PERC

Partnership for Evidence-Based Response to COVID-19

Data updated April 30, 2020

Sudan

Effective Implementation of Public Health and Social Measures in Sudan: Situational Analysis

Background

Public health and social measures (PHSMs) are an important strategy to slow transmission of COVID-19 and reduce the burden on health care systems. Effective implementation of PHSMs requires public support and adherence, but they can place a significant burden on people, especially when they restrict movement or entail the closure of services. This situational analysis, based on publicly available data and a recent phone survey, aims to inform efforts in Sudan to balance PHSMs to mitigate COVID-19 with other priorities, including public acceptance and social impacts.

Highlights[1]

Public health and social measures should respond to data about the growth of the epidemic and be implemented in a way that engages communities. Communities should be involved in helping to determine strategies for adapting measures to the local context, protecting livelihoods, and introducing appropriate relief measures to counteract the economic impact of these measures. The government should counter misinformation with appropriate risk communication and engage with communities to ensure voluntary adherence to COVID-19 response measures.

- While Sudan has 375 confirmed cases of COVID-19 as of April 30, the epidemic is doubling every five days, a rapid growth rate that signals that cases may rise significantly in coming weeks. The high case fatality rate also indicates that the scale of the epidemic may be larger than detected cases suggest. A three-week lockdown has been implemented recently in Khartoum and Omdurman to slow transmission.
- There is a concerningly high level of distrust of government information, relative to other African Union (AU) Member States, which could be a barrier to effective risk communication.
- There is widespread belief in several myths and misconceptions about the disease, which could lead people to believe erroneously that they are protected, or contribute to stigmatization of specific communities, such as ethnic Chinese.
- Public support for most public health and social measures is strong; however, there is significant concern about suspending prayer gatherings or closing religious spaces. Adapting religious services to meet religious needs while enabling social distancing will be a priority, especially during Ramadan.
- Personal protective measures can be improved; the rate of handwashing is very low compared to other AU Member States surveyed.
- COVID-19 has been detected in 10 of Sudan's 18 states. Sudan has approximately 1.1 million refugees and 1.87 million internally displaced people. To date, no confirmed cases of COVID-19 have been detected in refugees or internally displaced people in Sudan. Over 90% of all confirmed COVID-19 cases are in Khartoum state.[2]

1 This situational analysis brief is based on data from available sources as of the date of publication, and may not reflect more recent developments or data from other sources not referenced. Information about data sources available here: https://preventepidemics.org/coronavirus/perc/data

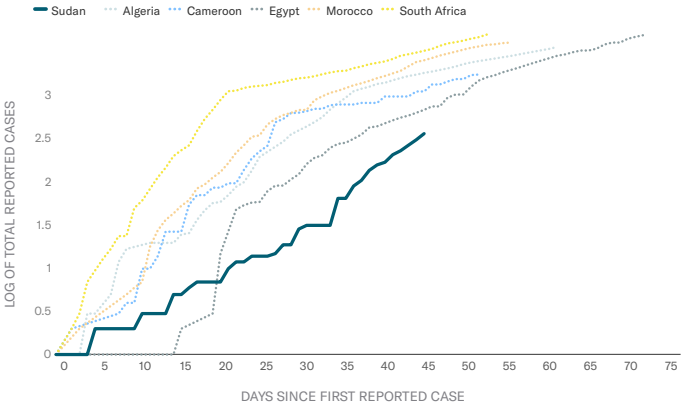
2 https://reliefweb.int/sites/reliefweb.int/files/resources/Situation%20Report%20-%20Sudan%20-%2023%20Apr%202020.pdf

Disease Dynamics

IN THE PAST FIVE DAYS, SUDAN HAS REACHED AN EPIDEMIOLOGICAL "TRIGGER," SIGNALING RAPID GROWTH AHEAD.

