As COVID-19 sweeps across Papua New Guinea, one fact is clear: vaccination rates need to rise. There are a range of reasons why so few people have been vaccinated to date. Supply was limited at first, and threadbare health infrastructure has hampered the rollout since. But one impediment has become
increasingly obvious: many people are hesitant about being vaccinated.

Starting in May this year, along with counterparts, I’ve been involved in research on attitudes to COVID-19 vaccinations in Papua New Guinea. The work included a large, broadly nationally-representative phone survey (run in late May and June) on attitudes to COVID-19 vaccinations. The research also included a large online survey experiment in June and July to see what information, if any, could change attitudes about vaccines. In a country like PNG, phone surveys and online experiments are imperfect tools. But face-to-face surveys are difficult and expensive and, with a need for speed, our approach was the best alternative. What’s more, using phone tower information to ensure good geographical coverage, along with survey weights derived from the most recent Demographic and Health Survey and census ensured the resulting data were as representative as possible.

All of the methods are covered in full in a recent World Bank discussion paper. The results I’m going to write about today, and more, are also covered in detail in the paper. In this post I’m going to provide my take on the findings, in the form of bad news, good news, and a possible pathway forwards.

The bad news is striking. Less than one in five respondents to the phone survey who were aware a vaccine existed said they were planning on being vaccinated.
Response to question in May/June phone survey on vaccination plans

To learn more, participants who weren’t planning on being vaccinated were asked why. There were many possible responses – including answers involving logistics and cost. In practice though, most of the people who said they weren’t planning on being vaccinated were sceptical, or frightened of, the vaccine itself.
Although a lot has been said about online misinformation over the course of the pandemic in PNG, the phone survey participants’ vaccine hesitancy doesn’t seem to have come directly from the internet. Only a small proportion of phone survey respondents said they used the internet for health information. And there was no correlation between people’s trust in information from the internet and whether they planned on being vaccinated against COVID-19. Internet misinformation might still be affecting people’s views about vaccines indirectly in PNG, with rumours starting online before subsequently being propelled by word of mouth. But the internet on its own doesn’t seem to be the primary vector of vaccine
aversion.

The good news is that even though most of the respondents to the phone survey said they weren’t planning on being vaccinated, or were uncertain, when asked who might change their mind, their replies offered some hope they were open to reconsidering. Their responses also made it clear whose recommendations they trusted first and foremost: health workers.

**People who might change respondents’ minds about the vaccine (phone survey)**

![Bar chart showing percentages of respondents who might change their mind based on advice from different sources.](chart)

On top of this, in the online survey experiment we found that even very basic information such as statements about the vaccine’s safety and the danger of
COVID-19 could increase people’s inclination to be vaccinated. The information provided was simple, and participants only got to read it once. It’s unlikely to be as influential as a conversation with a trusted health professional. Yet, even so, telling people the vaccine was safe and COVID-19 dangerous increased the share of respondents who said they were planning to be vaccinated by over 10 percentage points. Some of the other information tried in the experiment didn’t affect people’s views (more details are in the paper) so messages do need to be carefully thought through. But the good news is that it’s possible to change views about COVID-19 vaccinations in PNG by giving people the facts.

**Percentage planning to be vaccinated – experiment results**

![Bar chart showing the percentage planning to be vaccinated between the control group and the relative safety message group.](chart.png)

*Notes: The control group weren’t given any information; they were simply asked if they were planning on being vaccinated. The relative safety group were told about the safety of the vaccine, and the danger of COVID-19.*

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There is much more information in the paper. Taken together, the findings point to a pathway forward for PNG as it strives to reduce vaccine hesitancy: provide simple information about the safety of the vaccine and the dangers of COVID-19. And do this through local health workers wherever possible.

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