Mask Up! Testing strategies to increase mask use in Kenya

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Sector(s): Health

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Sample: 72 villages

Initiative(s): Innovation in Government Initiative (IGI)

Target group: General Adults

Outcome of interest: Health outcomes

Intervention type: Information COVID-19 response

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Partner organization(s): Siaya County Community Health Service, SafeHands Kenya, REMIT Kenya, Weiss Family Program Fund for Research in Development Economics

Covid-19 poses a threat to health, livelihoods, and socio-economic wellbeing around the world. Mask mandates have been one of the most widely adopted non-pharmaceutical intervention to prevent its spread, yet compliance remains low in many settings. In this community level RCT in Siaya county in Kenya, we investigate the impact of strategies, including the free distribution of masks, education campaigns, and the promotion of mask use by role models selected by their village peers. Early results suggest mask distribution in combination with education campaigns lead to an increase in correct mask use of forty to seventy percent and substantially improved Covid-19 related knowledge. Moreover, education and role model interventions were both effective at changing social attitudes around mask use.

Policy issue

Covid-19 poses a threat to health, livelihoods, and socio-economic wellbeing around the world. Despite vaccination campaigns being underway, precautions to prevent the spread of Covid-19 remain crucial, especially within communities with low vaccination rates, and amidst spikes in cases from new Covid-19 variants.

Recent evidence suggests that wearing masks may significantly reduce the spread of the virus, and an increasing number of governments are rolling out free mask distribution programs[1]. Mask wearing is mandatory in many countries. Yet, compliance with this requirement remains low in many settings. Additional research is needed to understand how to most effectively promote mask adoption and encourage social distancing behavior. Can informational campaigns and free mask distribution increase mask adoption and slow the spread of Covid-19? Can existing health infrastructure, and village-level social networks be leveraged to promote a change in behaviors and attitudes with respect to masks?

Context of the evaluation

As of January 2022, there have been over 304,000 confirmed cases of Covid-19 in Kenya, and more than 5,400 people have died due to Covid-19[2]. Compulsory mask wearing remains a key pillar of the country's mitigation strategy. However, evidence suggests that mask adoption rates often remain low in practice.

Siaya county, where this study took place, is among the locations experiencing low rates of mask adoption in the country. At the time of this study, around 10 percent of villagers and market participants wore masks in villages, and about 18 percent wore masks in crowded markets, as observations from summer 2020 suggest. Siaya ranks among the top fifteen county-wide Covid-19 rates in Kenya, with a cumulative 3,650 confirmed cases as of December 2021.

Different actors have been investing in mask distribution programs to respond to low rates of mask adoption. The NGO SafeHands Kenya, for instance, distributes masks to vulnerable communities around the country, including Siaya county, with similar campaigns underway in neighboring Uganda. Building on this work, the Ministry of Health in Siaya County was interested in identifying the key barriers to mask adoption, and determine the most cost-effective ways to encourage people to wear masks regularly, including through mask distribution.



Domestic workers wearing surgical masks attend a training in Kenya.

Photo credit: Sebastian Castelier, Shutterstock.com

Details of the intervention

Researchers partnered with the Ministry of Health in Kenya's Siaya county, SafeHands Kenya, and REMIT to test whether free mask distribution, combined with informational and behavioral campaigns, as well as incentivized mask promotion by peer-identified role models can increase mask wearing, improve covid-related knowledge and attitudes, and reduce the spread of

Covid-19.

Researchers randomly assigned 72 villages in Kenya's Siaya county into one of three groups:

1. *Free mask distribution + Education*: Community health workers distributed masks at no cost to recipients, and received in-person education campaigns. Masks were branded with '#TIBANISISI', translating to 'we are the cure'.
2. *Education only*: Villages did not receive free masks, but received some form of in-person education campaign.
3. *Comparison group*: Villages did not receive the mask distribution nor the education campaigns.

