



Surviving an Epidemic

Covid-19 Phone Surveys in the Malawi Longitudinal Study of Families and Health

Hans-Peter Kohler and the MLSFH Team

(including James Mwera, Andrew Zulu, Victor Mwapasa, Iliana Kohler,
Fabrice Kämpfen, Alberto Ciancio, Rose van der Linden, and many others)

PAA Covid19 Virtual Seminar — 18 August 2020



Malawi Longitudinal Study of Families and Health

► MLSFH Survey Data

- Longitudinal household panel interviewed in 1998, 2001, 2004, 2006, 2008, 2010; 2012, 2013, 2017 on mature adults age 45+
- Follow-up of all respondents during 2018–19
- ≈4,000 randomly selected adult respondents
- Covering demographics, economic conditions, health & well-being, sexual & social networks, intergenerational relations, migration, aging

► Adolescents, adult and aging-focused projects

► Expectations and transfers data & randomized field experiments

► Data publicly available

(<http://www.malawi.pop.upenn.edu>)



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MLSFH Context: Three Diverse Rural Areas in Malawi

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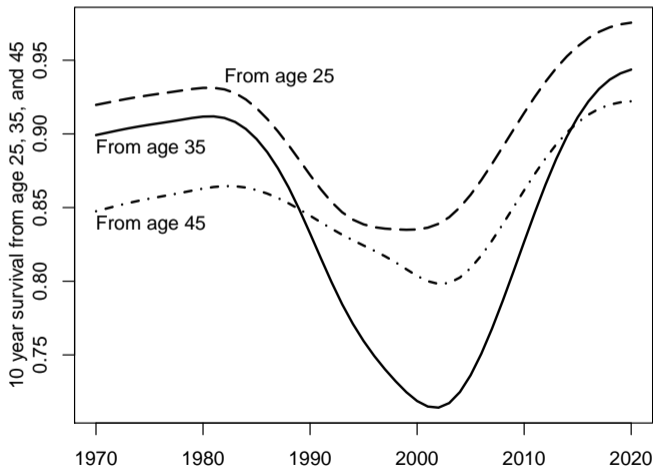
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Currently Funded Aims: Surviving an Epidemic

10-year survival probabilities 1970–2020 from age 25, 35 and 45 (men)



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2020 Plan: In-person Surveys with Health Measurements



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2020 Plan: In-person Surveys with Health Measurements



Covid-19: Plans for 2020 in-person surveys were canceled March 10

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IMF maintains high growth rate for Malawi amid Covid-19



PHOTOGRAPH: NATION

DUMBANI MZALE
STAFF WRITER

Malawi's economy is set to expand by a six to seven percent range in the medium-term despite the threat of coronavirus disease (Covid-19), the International Monetary Fund (IMF) has said.

But the fund has made it clear that the risk of a "deeper disruption" to the

country's economic activity remains elevated owing to spillover effects of the pandemic.

Recent strong agricultural harvests and reconstruction activity after Cyclone Idai have boosted Malawi's economic growth, but IMF warned that the growth path for the remainder of the year will depend on the extent of transmission to Malawi of Covid -19 and

the magnitude of associated global and regional economic spillovers.

In a statement outlining the outcome of a fourth review of the three-year Extended Credit Facility (ECF) arrangement for Malawi, the fund said in the medium-term growth should be underpinned by infrastructure that is more resilient to shocks from climate change, improved

access to finance, crop diversification, and an improved business climate.

But the projected medium-term economic growth projection by the institution is way above a 5.1 percent growth which authorities are anticipating achieving this year.

While commending authorities for regaining

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Border staff lack Covid protective kits —National P2

WHAT CORONA?

- In rural Malawi, it's business as usual despite virus threat
- Presidential orders largely ignored, little enforcement

STAFF WRITERS

Chris Ntonio is 86. She has never heard of coronavirus disease (Covid-19), let alone accessed any message of how to protect herself from it.

When one of our reporters covering this story asked her yesterday if she was aware of the coronavirus, she looked perplexed.

The octogenarian, enjoying fresh air under a tree at her home, retorted: "Mutolamba za kolena yemweya timavaliyi? [Are you talking about the same rosary we Catholics use?]" Ntonio wondered.

