

### Context

COVID-19 is the result of infection by the coronavirus. The most common symptoms of the disease are fever, dry cough, and fatigue. The virus spreads mainly through droplets of saliva or discharge from the nose that are spread when an infected person coughs or sneezes. Currently there are no specific vaccines or treatments for the disease. However, a number of preventive strategies are recommended, including frequently washing one's hands with soap and water, maintaining at least one meter distance from people who are coughing or sneezing, avoiding touching one's face, avoiding unnecessary travel, and staying away from large groups of people.

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### 3-2-1 COVID-19 Survey

Viamo, as part of our COVID-19 response, added COVID-19 information on our 3-2-1 Service (<https://viamo.io/services/3-2-1/>) in 18 countries, including messages on symptoms and prevention. As of July 1 2020, these key messages have been listened to 25 million times by more than 3.3 million users. To further understand the information gaps and needs of our users, we added the 3-2-1 Service COVID-19 Survey to poll our users about their knowledge of the disease, as well as the impact of the disease on their livelihood.

To keep the IVR survey short, 12 different questionnaires were used, each addressing a specific COVID-related topic area (knowledge of COVID-19 and how to prevent it, attitudes, preventive behaviors, motivation, impact on food security, income, mental health, COVID-related school disruption etc.). The surveys were implemented in the Democratic Republic of Congo, Nepal, Madagascar, Malawi, and Rwanda. The first wave of the 3-2-1 COVID-19 Surveys, conducted in May 2020 and involving over 1,500 respondents for each of the 12 questionnaires, demonstrated the value of the 3-2-1 Service for providing rapid, reliable, low-cost data on country experiences during the pandemic. Compared to Random Digit Dial mobile surveys, 3-2-1 Service users are younger, slightly poorer, and more likely to get their information through their mobile phones.

We present here key findings from Wave 1 of the 3-2-1 Service COVID-19 Survey as longitudinal, cross-sectional data continues to be collected. These findings may be of interest to officials, planners, and policy-makers currently addressing the pandemic at all levels of the response.

### Highlights



Knowledge of the virus is far from universal: 29% of respondents have not heard of the disease even though, according to the WHO, the best way to prevent and reduce the transmission of the coronavirus is to be well-informed about the virus and how it spreads (WHO 2020).



Many people are unaware how the virus is spread: 41% report not knowing how the virus is spread while another 21% incorrectly identify mosquito bites, sexual relations, or contaminated food and water as the main source of spreading.



Limited awareness of silent spreaders: Only 63% of respondents know the virus can be spread by asymptomatic persons.



Varying knowledge of symptoms: 41% report not knowing the main symptoms, ranging from 17.5% in Rwanda to 61.5% in Malawi. When asked about the main symptoms, only one in two respondents (51.7%) correctly identify fever, cough, and breathing problems. Awareness of these symptoms is notably higher in Rwanda (79.7%) and low in the DRC (31.4%) and Malawi (37.1%).



Most people know regular hand washing helps prevent infection: 86% of respondents agree that regular hand washing helps prevent infection and 77% believe that avoiding contact with people who cough or sneeze will do so. However, many respondents also believe that practices that have been proven effective for other diseases can help prevent coronavirus infection, such as using a mosquito net (38.6%) or cooking meat and eggs well (54.9%)