Total cases	Total deaths	Case-fatality rate (%)	Total # of days to double case count	Date of first reported case
375	28	7.46	5	March 13

Rate of growth of caseload in Sudan has been slower compared to highest-caseload African Union Member States, but is accelerating
as of April 30, 2020



- Sudan's COVID-19 epidemic initially grew at a slower pace compared to the five most affected AU Member States. However, the daily number of new reported cases has increased significantly since April 17, after being very low since the first case was detected on March 14.
- Sudan has also seen a 10% increase in the total number of cases for three consecutive days. In combination with the doubling time, Sudan has reached an epidemiological "trigger," signaling rapid growth ahead. It will be important to monitor trends closely in Sudan.
- As of April 30, the doubling time is five days. Doubling time is the number of days it took for cases to double to reach the current level. This metric can be used to estimate the recent rate of transmission, with higher doubling times indicating slower growth. In general, doubling times exceeding seven to 10 days and increasing over time suggest a slowing of the epidemic.
- Case-fatality rate (CFR) describes the proportion of reported deaths to reported cases. The CFR in Sudan is high at 7.5%, most likely an overestimate due to undetected cases (mild, pre-symptomatic and asymptomatic).
- If testing is believed to be sufficient or is increasing, then changes in case counts per day can also be used to assess COVID-19 transmission. Currently all COVID-19 tests are processed by the National Public Health Laboratory (NPHL) in Khartoum. The Government of Sudan, supported by WHO, has increased the testing capacity of National Public Health Laboratory (NPHL) in Khartoum to 130 tests a day. Additional labs in Red Sea and Gazira are functional and processing tests, however, their existing capacity is not known. The goal is to increase the overall national capacity to reach 600 tests per day.[3]

Implementation of Key PHSMs

SUDAN RAMPED UP THE IMPLEMENTATION OF PHSMS ON MARCH 15, CLOSING SCHOOLS AND PUBLIC TRANSPORT AND SHUTTING DOWN ALL BORDERS BY MARCH 26. IN RESPONSE TO INCREASING CASES, THE GOVERNMENT ENACTED A LOCKDOWN IN KHARTOUM AND OMDURMAN ON APRIL 18.

3-day moving average of new cases and date of PHSM implementation

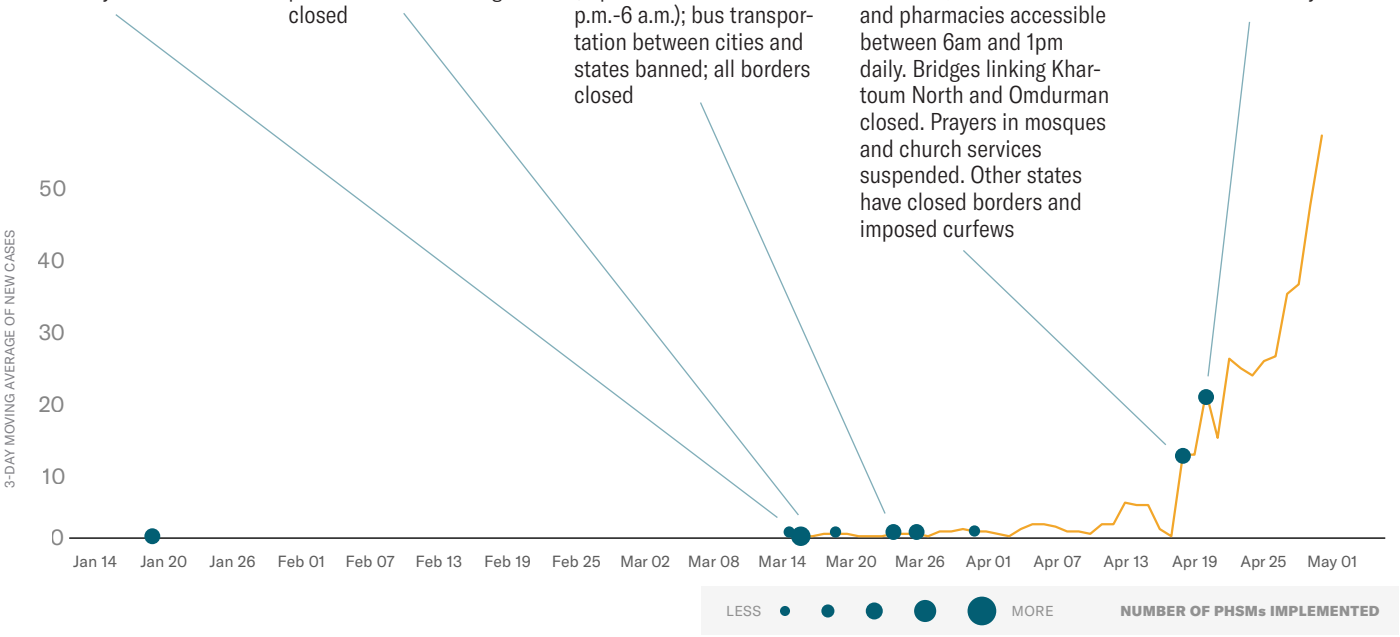
March 13:
Travelers must test negative for coronavirus to obtain to obtain entry visa

