

Authors

Mushfiq Mobarak
Yale University

C. Austin Davis
Yale University

Paula López-Peña
Yale University

Shabib Raihan
Senior Research Associate

Prevalence of COVID-19 symptoms, risk factors, and health behaviors in host and refugee communities in Cox's Bazar: a representative panel study.

Paula Lopez-Pena¹, C. Austin Davis¹, A. Mushfiq Mobarak² & Shabib Raihan³

¹ Yale MacMillan Center, New Haven, CT, and School of International Service, American University, Washington, D.C., USA

² Yale MacMillan Center, New Haven, CT, USA

³ Yale School of Management and Department of Economics, Yale University, New Haven, CT, USA

⁴ Innovations for Poverty Action, Dhaka, Bangladesh

Correspondence to: Dr. Ahmed Mushfiq Mobarak, 3532 Edward P. Evans Hall, 165 Whitney Avenue, New Haven, CT 06511-3729, USA, Email: ahmed.mobarak@yale.edu, Phone: +1 (203) 435-0156 or +1-203-432-5787.

(Submitted: 10 May 2020 – Published online: 11 May 2020)

DISCLAIMER

This paper was submitted to the Bulletin of the World Health Organization and was posted to the COVID-19 open site, according to the protocol for public health emergencies for international zoonoses as described in Vassie Moorthy et al. (<https://doi.org/10.2471/BLT.20.251561>).

The information herein is available for unrestricted use, distribution and reproduction in any medium, provided that the original work is properly cited as indicated by the Creative Commons Attribution 3.0 International Organization License (CC BY-NC 3.0).

RECOMMENDED CITATION

Lopez-Pena P, Austin Davis C, Mushfiq Mobarak A & Raihan S. Prevalence of COVID-19 symptoms, risk factors, and health behaviors in host and refugee communities in Cox's Bazar: a representative panel study. [Preprint]. *Bull World Health Organ*. E-pub: 11 May 2020. doi: <https://doi.org/10.2471/BLT.20.251561>

Prevalence of COVID-19 Symptoms, Risk Factors, and Health Behaviors in Host and Refugee Communities in Cox's Bazar: A Representative Panel Study

We study the prevalence of COVID-19 symptoms in refugee and host communities and their correlates with current and pre-COVID-19 living conditions. We administered a phone-based

survey to a sample of 909 households in Cox's Bazar which was drawn from a household panel representative of Rohingya refugees and the host population. We conducted a symptoms checklist to assess COVID-19 risk based on the WHO guidelines. We included questions covering returning migration, employment, and food security. We asked additional questions on health knowledge and behaviors to a random subsample (n=460). 24.6% of camp residents and 13.4% of those in host communities report at least one common symptom of COVID-19. Among those seeking treatment, a plurality did so at a pharmacy (42.3% in camps, 69.6% in host communities). While most respondents report good respiratory hygiene, between 76.7% (camps) and 52.2% (host community) had attended a communal prayer in the previous week. Another 47.4% (camps) 34.4% (host community) had attended a non-religious social gathering. The presence of returning migrants, respondent mobility, and food insecurity strongly predict COVID-19 symptoms. Conclusion. COVID-19 symptoms are highly prevalent in Cox's Bazar, especially in refugee camps. Attendance at religious and social events threatens efforts to contain the spread of the disease. Pharmacies and religious leaders are promising outlets to disseminate life-saving information.

May 19, 2020