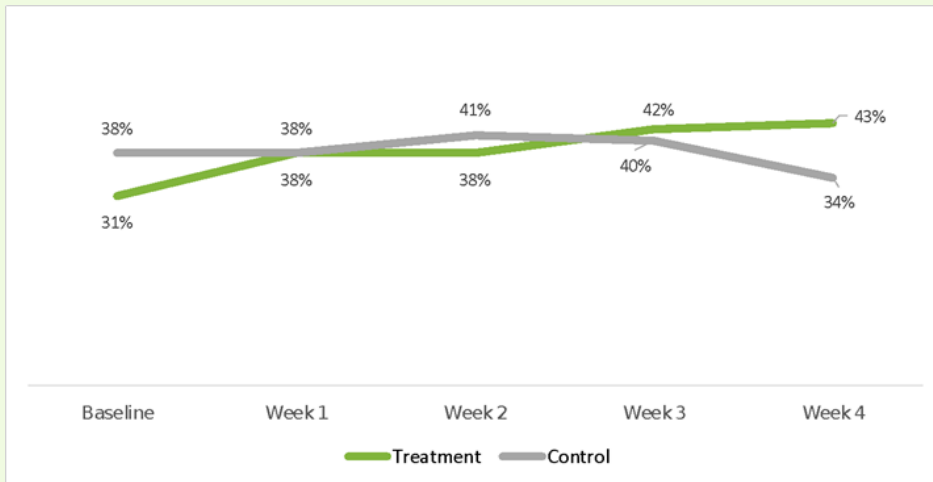


Chart A. Overall Impact between Intervention and Comparison

- The program targeted six types of locations as mentioned above, among which, **proper mask-wearing increased mostly in Kacha Bazar**. In some weeks, shopping complexes, markets and bus terminals also showed increased proper mask-wearing. However, slum areas continued to have a lower rate of mask-wearing.

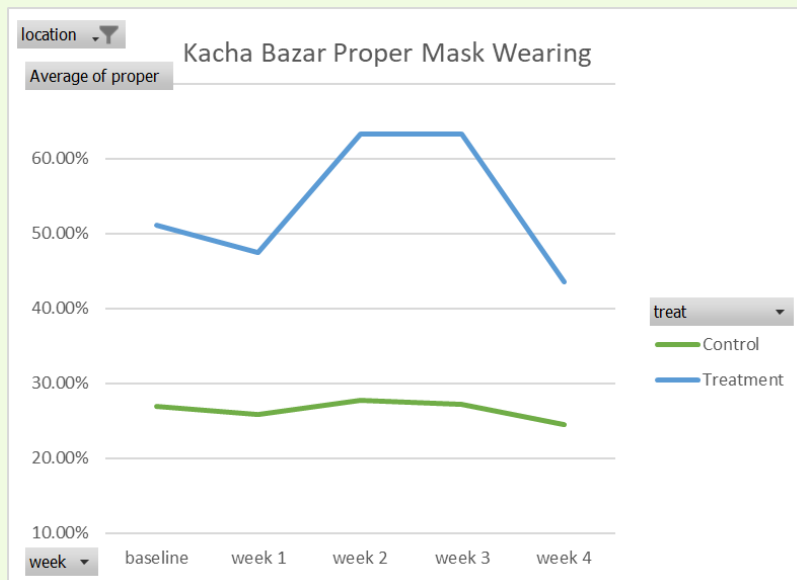


Chart B. Location type wise Comparison (Kacha Bazar)

