Abstract

The Cox’s Bazar Panel Survey (CBPS) tracks representative samples of Rohingya refugees and host communities in Cox’s Bazar district in southern Bangladesh. A phone-based follow-up survey from April 2020 reveals that, despite widespread knowledge of COVID-19, attendance at religious gatherings is high, representing a potentially important pathway for disease spread in refugee camps and host communities in Cox’s Bazar. Even after the imposition of lockdown restrictions in early April, attendance to religious events was still common in refugee camps and host communities alike. Over 75% of men in refugee camps and over 50% of men in host communities reported attending religious services at least once in the week prior to the survey (April 9-16, 2020). Most male respondents who attended religious gatherings did so regularly, for an average of 4.0 days and 2.2 days in the last week for refugees and hosts, respectively. These behaviors are prevalent despite widespread awareness of the sources of COVID-19 transmission. When asked about trusted sources of advice on COVID-19, both hosts and refugees identified friends, acquaintances, and community leaders – including religious leaders – as important. In fact, 44% of refugees place their trust in community leaders such as block majhees; putting them in front of other trusted sources of information including family, relatives, and informational campaigns.

In a separate survey of Imams from around Bangladesh, we find considerable willingness to make changes: almost every respondent had adjusted their practices in some way. Still, some important measures remain uncommon, including discouraging attendance of the elderly, removal of the communal prayer mat, and postponing congregational prayer. This may be due to respondents’ subjective assessment of the risk posed by COVID-19. About two thirds of Imams felt that COVID-19 posed no or low risk to their communities. Given the ongoing attendance of religious gatherings and the trust placed in religious leaders, policies should be targeted towards decreasing prayer gathering sizes, reducing frequency of prayer attendance, and disseminating public health and social distancing advice through a key trusted source of information: Imams and religious leaders themselves.

† We gratefully acknowledge the support and partnerships provided by the Yale MacMillan Center Program on Refugees, Forced Displacement and Humanitarian Responses (PRFDHR), the Gender and Adolescence: Global Evidence (GAGE) consortium, which is funded by UK aid from the UK government; the World Bank; the Yale Research Initiative on Innovation and Scale (Y-RISE) at the MacMillan Center; IPA’s Peace and Recovery Program; and the UN High Commissioner for Refugees (UNHCR). The opinions expressed in this publication are those of the authors. This publication does not necessarily reflect the views of the donors.

Editors: Teresa Delgado (PRFDHR Yale MacMillan Center), Austin Davis (American University) and A. Mushfiq Mobarak (Yale University)

Researchers: Austin Davis (American University), Paula López-Peña (PRFDHR Yale MacMillan Center) and A. Mushfiq Mobarak (Yale University)

Research Assistant: Hannah Moreno (Yale University)

Contact: A. Mushfiq Mobarak, Professor of Economics, Yale University, ahmed.mobarak@yale.edu

1 in Bangladesh, it is most common for men to attend mosque and for women to pray at home.
Main Findings of COVID-19 Phone Survey

[1] Attendance at religious events threatens efforts to slow the spread of COVID-19, especially in camps. 77% of refugee men and 58% of host men report having attended a weekend religious event in the week prior to the survey (April 9-16, 2020) (Fig 1). Only 23% of refugees avoided attending prayers on other days, compared to 49% of hosts.

Figure 1. Social distancing in mid-April 2020 (last 7 days)

Source: CBPS, COVID-19 Phone Survey

---

2 Religious observance is only one of many differences between host and refugee communities. For example, perhaps due to the relative crowding of their residences, refugees are more likely to attend non-religious social gatherings. Refugees were also more likely to attend non-religious social gatherings (only 53% avoided social events, compared to 66% of hosts), and less likely to keep the safety social distance with non-household members every day (34% versus 41% of hosts).
[2] Communal prayer is an important source of non-compliance with social distancing guidelines. Among those who did attend gatherings in the week prior to the survey, refugees attended communal prayers for an average of 4.0 days and social events for an average of 2.3 days, compared to 2.2 days and 1.3 days for hosts, respectively (Fig 2). Members of refugee and host communities all reported staying home all day for only around half of the previous week.

Figure 2. Average number of days spent at social events vs. social distancing (April 9-16, 2020)
[3] Local community leaders (including religious ones) are trusted sources of information and advice on COVID-19, especially among the refugee community. 44% of refugees place their trust in community leaders such as block majhees (Fig 3). More refugees trust community and religious leaders than family/relatives or informational campaigns. In contrast, 80% of hosts trust newspapers, radio, and TV, and even social media and informational campaigns on the street rank higher than religious leaders as popular sources of information. While community leaders enjoy differing levels of trust in the two communities with respect to COVID-19, religious leaders may be particularly well positioned to affect attendance at religious gatherings, thereby encouraging compliance with social distancing guidelines.