March 15:
School closures; limits on mass gatherings; airports, ports and land crossings closed

March 24:
Curfew implemented between 8 p.m. and 6 a.m. (expanded on March 31 to 6 p.m.-6 a.m.); bus transportation between cities and states banned; all borders closed

April 18:
Khartoum and Omdurman go on a three-week lockdown, with bakeries and pharmacies accessible between 6am and 1pm daily. Bridges linking Khartoum North and Omdurman closed. Prayers in mosques and church services suspended. Other states have closed borders and imposed curfews

April 20:
Airport closure for international and domestic flights extended until May 20



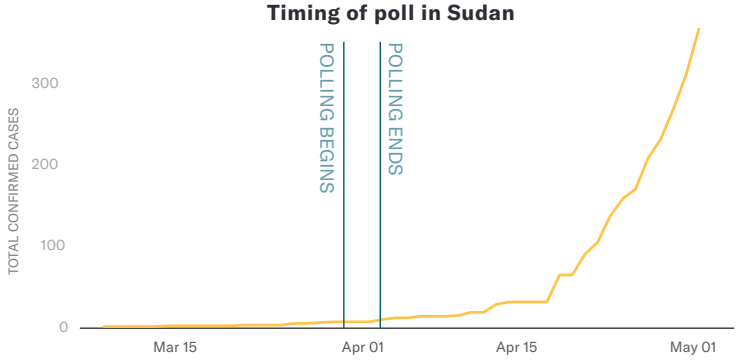
3 https://reliefweb.int/sites/reliefweb.int/files/resources/Situation%20Report%20-%20Sudan%20-%2030%20Apr%202020.pdf

Public Reactions to COVID-19 and Related PHSMs

RESULTS FROM RECENT POLLING

Market research firm Ipsos conducted a telephone poll of 1,101 adults in Khartoum between March 30 and April 2, 2020. At the time of polling, Sudan had five to seven confirmed COVID-19 cases.

Timing of poll in Sudan

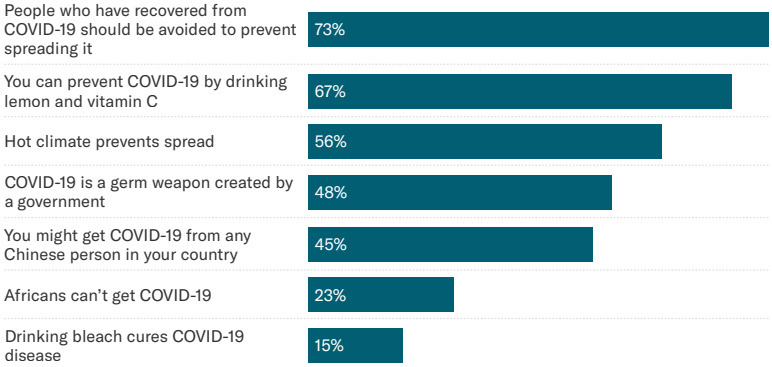


Information on COVID-19

In the poll, Sudanese reported high awareness of COVID-19 (99%). But misperceptions persist. Some of these may provide a misplaced sense of protection, such as that Africans cannot get COVID-19 (23% believed this to be true) or hot climate prevents the spread of the virus (56%), while others could lead to stigmatization of those thought to be at risk for the disease: 45% reported that "you could get it from any Chinese person in your country." A sizeable minority of respondents (29%) indicated they would like to have more information, particularly on transmission, prevention and treatment.