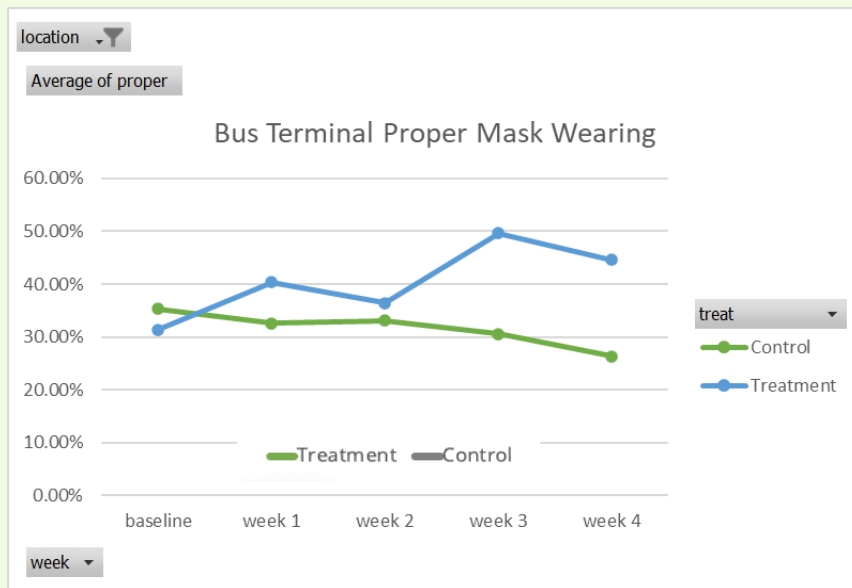


Chart B. Location type wise Comparison (Bus Terminal)

- **Proper mask-wearing increased by 18 percentage points among men and 15 percentage points among women** showing a similar increase in both genders. However, over the course of the four weeks of the program, there was a decrease in mask-wearing in the comparison group.

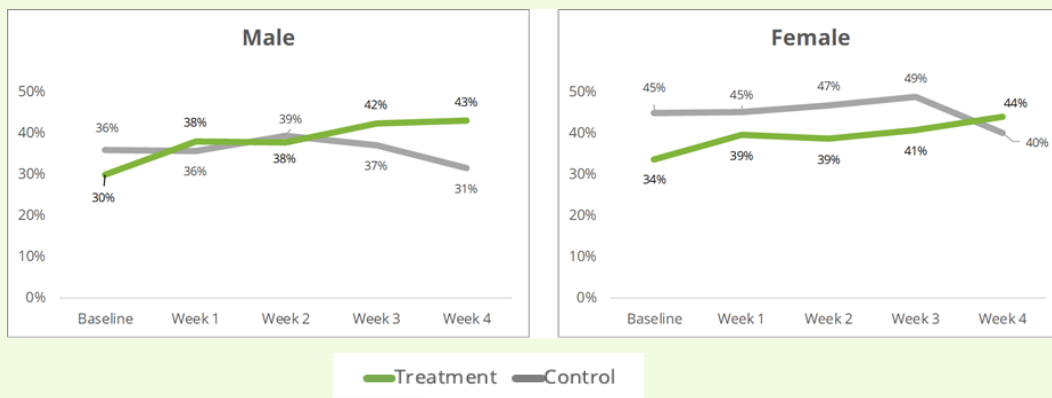


Chart C. Gender-wise Comparison

- Proper mask-wearing of **middle-aged persons increased by 31 percentage points, and also increased across all ages in the intervention** group and declined across all ages in the comparison group.