Fig 1: Percentage of respondents who have heard of coronavirus

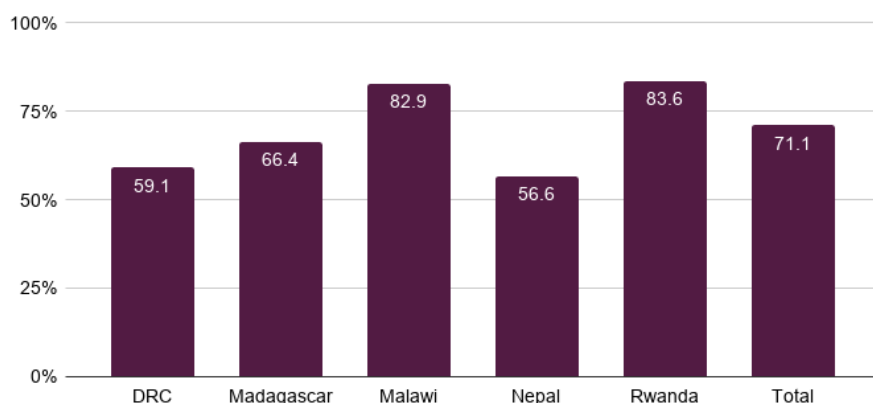


Fig. 1. Despite the extensive news coverage of the global COVID-19 pandemic and despite the fact that nearly all countries have implemented specific policies to curtail the spread of the virus and to protect its citizens, awareness of the disease is far from universal. Across the five countries in studies, only 71.1% of respondents report being aware of the disease. In only two of the countries, over 80% of respondents reported having heard about the new coronavirus disease (83.6% in Rwanda and 82.9% in Malawi). Awareness of the disease is lowest in the Democratic Republic of Congo and Nepal, at 59.1% and 56.6% respectively.

**Fig 2: Percentage who report the main way coronavirus spreads**

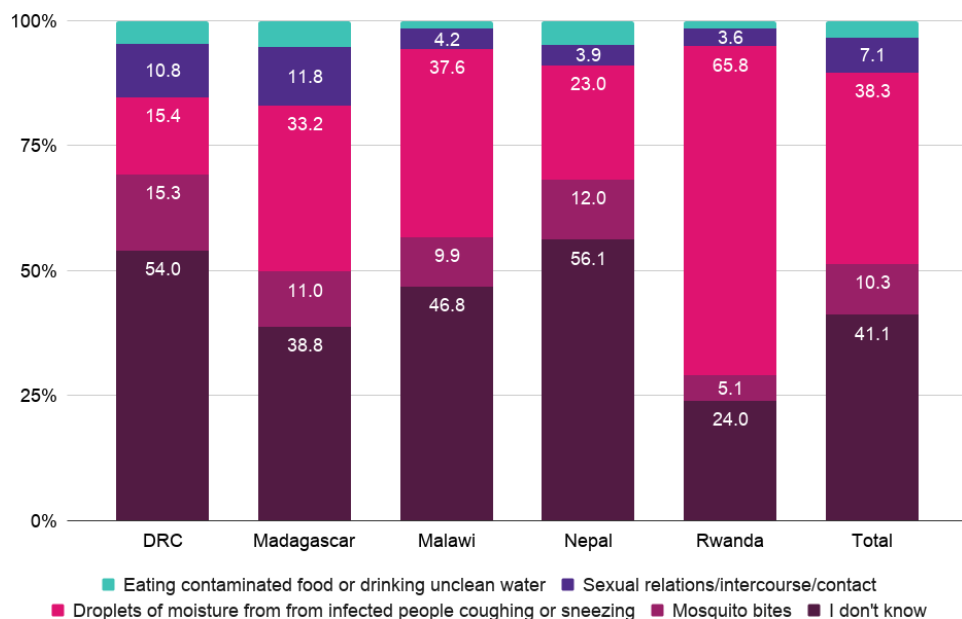
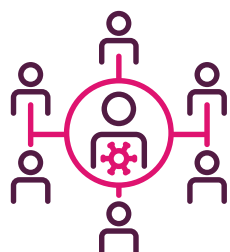


Fig. 2. Consistent with the fairly low awareness of COVID-19, many people have a poor understanding of how the virus spreads. When asked the main way the virus spreads, only 38.3% responded it is spread through droplets from infected people coughing or sneezing. Rwanda is the only country where over half of respondents (65.8%) reported that the virus is transmitted through infected people coughing or sneezing. In the DRC and Nepal less than one in four respondents were aware of this transmission mode (15.4% and 23.0%, respectively). For all countries combined, a notable proportion of respondents reported they believe the virus is transmitted through mosquito bites (10.3%), sexual relations (7.1%), or contaminated food and unclean water (3.3%).