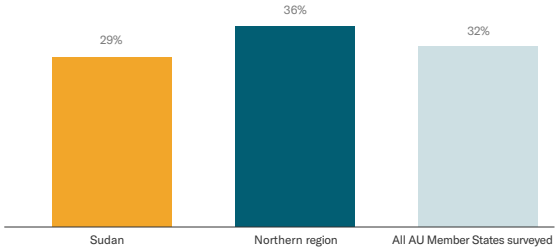
Belief in Misinformation and Rumors

Percentage believing each false statement is probably or definitely true



Demand for Information

Percentage reporting they **do not** currently have enough information about COVID-19



Information Needs

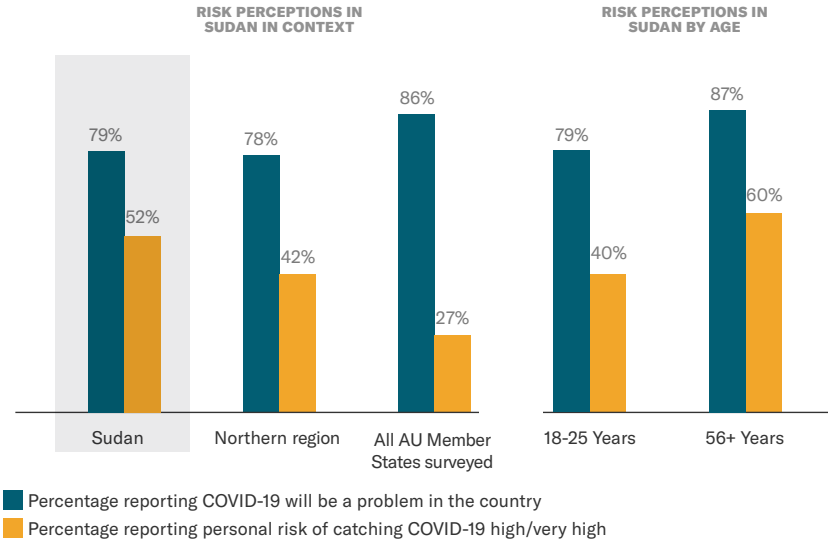
27% want more information on **how to cure COVID-19 or if there is a cure**

23% want more information on **how to protect themselves and their families**

21% want more information on **how COVID-19 spreads**

Risk Perceptions

The majority of Sudanese surveyed (68%) think COVID-19 will be a problem for Sudan but only about half (52%) perceived that their personal risk was high or very high.



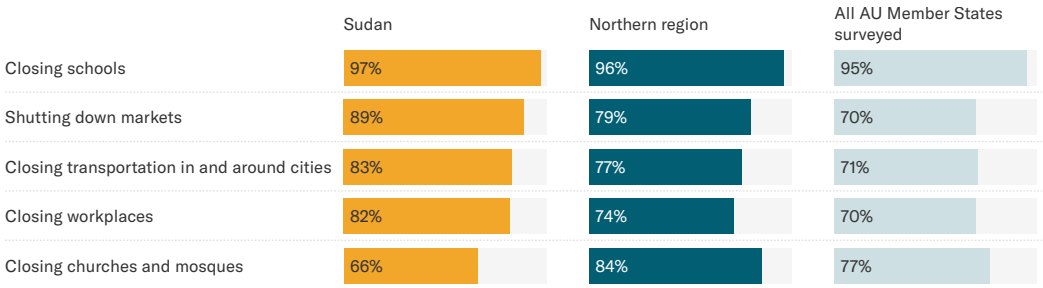
Support for Government and PHSMs

The majority of respondents (63%) were positive about the government's response to date; however, a significant minority expressed disapproval (36%), and there was a high level of distrust, with only two in five completely or mostly trusting the information from government (41%) versus 56% who have little trust (30%) or no trust at all (26%). This is substantially higher than the rate of distrust across other African Union Member States surveyed (32% across all Member States and 28% in the North African region). Doctors are more trusted than the presidency and political leaders, but overall levels of trust in institutions are relatively low. Nonetheless, respondents expressed optimism about being able to get the care they needed to with the illness if they became infected, with 59% confident that they could get help.

Respondents expressed support for a wide range of personal and community public health social measures to help limit the spread of COVID-19 (for example 97% support school closures), but there was lower support for closing churches and mosques (66%).