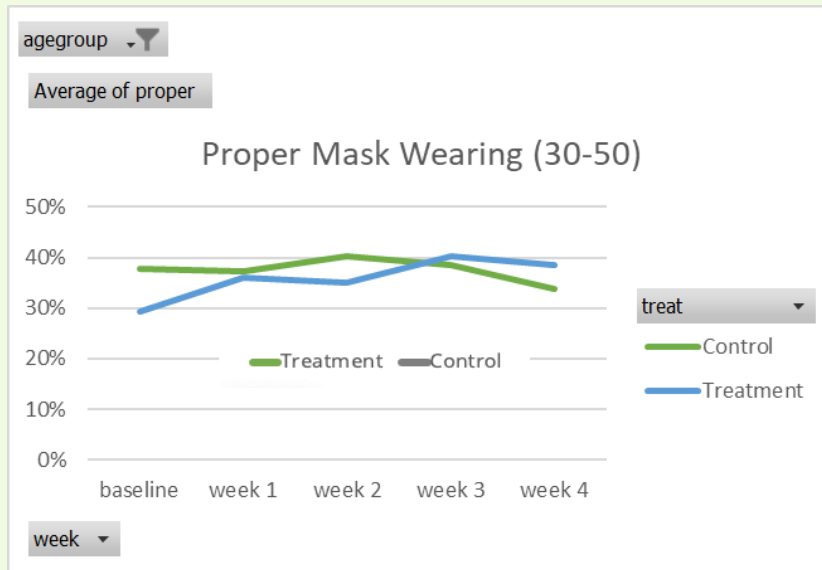


Chart D. Age group-wise Comparison (Middle aged, 30-50 years old)

Qualitative Results

Focus Group Discussions (FGDs) were conducted alongside IPA's quantitative data collection by Shakti Foundation with their promoters. The aim of the FGD was to both provide promoters an opportunity to share their feedback and to gain a qualitative understanding of the promotional activities to support continuous improvement in designing and adapting the scale-up program.

Process

Shakti Foundation held three focus group discussions with the mask promoters from two volunteer platforms and the team leaders from Shakti, to gain insights on the effectiveness of the campaign and the general attitude of urban residents towards mask-wearing after the four weeks of intervention. A group of about 20 team leaders who worked in the promotion were part of the virtual FGD. In addition to the FGD, 24 volunteers from BD Clean and Young Bangla were also interviewed over the phone. In these two structures, representatives from all the six intervention locations were included providing a breadth of understanding across the program.

FGD Findings

Promoters found:

- **Higher mask-wearing among women than men** even in low mask-wearing locations like- Khilgaon Taltola market and Korail slum;
- **Easier to communicate** mask promotional messages among the **middle-aged group (35-50 years)**;
- The customers visiting Gulshan-1 Kacha Bazar started wearing masks while it was difficult to target the vendors to wearing masks;
- A few **common reasons cited** for not wearing masks:
 - **The Religious Paradox:** There is a prevailing religious misconception that coronavirus is not harmful to religious groups. However, the promoters found religious leaders to be taking leadership roles after the promoters shared the messaging elements targeted to Imams (the element contained verses of Hadith and the Quran); this qualitative finding coupled with the findings from the original study suggests that religious leaders are a key role model influencing behavior change in our NORM model.
 - **Comfort:** Masks cause breathing problems and discomfort while talking or working, especially for people in labor-intensive jobs and where it requires them to talk a lot.
 - **Socioeconomic factor:** A common belief that COVID-19 only affects the higher income group was found to be prevalent in people with lower income levels. For example- in Korail slum, although people accept the masks, they either throw out or put away the masks even after consistent promotion; **A false sense of security due to getting vaccinated** has prompted some to stop wearing masks.

Promoters Quotes in FGD

"It was easier to aware and encourage educated and middle socioeconomic class people about the importance of wearing masks." - Salma Akhter (Young Bangla, Gabtoli Location)

"We reminded students the importance of wearing masks to reduce infection rates saying if corona cases rise their schools and college would remain close hampering their studies. This created awareness among them and many started wearing masks properly." - Ahsan (BD Clean, Mohammadpur)

Limitations of Quantitative Results

The above results have a few caveats to remember as we design and continue to adapt these scale-up programs. The quantitative findings are from program monitoring data and are not representative of a large-scale impact evaluation.

- The result is from a small sample size (N=12). There are only twelve hotspot locations, so there was one treatment and one comparison group for each type of surveillance site;
- There is only one day of baseline data before the promotion started. The rest of the monitoring data is from the active promotional hours and does not necessarily reflect mask-wearing when the promotion is not happening;
- The quantitative data is suggestive and is not statistically significant.