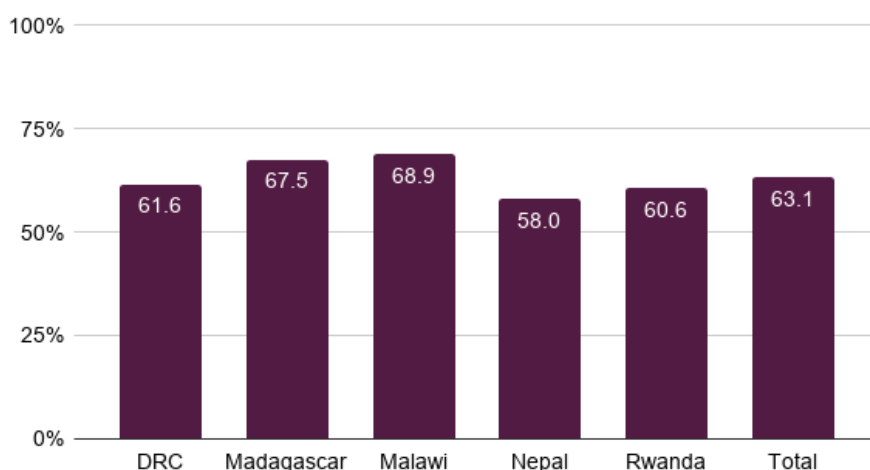
**Fig 3: Percentage of respondents who believe coronavirus can be spread by asymptomatic people**

Fig. 3. Only six in ten respondents (63.1%) believe that the coronavirus can be spread by people who do not have any symptoms of the diseases. Awareness that the virus can be spread by asymptomatic people is over 60% in four of the five countries (DRC, Madagascar, Malawi, and Rwanda), but only 58.0% in Nepal.



**63.1%**

of respondents believe that the coronavirus can be spread by asymptomatic people



**Fig 4: Percentage of respondents who report the main symptoms of coronavirus**

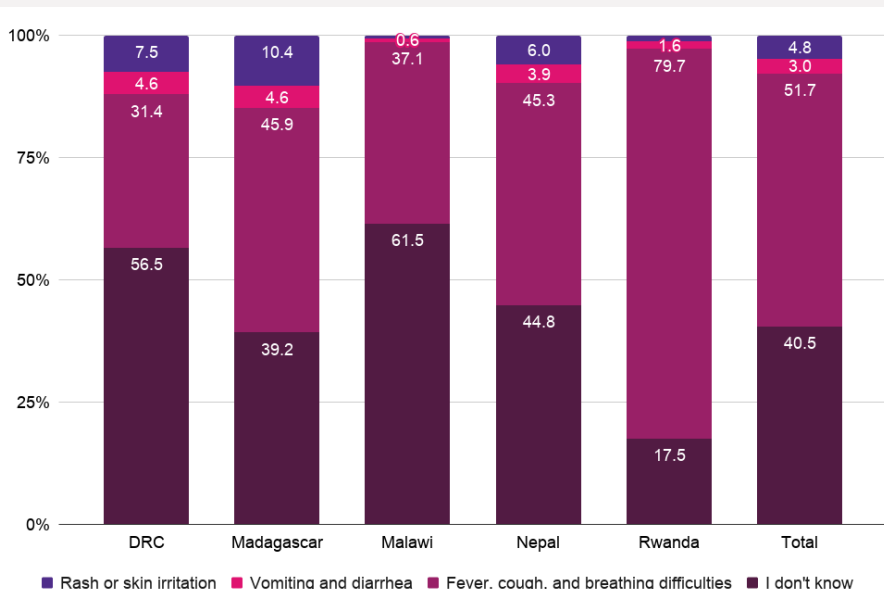


Fig. 4. When asked about the main symptoms of the coronavirus disease, over half of respondents (51.7%) replied that the symptoms are fever, cough, and breathing problems. Awareness of these symptoms is notably higher in Rwanda (79.7%) and very low in the DRC (31.4%) and Malawi (37.1%). The percentage who report not knowing the symptoms ranges from 61.5% in Malawi and 56.5% in the DRC to a low of 17.5% in Rwanda. Across the five countries, only a small fraction of respondents believe that the main symptoms include rash and skin irritations (4.8%) or vomiting and diarrhea (3.0%).



