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Yes

COVID-19 Knowledge and Social Distancing

Researchers

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Abstract

Providing health information is a non-pharmaceutical intervention designed to reduce disease transmission and infection risk by encouraging behavior change. But does knowledge change behavior? We test whether coronavirus health knowledge promotes protective risk mitigation behaviors early in the COVID-19 pandemic across four African countries (Ghana, Malawi, Sierra Leone, and Tanzania). Despite reputations for weak health sectors and low average levels of education, health knowledge of the symptoms and transmission mechanisms was high in all countries in the two months after the virus entered the country. Higher knowledge is associated with increased protective measures that would likely lower disease risk with one exception–knowledge is inversely correlated with social distancing. Respondents largely adhered to mask mandates and lockdowns, but continued coming into contact with others at small, informal gatherings, gatherings not affected by mandates. Knowledge alone appears unlikely to reduce all risky activities, especially gatherings within other people's homes. Even early in the pandemic income loss or stress were commonly reported. Our results suggest that early and consistent government provision of health information, likely reduced the severity of the pandemic in Africa but was not a panacea.

Project Outcomes of Interest

Social distancing in the past seven days. Knowledge of virus transmission and symptoms

Partners

Varies by country; government bodies

Key Findings

Despite reputations for weak health sectors and low average levels of education, health knowledge of the symptoms and transmission mechanisms was high in all countries in the two months after the virus entered the country. Higher knowledge is associated with increased protective measures that would likely lower disease risk with one exception–knowledge is inversely correlated with social distancing. Respondents largely adhered to mask mandates and lockdowns, but continued coming into contact with others at small, informal gatherings, gatherings not affected by mandates. Knowledge alone appears unlikely to reduce all risky activities, especially gatherings within other people's homes. Even early in the pandemic income loss or stress were commonly reported. Our results suggest that early and consistent government provision of health information, likely reduced the severity of the pandemic in Africa but was not a panacea.

Link to Results

Published Paper (Journal of Economic Behavior and Organization)

Impact Goals

- Keep children safe, healthy, and learning
- Reduce COVID-19 transmission rates

Project Data Collection Mode

- CATI (Computer-assisted telephone interviewing)

Results Status

Results

Results

- In this paper we examine the role of information as a non-pharmaceutical intervention (NPI) to induce risk mitigation behaviors early in the coronavirus pandemic across four

samples in Africa—educators in Ghana, men who frequented bars pre-pandemic in Malawi, public transit riders in Sierra Leone, and microenterprise owners in Tanzania. Only one to two months after the first reported cases in each country, knowledge of the coronavirus symptoms and transmission mechanisms was relatively high. Information was positively correlated with reports of other non-pharmaceutical interventions that mitigate the spread of the coronavirus, such as hand washing, mask wearing, increased social distancing, and using hand sanitizer. Relatively high rates of use of these measures early on in the pandemic may partly explain why Africa had relatively few deaths per capita in 2020 compared to richer regions. Across the four countries we study, the same high rates of knowledge were found across the data collection period.

- Our findings have three implications for public policy. First, even those with high levels of knowledge continued to engage in informal gatherings, perhaps because of the stressful context of the early pandemic period. While Maire (2020) found that extreme poverty, and those with vulnerable employment, particularly in agriculture were less able to comply with lockdown requests, work by Krekel et al. (2020) found that personal happiness and mental health were also a key factor in lockdown compliance. Therefore, additional campaigns that increase symptom and transmission knowledge will likely not reduce these interactions. Instead, voluntary behavior change appears a more complicated utility maximization problem that could involve changing people's norms and cost-benefit assessments.

- Second, the direct health effects of the pandemic were not the only costs. Many more respondents reported income loss and increased stress than those that reported direct health effects in their households. The potential negative consequences of long-term stress should be given appropriate consideration, particularly in the context of children at home from school at risk of abuse.

- Third, individuals will undertake their own cost-benefit assessments that might not align with true underlying risks or those perceived by policymakers. Individuals largely adhered to formal closures in the countries in which they were instituted, yet continued small indoor gatherings that are both a substantial potential source of transmission and not likely easy to curtail. Clear, consistent communication about risks and benefits appear paramount along with providing messaging about which activities are relatively lower risk.

- Early in the pandemic, consistent and timely health information across the four countries of study likely increased the likelihood that people took many, but not all, preventative health behaviors. As the pandemic continues into year 2, the messaging and support available to households will likely need to evolve, especially as pandemic fatigue increases.