**Figure 3. Trusted sources of information on COVID-19 prevention and advice (mid-April 2020)**

Source: CBPS, COVID-19 Phone Survey
Religious leaders are willing to change practices and share health information, but adoption of protective measures is incomplete. We conducted a separate survey of 138 Imams from 50 rural unions spread across all divisions in Bangladesh in May 2020 in two waves. Almost all Imams reported making some adjustment to their religious observance in response to COVID-19. Over 70% of Imams reported increasing distance between congregants, requesting that congregants wear masks, and encouraging the use of or providing soap (Fig 4). Imams are continually making changes; in the approximately 10 days between survey waves, the adoption of many practices increased. The proportion of Imams discouraging physical contact and making health announcements during services increased by almost 30 percentage points. Still, there is room for improvement. Fewer than half discouraged attendance of the elderly or removed the communal prayer mat, and fewer than 15% postponed congregational prayer. While Ramadan may have discouraged Imams from taking some measures, part of the explanation may lie in their subjective assessment of the risk posed by COVID-19. Even during the later survey wave, roughly 67% of Imams felt that COVID-19 posed no or low risk to their communities (Fig 5).

![Figure 4. Changes to religious observance (May 2020)](image1)

![Figure 5. Imams' risk assessment (May 2020)](image2)
Changes in Religious Gatherings & Practices to Curb COVID-19

The Islamic Foundation and the Ministry of Religion of Bangladesh have already provided guidance on how to safely continue religious practice at home while distancing from others (MIS 2020). In Cox’s Bazar, work has already been done toward spreading key messages on COVID-19 through a variety of communication initiatives led by the Communication with Communities Working Group, the Inter Sector Coordination Group, and other organizations (CwC and ISCG 2020). Such COVID-19 information sessions have successfully reached over 800,000 refugees in Cox’s Bazar, while sessions led by religious leaders have reached nearly 400,000 people across Cox’s Bazar (as of July 8, 2020). It is imperative that efforts like these expand to ensure that COVID-19 messaging specifically address behavior and attendance at religious gatherings, especially when messages are given by religious leaders themselves.

There has been a diversity of responses in the Muslim world more broadly. In several other countries, including Iran, Saudi Arabia, Turkey, Lebanon, Egypt, Jordan, Iraq, Kuwait, Malaysia, and Singapore, authorities have been asking Muslims to use their own prayer mats, refrain from shaking hands, sanitize their hands often, and pray at home if possible (Al Jazeera and Dwyer, March 2020). As the severity of the COVID-19 contagion increased, mosques shut down and Friday prayer services canceled altogether in major cities and provincial capitals in Iran and Tajikistan (Vyborny, Junaid, & Khan, April 2020). However, as time passed and major Muslim celebrations took place, including Ramadan, restrictions were relaxed in Iran and Eid al-Fitr was permitted in certain areas in Iran (Al Jazeera, May 2020). Saudi Arabia started a gradual ease of restrictions after Ramadan with Friday prayers and congregational prayers (jamaa’a) in all mosques except Mecca (Al Arabiya English, May 2020). It remains to be seen the effectiveness of restrictions imposed on pilgrimage between July 19 and August 2 to the Holy Mosques in Mecca and Medina for Hajj, which in normal times can attract up to three million people but this year have been scaled back to allow only a reduced number of pilgrims from inside Saudi Arabia (Al Arabiya English, July 6, 2020). Other Muslim countries like Indonesia and Pakistan have allowed group prayers to proceed, due in part to disagreement among some religious leaders on the restrictions.
The larger Muslim-majority countries around the world have had vastly different experiences with COVID-19 (Fig 6).\(^3\) There are many factors affecting the spread of the disease, from differences in public health capacity to differences in internal and international mobility. However, our survey results in Bangladesh suggest that policies surrounding religious observance are potentially important. In general, the risk of contagion of COVID-19 is higher the larger the event, when gatherings are conducted indoors, when people cannot practice social distancing and attendees travel from outside the local area (CDC July 2020).

![Figure 6. New COVID-19 cases in selected Muslim countries](image)

Large religious gatherings like Hajj, the diversity of policy responses across the Muslim world, and the variation in COVID-19 trends all argue in favor of a research program to understand how religious observance can be respectfully modified to minimize public health risks. Engaging religious leaders must be central to this effort.

With that aim, a study was conducted by the Centre for Economic Research in Pakistan to assess whether outreach with local religious leaders enhanced the effectiveness of the state response to the COVID-19 crisis (Vyborny, Junaid, & Khan, April 2020). After reaching out to approximately 100 Imams in Pakistan in early April, researchers found that there was a 60% increase in willingness to cancel Friday prayers in light of the health information provided in the survey. Researchers also found that almost all Imams were willing to give announcements about COVID-19 relief programs in their mosques once they were informed of such programs in the survey. The results from both Pakistan and Bangladesh motivated ongoing research studying outreach to Imams, briefly described below.