When our reporter explained to her that Covid-19 was

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PHOTOGRAPH: CHRISTIAN PANGUWU

Ntonio: I don't have a radio to get such information



Disaster response receives K44bn boost —National P4



CFTC for vigilant consumers —National P4



Opportunities

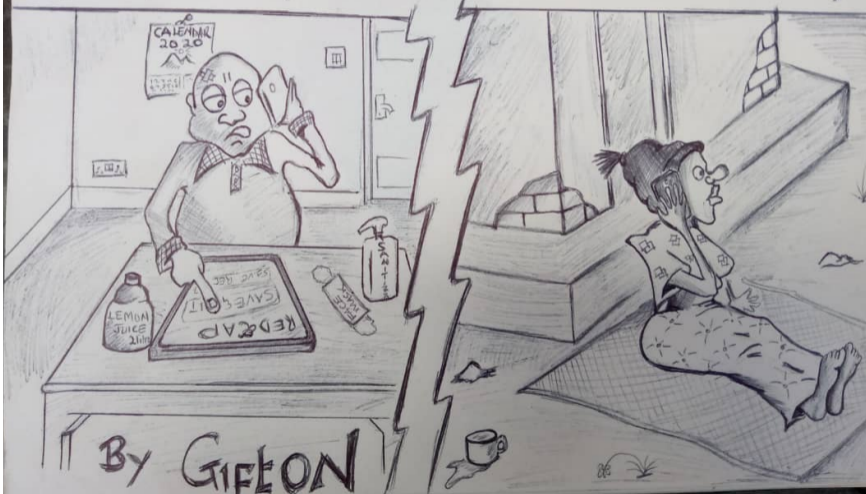
- ▶ Extensive prior longitudinal data
- ▶ Collected (unverified) cell phone numbers since 2017 as part of contact infos
- ▶ Broad age range: young adults to old individuals, including data on spouses and family/household structures
- ▶ Data on HIV & NCD disease perceptions, and data on coping with, and consequences of, HIV epidemic
- ▶ Future post-pandemic data are likely



Challenges

- ▶ Covid-19: ensure health & safety of respondents and study team
- ▶ Importance of familiarity of interviewers with study context/areas
- ▶ Power outages, weak cell phone network, often shared cell phones (very few smart phones), busy lives of respondents, presidential election in Malawi
- ▶ Data security and data quality monitoring
- ▶ Respondent Identification in longitudinal panel
- ▶ Identify topics where MLSFH phone survey has distinctive advantages

OCEAN'S 12 TEAM IS MORE THAN READY FOR COVID 19 PHONE STUDY



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Approach for MLSFH Phone Survey

- ▶ **Phone survey** conducted by experienced MLSFH supervisors working from home (3 survey languages), with respondents randomly assigned
- ▶ Target sample: **MLSFH respondents**, Village Heads, Health Care Providers
- ▶ Commitment to **build MLSFH capacity** for data collection during Covid-19
- ▶ **Redcap** for recording answers (+ encrypted data storage & transmission)
- ▶ Geographically **dispersed survey team** (12 members) equipped just before planned Malawi National Lockdown 4/18/2020 (got delayed on last minute)
- ▶ **Zoom meetings** for instrument development, training and implementation,
- ▶ complemented by YouTube videos, Google Sheets, WhatsApp Groups, encrypted Dropbox folders, remote tablet management software, etc.
- ▶ Priority on **data security and quality**: limited data on tablets (encrypted), no paper trails with identifiable info, daily data uploads, daily quality controls with daily reports communicated to team, daily project meetings
- ▶ **Fail-safe approach**: focus on weak links (persons & technology) + flexibility

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Target Sample for MLSFH Phone Survey

Target sample (respondent survey) included:

- ▶ MLSFH respondents surveyed during 2017–19 with recorded phone number
- ▶ Spouses of the above
- ▶ Village Heads surveyed in 2019
- ▶ **Total target sample: 3,172**

Proportion of 2017–19 MLSFH respondents in Target Sample

Age	Women	Men	Total
25-34	74%	86%	77%
35-44	80%	83%	81%
45-54	82%	85%	83%
55-64	80%	85%	82%
65-74	74%	83%	78%
75+	56%	79%	66%

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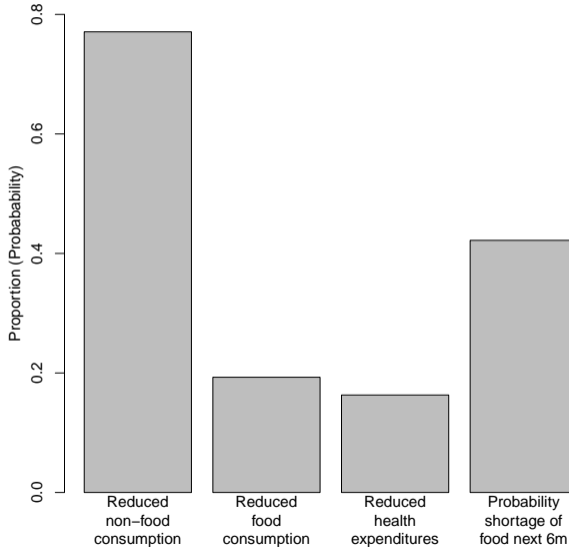
Survey outcomes (survey period June 2 –Aug 17, 2020):