Challenges in DNCC Urban intervention

There are different challenges faced by the program team in both monitoring and implementing ends.

- Smaller sample size makes it difficult to evaluate the effectiveness of the program;
- Each of these locations is densely populated. However-
 - The number of promoters in each location was **not sufficient** with respect to the density of the population. This limits the reach of messaging to people including the time invested in each people to promote the message of mask-wearing;
 - The promotion (each day) was for only six hours, which is **not sufficient** in a high-density area like the Gabtali bus stand and considerably hinders the effectiveness of NORM.
- Promotional challenges-
 - Promoters had to give away some volume of masks to local and political leaders outside intervention capacity;
 - Difficulties in team management were due to continuous replacements of both team leaders and volunteers due to the long duration of the campaign;
- Complaints from mask vendors due to the free distribution which hinders their income;
- There were few incidents of *harassment* of the female promoters concerning the safety of promoters in evening promotional shifts.

Recommendations

The original NORM model was conducted for eight weeks in rural areas with longer promotional hours and promoters were engaged in proportion to the number of people in each location. In Urban areas, people have a busy lifestyle, and a high-density

population suggests the need for more engagement by promoters in proportion to the areas with longer promotional schedules where possible. Following are some of the recommendations from the NORM team for increasing the effectiveness of Urban scale-up:

- 1. Regular monitoring and daily feedback to improve implementation quality**
 - a. Pictorial documentation to ensure the quality of promotion
 - b. Include monitoring officer from NORM team in each location for better communication & monitoring
 - c. Regular data sharing
 - d. Motivating the promoters
- 2. Offering more wide-spread pieces of information**
 - a. Using hand mic, mics from rickshaws
 - b. Billboards (electronic/non-electronic), banners, and posters in high-traffic locations (entrance-exit)
 - c. Promotion using the print/electronic media, social media
- 3. Stronger reinforcement**
 - a. Including '*implementing officers*' from the IPA team with the promotional teams in each location from closer monitoring of module implementation and answering queries instantly
 - b. Increased number of promoters, days, and durations (time per day)
 - c. Bring gender dynamics depending on locations like- mosque/bus terminals more male promoters
- 4. Modelling and endorsement**
 - a. Intensified involvement with imams and mosques
 - b. Engage public agencies- march with local people and officials
 - c. Monitoring the campaign location by law enforcement, authorities and local leaders can make the campaign more effective.
- 5. Location type-wise *mini-experiment***
 - a. Designing experiments or modules by characteristic features of the locations and targeting based on the
- 6. Safety and security**
 - a. Including the concept of mask disposal and setting up dustbin for masks;
 - b. Safety of promoters especially female promoters in odd hours;

Partners of NORM Adaptation in Urban Area

Initiated by: Dhaka North City Corporation (DNCC) with support from ICT Ministry, Aspire to Innovate (a2i),

Implementation Partners: Shakti Foundation, with promoters from Young Bangla and BD Clean.

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Appendix

Table 1: Hotspot Locations with the Randomization arm in Rapid Evaluation Phase

Hotspot Locations	Type	Randomization arm
Natun Bazar	Market	Comparison group
Khilgon taltola market	Market	Treatment
Tokyo Square shopping complex	Shopping Complex	Comparison group
Mirpur-2 shopping mall	Shopping Complex	Treatment
Mohakhali Bus stand	Bus terminal	Comparison group
Gabtolli Bus stand	Bus terminal	Treatment
Farmgate bus stand	City Bus stand	Comparison group
Mohammadpur bus stand	City Bus stand	Treatment
Duaripara Slum, Mirpur-11	Slums Area	Comparison group
Korail Slum, Banani	Slums Area	Treatment
Shahjahanpur Kacha Bazar	Kacha Bazar	Comparison group
Gulshan 1 Kacha Bazar	Kacha Bazar	Treatment