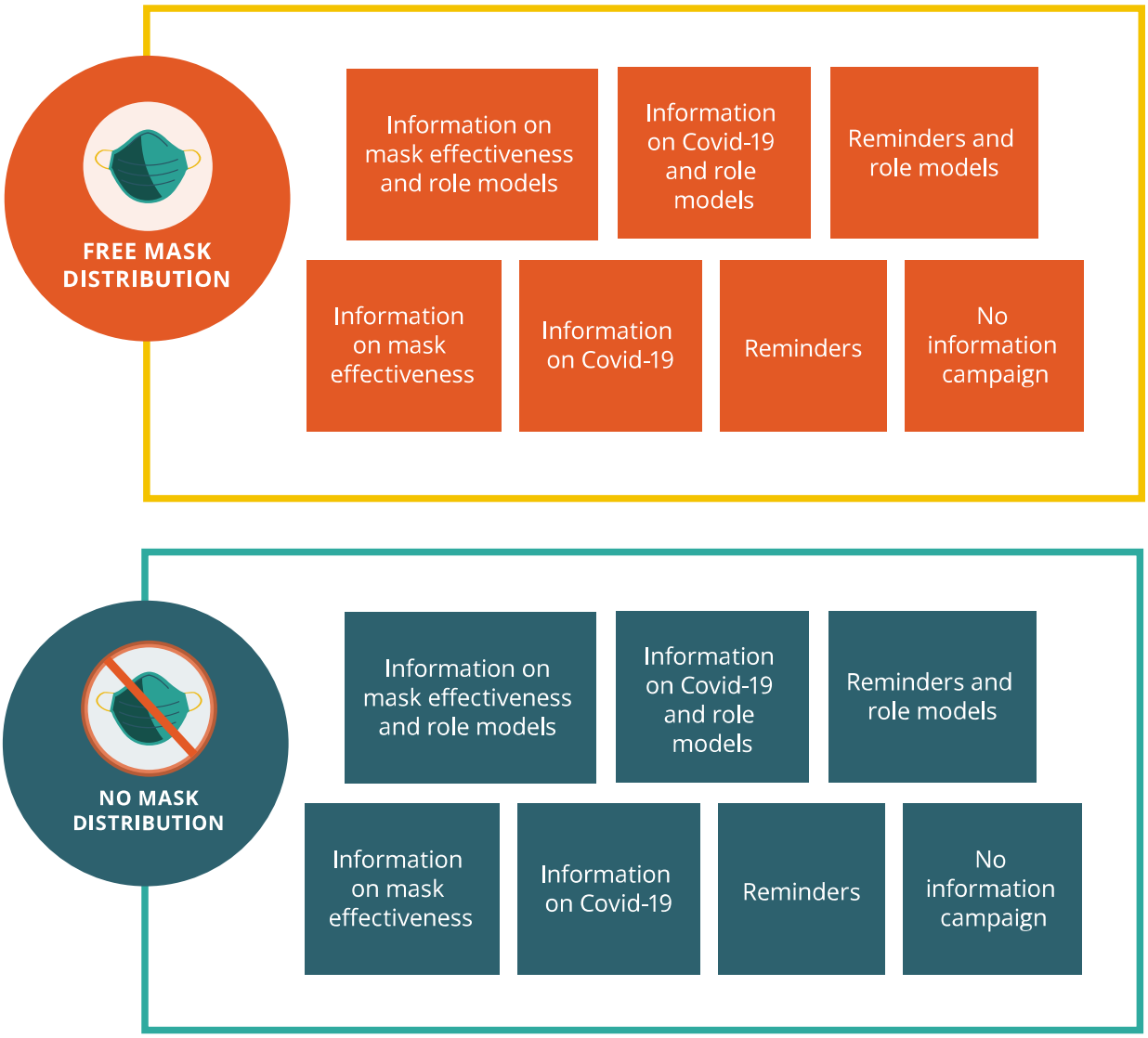
In villages with education campaigns (groups 1 and 2), half of households were randomly assigned to one of three types of additional informational campaigns designed to text three potential drivers of under-adoption of masks: a) incorrect beliefs about mask effectiveness, b) incorrect beliefs about the likelihood of getting infected and the severity of Covd-19, and c) inattention / lack of habit of mask use.

- *Information on mask effectiveness*: Participants received information in-person and via text message about the effectiveness of masks in preventing the spread of Covid-19. The informational material covered virus transmission via droplet spread with and without masks, as well as evidence on the effectiveness of masks.
- *Information on Covid-19*: Participants received information in-person and via text message about Covid-19 symptoms and hospitalizations, as well as a graphic to illustrate the pandemic's exponential spread.
- *Reminders*: Community health workers visited participants and helped them identify a place in their home to hang a mask as a visual reminder to wear it leaving the house. Participants also received weekly text message reminders to wear masks.

In a second step, the above-mentioned interventions were overlaid with an additional intervention that was cross-randomized across villages:

1. *Role models*: In selected villages, researchers identified individuals who were seen as trustworthy in health matters by others in the village. The identified role models wore masks in public, easily visible to others, and were incentivized (through a competition, and a small monetary benefit) to promote mask use in their village. Their masks were branded with '#TIBANISISI', translating to 'we are the cure'. The aim of this intervention was to counter social stigma around mask wearing and promote a change in social norms around mask use.

Researchers collected data on observed mask usage in public spaces in 4 rounds before and after the study and administered short phone surveys to learn about participants' self-reported mask wearing and social distancing behavior, as well as their knowledge and attitudes related to covid-19 and mask wearing.



At the time of the intervention, masks provided by SafeHands Kenya were limited in supply, and not all Siaya county villages could receive free masks at the same time. Thus, the study at no point purposefully withheld any masks from anyone. Ugunja sub-county was chosen as the study area for this pilot because of is increased early exposure due to its location along a major trade route and highway.

Results and policy lessons

Research ongoing; results forthcoming.

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1. Chu, D.e.a., 2020. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *The Lancet*, 0140(6736).

2. https://covid19.who.int/region/afro/country/ke (accessed November 16, 2021)