**51.7%**

of respondents replied that the symptoms are fever, cough, and breathing problems.

**Fig 5: Percentage of respondents who think they are very likely to become infected or are already infected**

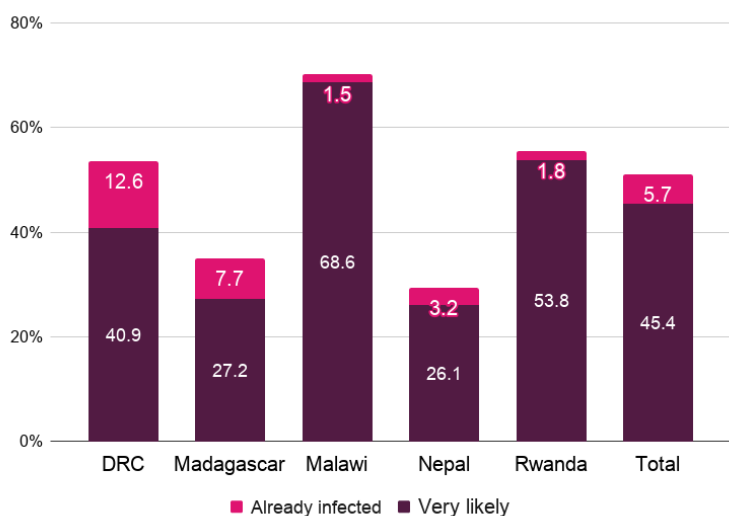


Fig. 5. Overall, 45.4% of respondents reported that they believed it is very likely that they will become infected with the coronavirus, and 5.7% believe they have already been infected. The percentage who believe it is very likely they will become infected is highest in Malawi (68.6%) and Rwanda (53.8%), and lowest in Madagascar (27.2%) and Nepal (26.1%). Although respondents from Malawi are most likely to believe it is very likely that they will become infected, only 1.5% think they have already been infected. By contrast, in the DRC 12.6% of respondents believe they are already infected.

