Nudging or Paying? Evaluating the effectiveness of measures to contain COVID-19 in rural Bangladesh in a randomized controlled trial

Shyamal Chowdhury (University of Sydney), Hannah Schildberg-Hörisch (University of Düsseldorf), Sebastian O. Schneider (Max Planck Institute Bonn) and Matthias Sutter (Max Planck Institute Bonn)

We conducted an RCT in rural Bangladesh with more than 3,000 participants from 150 villages to compare the effectiveness of a monetary treatment with a simple information campaign in containing COVID-19. We designed our experiment to allow for the identification of spillover effects at the village and the neighborhood level. The information campaign stressed the importance of social distancing and hygiene measures and the contribution of every villager by illustrating the effects of an exponential spread within the village. It imparted knowledge with respect to most common symptoms and measures in case of showing symptoms. In the monetary treatment, in addition, we unconditionally offered 2-3 days' worth of agricultural wages in rural areas to adhere to social distancing measures.

Interventions were conducted via phone, and started right before the (local) onset of the pandemic in early 2020. In treatment villages, about 20 households were randomly selected for treatment. Two village and household surveys two weeks and about three months after the intervention allow us to estimate short and long-term effects, and extensive data on risk, time and social preferences allow for a deeper understanding of beneficial characteristics to contain a global pandemic.

Preliminary findings indicate that in the short-run, both treatments improved individual health status of the treated significantly, as measured by our pre-registered health scale consisting of information on symptoms, diagnosis and quarantine. After three months, however, only the information treatment still has a positive effect on health status, whereas the effect of the monetary treatment becomes negative (although insignificant). Knowledge and believing that everybody can make a change have also been positively affected by our treatments – both in the short and in the long run. Whereas in the short run, risk aversion is a significant predictor of improved health status, in the long run, it is no longer significant and becomes replaced by prudence, which can be interpreted as a preference to avoid risks with a downside that affects not only the presence, but also the future.

Our results suggest that providing information via the phone to remote locations is a scalable solution to efficiently contain pandemics, whereas rewards might evoke the impression that measures should be followed only for an adequate time span in exchange for these rewards.