Support for PHSMs

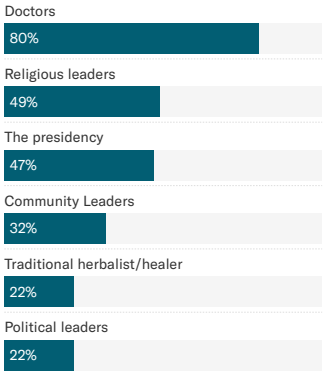
Percentage of respondents that somewhat or strongly support



Perceptions of Government & Health System

Trust in Information Sources

Percentage that completely or mostly trust each source for health information



Barriers to Adherence

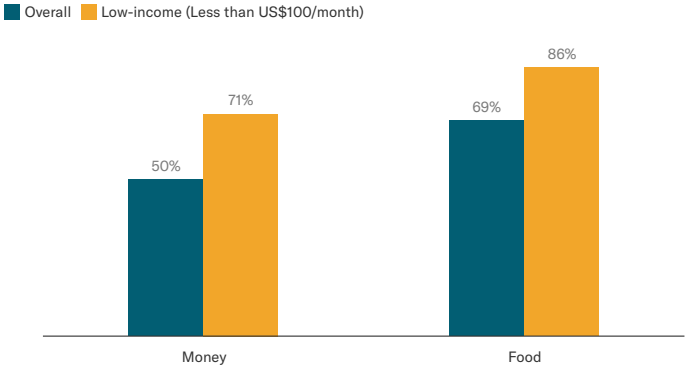
Compared to other AU Member States surveyed, Sudanese are somewhat better equipped to adhere to PHSMs; two-thirds (66%) have separate rooms at home to isolate sick family members. Nonetheless, half would run out of cash and 69% would run out of food within a week, and this proportion is much higher among lower income households. Compared to other Member States polled, adherence to personal hygiene measures was low, with only 18% of respondents saying that they washed their hands 10 or more times the previous day (compared to 41% across all AU Member States).

66%
of respondents have a separate room in the home to isolate someone with COVID-19

65%
of respondents in families making less than US$100 per month have a separate room in the home to isolate someone with COVID-19

Supplies of Food & Money

Percentage who expect to run out in 1 week or less



Economic and Relief Measures

Sudan was in economic crisis prior to the epidemic, with the economy contracting in 2019, high public and external debt, rapid inflation, and a devalued currency. There have been reports of increased food prices and rising unemployment. Due to existing sanctions, Sudan is ineligible to access any funds from International Monetary Fund or the World Bank for its COVID-19 response.

- **Health care:** According to a multi-hazard emergency health preparedness plan supported by the World Health Organization, the government estimates that US$ 120 million is needed for the COVID-19 emergency response. Various donors are providing or have pledged support, including the United Nations, United States, European Union, World Bank, and the Islamic Development Bank.
- **Social support:** Prior to COVID-19 outbreak, 50% of Sudan's population was estimated to be living below the poverty line. To respond to COVID-19, the government is considering social assistance measures including cash transfers and unemployment benefits. Cash transfers will apply to 80% of the population (an estimated 30 million people) and will primarily target the informal sector. The government is also reforming civil service salaries.
- **Food security:** From June–August 2019, over 5.85 million individuals were estimated to be in crisis or worse and in need of urgent humanitarian assistance to mitigate acute food insecurity in Sudan. COVID-19 is further aggravating the situation. The government is considering providing discounted food baskets to vulnerable households. The World Food Programme signed an agreement with the Ministry of Finance to import 200,000 metric tons of wheat.

Overview of Security Incidents Related to COVID-19

A rise in unrest or insecurity—including peaceful protests as well as riots and violence by and against civilians—can affect adherence to PHSMs and serve as a warning sign of the burden such measures are imposing on people. There have been minimal reports of COVID-related insecurity in Sudan. Among several incidents reported were a prison riot and an alleged attack by military forces on doctors attempting to enforce screening measures. More recently, a large group of miners protested the closure of mines due to COVID-19 protection measures, which lead to the torching of several buildings, and the use of tear gas and live ammunition on demonstrators.

INFORMATION ABOUT DATA SOURCES AVAILABLE HERE: HTTPS://PREVENTEPIDEMICS.ORG/CORONAVIRUS/PERC/DATA