- ▶ 2,256 completed surveys plus 118 Proxy interviews (10 refusals),
- ▶ Conducted during 2 June – August 17, 2020
- ▶ Average survey time 42 minutes (SD 8.3 min)
- ▶ Up to six call attempts to multiple numbers, total of > 12,200 phone calls

Proportion of target sample surveyed:

Age	Women	Men	Total
25-34	77%	74%	76%
35-44	78%	77%	78%
45-54	75%	76%	75%
55-64	70%	73%	71%
65-74	57%	68%	62%
75+	37%	57%	47%

Economic Consequences of the Pandemic



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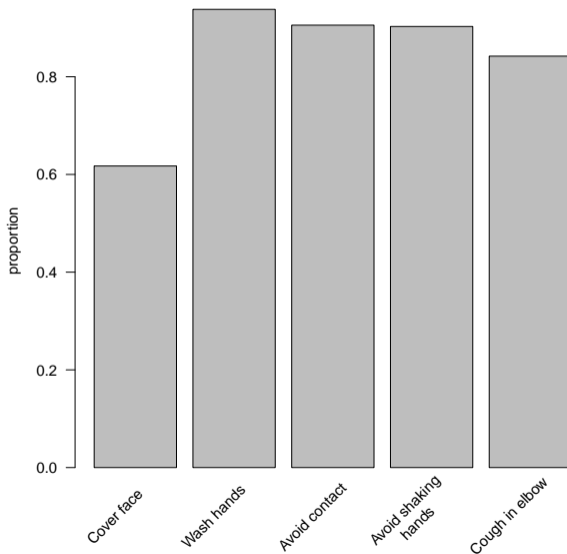
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Social Distancing and Other Prevention



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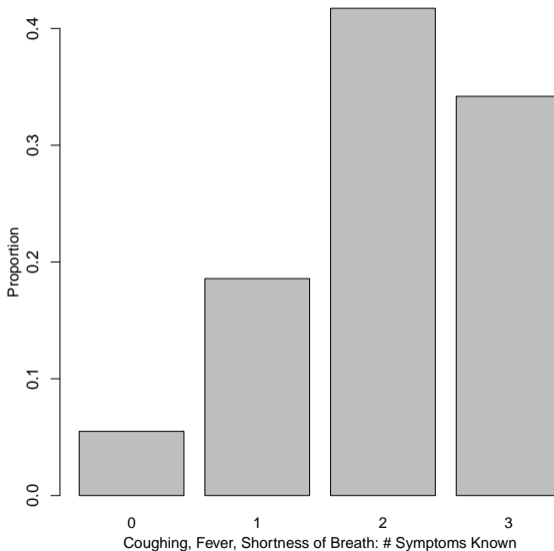
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Know Symptoms: Fever, Shortness of Breath, Cough



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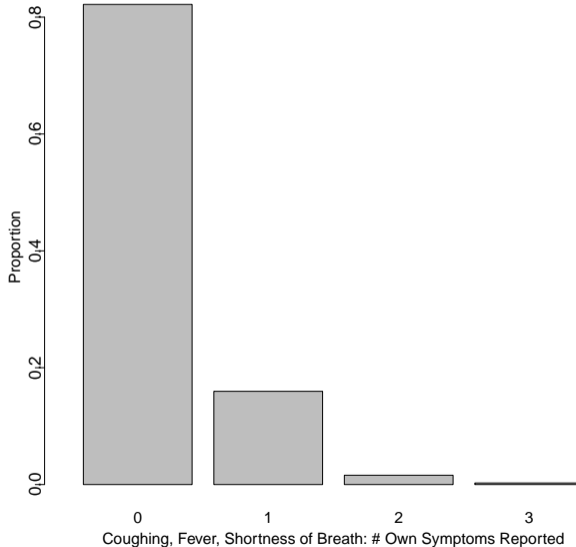
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Own Symptoms: Fever, Shortness of Breath, Cough



