3-2-1 COVID-19 Survey
Mental Health and Violence

Context
As COVID-19 emerged into a global pandemic, its rapid spread greatly outpaced the emerging knowledge base for the virus, leading to considerable uncertainty regarding transmission and mortality risks, and generating both physical and mental health consequences. The World Health Organization has noted that uncertainty regarding the pandemic can breed fear and anxiety (1). Further contributing to an already troubling situation, the recession brought on by the pandemic has meant substantial job loss and declining incomes globally (2). Other rapid shifts have included transitions to working from home, lack of physical contact with family members, friends and colleagues, and disruption of even basic tasks (3). As a result, experts cite a greater risk of a variety of COVID-related emotional responses, including fear, boredom, loneliness, anxiety, insomnia, or anger (4).

Highlights
People feel prepared to handle COVID-19: 77% of those surveyed across six countries reported that they felt somewhat or very prepared to handle the virus. The feeling of preparedness varied across countries, from only 44% of households in Tanzania saying that they were “very prepared” to 80% of households in Malawi noting the same.

Mental health has suffered as a result of the pandemic. 51% of respondents report feeling more anxious or stressed than usual because of COVID-19. Respondents in many countries report greater anxiety, increased sadness or loneliness, and greater anger as a result of the coronavirus.

The pandemic has been associated with dramatic increases in reported violence, including violence towards healthcare workers, violence against those suspected of having COVID-19, general unrest, and violence against family members.

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 lives and livelihoods.

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, etc.). The surveys were implemented in the Democratic Republic of Congo, Nepal, Madagascar, Malawi, Rwanda, and Tanzania. 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. 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.

![Fig 1: Percentage distribution of respondents by self-reported level of COVID-19 preparedness](image)

Fig. 1. As part of the 3-2-1 Service COVID-19 Survey, callers were asked questions about their perceived preparedness for COVID-19, as well as questions related to changes in their emotional and physical health attributable to the virus. In these six countries, both preparedness and mental health varied considerably. In Madagascar, Malawi, and Rwanda, the majority of respondents reported that they were “very prepared” to handle COVID-19. This contrasted with the DRC, Nepal, and Tanzania, where approximately half or fewer respondents reported that they were “very prepared”. In Malawi and Rwanda, only 13% and 3.7% of respondents said that they were “not at all prepared.” This is in stark contrast with the DRC and Tanzania, where 18.4% and 28.0% of respondents respectively reported that they were “not at all prepared.”

Learn more at [www.viamo.io](http://www.viamo.io)
Fig. 2: Percentage distribution of respondents by self-reported level of anxiety about coronavirus

Fig. 2. Ironically, the countries that had the highest percentage of respondents who report feeling very prepared to handle the coronavirus also had the highest percentages of respondents who felt more stressed than usual. Causality, however, is difficult to pinpoint since better prepared countries might also have been experiencing greater public health awareness.

Overall, just over half of respondents reported feeling more nervous/anxious/stressed than usual. In both Malawi and Rwanda, approximately two-thirds of respondents reported they were more nervous/anxious/stressed than usual, while roughly half of respondents in the DRC, Madagascar, and Nepal said that they were feeling increased levels of anxiety. Tanzania appeared to be an outlier. There, only 29.5% of respondents reported more anxious than usual: more people (35.4%) actually reported that they were feeling less anxious than usual.

Fig. 3. Overall, 55.3% of respondents reported that COVID-19 is making them feel more sad or lonely than usual. People in Malawi were also the most likely to feel sad and lonely relative to the other countries. Nearly three-quarters of Malawians reported that they were more sad and lonely than usual and also more angry and upset than usual (see Fig 2). Similar to the pattern reported for stress and anxiety, approximately two-thirds of Malagasy and Rwandans report being more sad and lonely.

Fig. 3: Overall, 55.3% of respondents reported that COVID-19 is making them feel more sad or lonely than usual. People in Malawi were also the most likely to feel sad and lonely relative to the other countries. Nearly three-quarters of Malawians reported that they were more sad and lonely than usual and also more angry and upset than usual (see Fig 2). Similar to the pattern reported for stress and anxiety, approximately two-thirds of Malagasy and Rwandans report being more sad and lonely.

Fig 4: Percentage distribution of respondents by self-reported level of anger because of the current situation

Moled after a Coronavirus Study created by researchers at Stanford University, participants were asked if they had experienced common physical reactions to anxiety, depression, and loneliness. In total, 39.5% of people surveyed reported physical symptoms at least one day in the past week. Individuals in the DRC appeared to have the highest occurrence of physical symptoms; approximately 57.2% of respondents reported that they had physical symptoms at least one day in the past week, as compared with 42.9% of respondents in Rwanda and 40.0% of respondents in Madagascar.
Tanzania appeared to be an outlier. This was reflected in the relative absence of physical symptoms of stress. Only 25.6% of Tanzanians reported that they had experienced physical reactions such as sweating, trouble breathing, nausea, or a pounding heart in the past 7 days when thinking about coronavirus experiences like loss of income or work and concerns about the infections. Globally there have been widespread reports of COVID-19–related violence, attributable to a variety of causes. In some countries, healthcare workers have been attacked because of fears that they were transmitting COVID-19 (5). However, times of economic turmoil and unrest have also been linked with increases in the risk of violence against women and children. To date, the evidence for a link between violence against women and children and COVID-19 appears mixed (6).

**Fig 6:** Respondents in these six countries were asked if they had heard of reports of violence across four categories: violence against healthcare workers, violence against people suspected of having COVID-19, violence due to unrest, and violence against family members. Our survey did not distinguish between physical and emotional violence. The questions on violence towards healthcare workers, suspected individuals, and unrest were specifically related to COVID, whereas the question violence against family members did not specify a cause. In all countries, there were reports of each type of violence, although the levels varied by type and by country. Overall, reported violence was highest in the DRC. Over 80% of respondents reported having heard of at least some kind of violence, with violence against healthcare workers, violence against people suspected of having COVID-19, and violence due to unrest being reported by over 50% of respondents. These were the highest percentages of any of the six countries. Reports of stories about violence appeared to be loudest in Nepal and Tanzania: 51.8% of Nepali respondents and 50.0% of Tanzanian respondents reported hearing of any kind of violence. While all types of violence were commonly reported, the most common across the six countries was violence related to unrest (36.4%), followed by violence against healthcare workers (34.3%), violence against individuals suspected of having COVID-19 (31.3%), and violence against family members (29.6%).

**References**


*Physical reactions include sweating, trouble breathing, nausea, or a pounding heart.*