---

\(^3\) The countries selected have a percentage of Muslims higher than 85% and a population larger than around 35 million people (Pew Research Center, 2017 and 2011).
Policy Recommendations and Future Research

Given the number of religious gatherings attended and their significance especially during large religious celebrations, combined with the trust placed by refugees in Imams and religious leaders, efforts by national and international organizations and researchers to engage directly with Imams in Cox’s Bazar on safer social distancing practices are crucial to curb Covid-19 contagion. In particular, these institutions should try to:

» Continue to educate Imams about the risks and modes of transmission of COVID-19.

» Evaluate the effects of various interventions. In partnership with Innovations for Poverty Action (IPA) Bangladesh, we made personal, faith-based appeals to Imams from randomly selected regions around the country. Several different research teams are pursuing similar efforts in Pakistan and elsewhere (Vyborny, Junaid, & Khan, April 2020). Together these studies will produce a generalizable base of evidence about effective strategies for safe worship throughout the Muslim world.

» Preliminary analysis of our experimental data suggests new, creative approaches may be needed to encourage Imams to more completely adopt protective measures during prayer, disseminate public health messages, and advocate protective measures be practiced outside of prayer⁴; our team at the Yale MacMillan Center has developed a short, engaging video featuring a prominent Bangladeshi cleric that can be easily circulated by mobile phone and social media (see screenshots below).

Further Reading

» An example of a video message about public health recommendations from a religious leader in Bangladesh, pictured above, can be accessed here.

» Methodological notes on the phone-based follow-up to the Cox’s Bazar Panel Survey (CBPS) can be found here.

» Methodological notes on the survey conducted on Imams across Bangladesh in May 2020 can be found here and described below.

---

⁴ Prayer practices and other health behaviors were similar in regions where Imams received the personal, faith-based appeals as compared to control regions that did not receive the intervention.
Methodological Note

The Cox's Bazar Panel Survey (CBPS) is a partnership between the Yale MacMillan Center Program on Refugees, Forced Displacement, and Humanitarian Responses (Yale MacMillan PRFDHR), the Gender & Adolescence: Global Evidence (GAGE) program, and the Poverty and Equity Global Practice (GPVDR) of the World Bank. The survey was executed jointly by Innovations for Poverty Action (IPA) Bangladesh and Pulse Bangladesh (Cox's Bazar) between April and July 2019.

The CBPS is a longitudinal study tracking 5,020 households across Cox's Bazar that is divided almost equally between refugee camps (n=2,493) and host communities (n=2,527). The Primary Sampling Units (PSUs) in host communities are mauzas, the lowest administrative unit in Bangladesh. Mauzas were stratified into areas within 15 kilometers from camps and areas farther away from camps. The PSU for refugee communities were camp blocks, as defined by the International Organization for Migration (IOM) Needs and Population Monitoring Round 12 (NPM 12).

The follow up phone-based survey had a sample size of 1,255 households, of which 909 were reachable by phone and 899 consented to be surveyed. Rohingya refugees (n=367) and host population (n=532) in Cox's Bazar were randomly drawn from the CBPS. It was administered between April 11 and 17, 2020 to assess the health status, health behaviors, and livelihoods of households across Cox's Bazar.

Questions also covered returning migration, employment, and food security. Additional questions on health knowledge and behaviors were administered to a random subsample (n=460).

The Religious Leaders COVID-19 survey was conducted by researchers affiliated with the Yale MacMillan Center in collaboration with IPA Bangladesh. It was administered to Imams in 50 randomly selected rural unions drawn from all divisions of Bangladesh. The sampling frame of 264 rural unions was drawn for a previous study evaluating a dispute resolution mechanism known as the "Village Court." We attempted to reach by phone every Imam of mosques in the sample unions, with contact information furnished by the Government of Bangladesh.

The referenced Imams survey was administered in two waves: 127 successfully completed interviews in Wave 1 (May 10-14, 2020) and 118 successfully completed interviews in Wave 2 (May 20-23, 2020). Of those, 107 Imams completed both waves, 20 Imams Wave 1 only, and 11 Wave 2 only. The survey collected information on the Imam’s demographics, economic wellbeing, knowledge & attitudes related to COVID-19, and congregation and prayer practices. The survey collected information on the Imam's demographics, economic wellbeing, knowledge & attitudes related to COVID-19, and congregation and prayer practices.

Graphs 1-3 above, that use the Cox's Bazar Covid-19 Phone Survey, include 95% confidence intervals. Graph 4, which uses the Religious Leaders COVID-19 survey, contains 95% confidence intervals derived from clustered standard errors at the union level.
References