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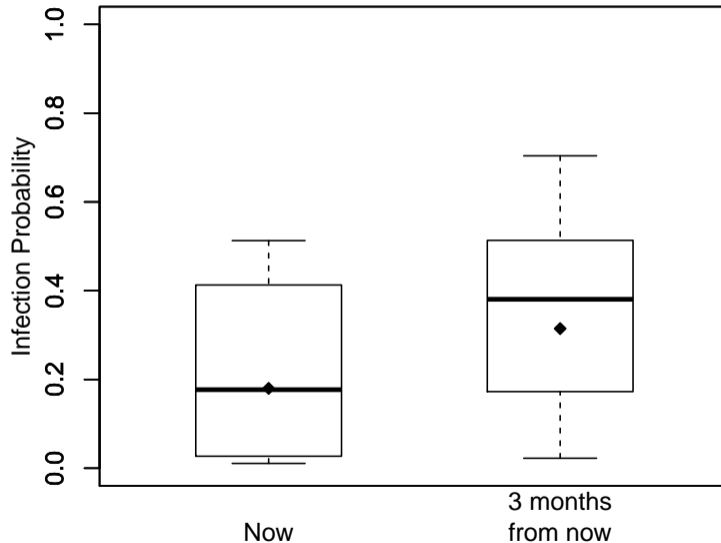
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Perceptions (Probabilities) of Covid-19 Infection



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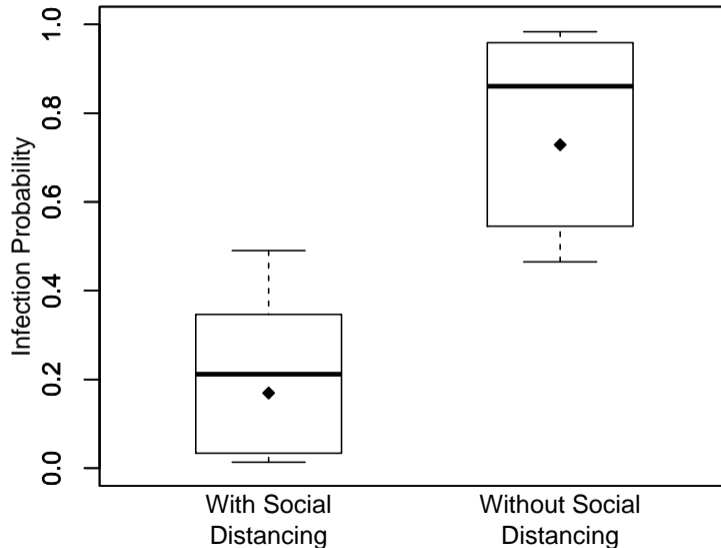
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Perceived Effect of Social Distancing Measures



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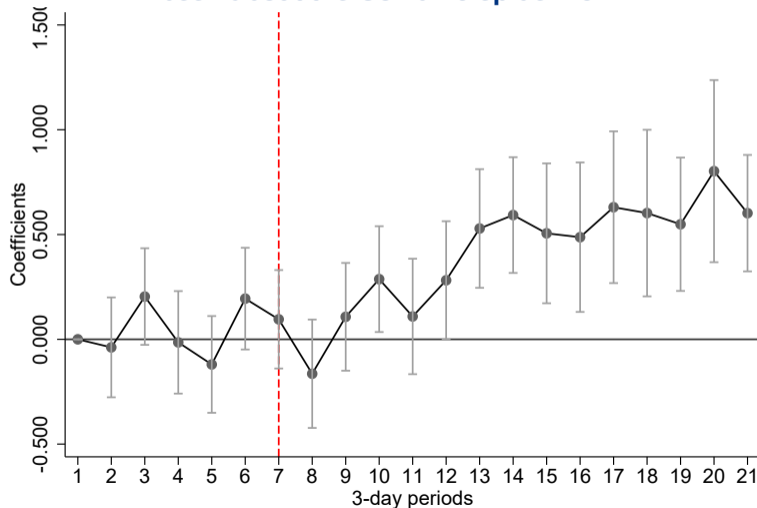
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Changes over Time: Effect of Election

How factually truthful do you think your country's government has been about the Covid-19 epidemic?



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SHARE



Children run past a mural warning about COVID-19 in Nairobi. Kenya has reported relatively few cases so far. AP PHOTO/BRIAN INGANGA

The pandemic appears to have spared Africa so far. Scientists are struggling to explain why

By Linda Nordling | Aug. 11, 2020, 3:15 PM

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Conclusions

- ▶ Longitudinal data across the Covid-19 pandemic is critical, including from difficult-to-reach populations
- ▶ Phone surveys provide unique opportunities, but require more than simply “making lots of phone calls”
- ▶ Possibly distinctive patterns of pandemic response, requiring also distinctive policy responses
- ▶ Key accomplishment: Establish **Phone Survey Panel** of 2,200 MLSFH Respondents
- ▶ **(Very) Preliminary findings:**
 - ▶ Relatively high levels of Covid-19 knowledge and preparedness
 - ▶ Plausible risk perceptions, and beliefs in effectiveness of social distancing measures
 - ▶ (So far) Low levels of reported symptoms (individual and household members)

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