Contagion and Migration in South Asia

Researchers

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Abstract

The lockdown in South Asia has led to mass migration of people back to their home towns/villages as the work opportunities in urban centres shrink or are no longer available. This poses a public health risk to rural areas as migrants may spread the virus when they return and these areas are ill-prepared to handle the crisis due to poor healthcare infrastructure. Preliminary analysis by Shonchoy (2020) has shown that this is indeed likely since the outbreaks outside of Dhaka have been strongly correlated with migration patterns, potentially due to returning migrants bringing the disease from Dhaka, Chittagong or internationally. We aim to extend this analysis to India and Pakistan using data on migration for the three countries combined with locality level data on coronavirus cases and healthcare infrastructure. We will also analyse the loss in consumption/food security for rural communities dependent on remittance income, and its distributional implications.

Project Outcomes of Interest

COVID-19 infections

Key Findings

- Lockdowns to stop COVID-19 pushed South Asian migrant workers to return home.
- We predict COVID-19 spread with migration data from Bangladesh, India and Pakistan.
- We integrate district-day data on confirmed cases with district-level survey data.
- Prior international out-migration predicts COVID-19 spread in India and Pakistan.
- Fighting externalities in one place displaced them to others.

Link to Results

[Migration, externalities, and the diffusion of COVID-19 in South Asia (Journal of Public Economics, 2021)](#)

Impact Goals

- Improve social-safety net responses
- Reduce COVID-19 transmission rates

Results Status

Results

Results

We investigate the relationship between migrant movements and the spread of COVID-19 using district-day-level data from Bangladesh, India, and Pakistan (the 1st, 6th, and 7th largest sources of international migrant workers). We find that during the initial stage of the pandemic, a 1 SD increase in prior international out-migration relative to the district-wise average in India and Pakistan predicts a 48% increase in the number of cases per capita. In Bangladesh, however, the estimates are not statistically distinguishable from zero. Domestic out-migration predicts COVID-19 diffusion in India, but not in Bangladesh and Pakistan. In all three countries, the association of COVID-19 cases per capita and measures of international out-migration increases over time. The results show how migration data can be used to predict coronavirus hotspots. More broadly, the results are consistent with large cross-border negative externalities created by policies aimed at containing the spread of COVID-19 in migrant-receiving countries.