**Fig 6: Percentage of respondents who report knowing what to do to prevent becoming sick from coronavirus**

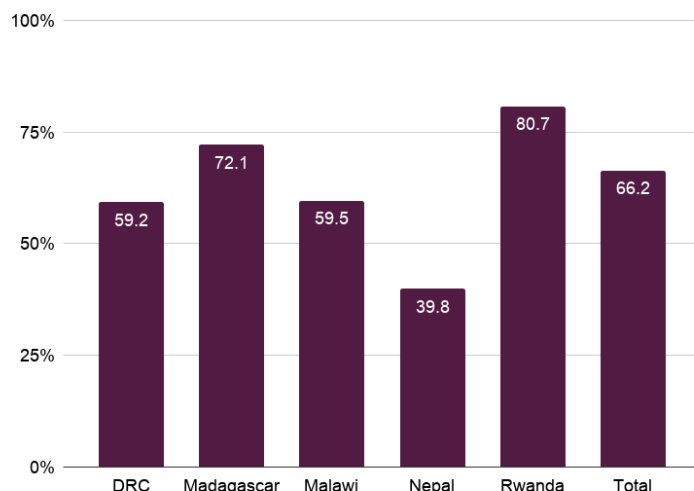
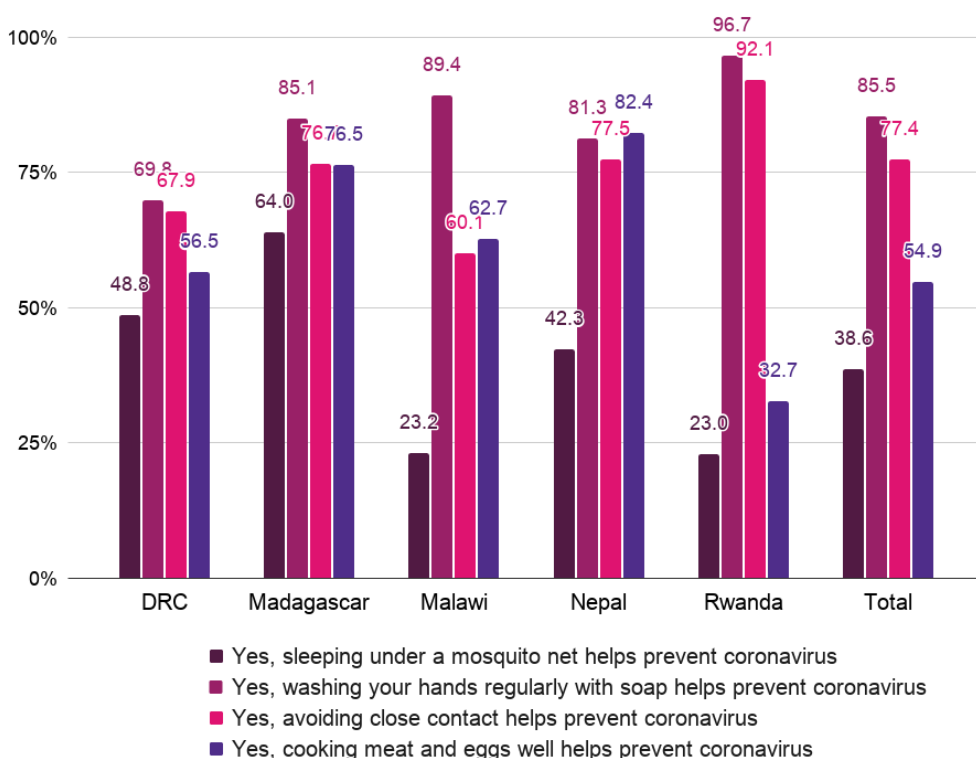


Fig. 6. When asked if they knew what they can do to prevent becoming sick with the coronavirus, the majority of respondents indicated that they do (66.2%). However, the percentage varies greatly across countries, ranging from a low of 39.8% in Nepal to a high of 80.7% in Rwanda.

**Fig 7: Percentage of respondents who agreed with various statements regarding effective prevention methods**

Fig. 7. To more accurately assess the respondents' understanding of different prevention approaches, they were asked whether one can help prevent infection through several specific actions, including regularly washing hands with soap and water, sleeping under a mosquito net, avoiding close contact with people who have a fever and cough or sneeze, or by cooking meat and eggs very well. Overall, between 70 and 97% of respondents in each of the countries agree that regular hand washing helps prevent infection. Similarly, between 60% and 92% believe that avoiding contact with people who cough or sneeze helps prevent becoming infected. However, many respondents also believe that practices that have been proven effective for other diseases can help prevent coronavirus infection. For example, nearly four in ten respondents (38.6%) believe that using mosquito nets can help prevent COVID-19. In Madagascar, 64.0% believe this to be true. Similarly, one in two respondents (54.9%) believe cooking meat and eggs very well will help prevent infection. This belief is particularly common in Madagascar (76.5%) and Nepal (82.4%), but less so in Rwanda (32.7%).



- Yes, sleeping under a mosquito net helps prevent coronavirus
- Yes, washing your hands regularly with soap helps prevent coronavirus
- Yes, avoiding close contact helps prevent coronavirus
- Yes, cooking meat and eggs well helps prevent coronavirus

## References

1) World Health Organization (WHO). 2020. Coronavirus. [https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1) (Accessed June 14, 2020).

## Suggested Citation

Meekers, Dominique, Leah Newman, and Paul Hutchinson. 2020. "Key findings of the 3-2-1 Service COVID-19 Surveys: Knowledge of Symptoms, Transmission Modes, and Preventive Practices (Wave 1)". Washington, DC: Viamo.