


# Willingness to comply with physical distancing measures against COVID-19 in four African countries

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## INTRODUCTION

The world is facing an unprecedented crisis related to the COVID-19 pandemic with many unknowns, which has led to much confusion and anxiety.<sup>1</sup> Public health measures have for centuries been the cornerstone of the response to epidemics.<sup>2</sup> Among them, physical distancing measures aim to reduce contact between infected and uninfected people.<sup>3</sup> As part of the global COVID-19 response, they have been widely used to slow down the spread of the virus in several countries. Despite their overall acceptance, they have been poorly documented, particularly in Africa, and debates persist on their appropriateness and practicality in the context of low-income countries. Many political, ethical and socioeconomic questions arise.<sup>4</sup> This article describes the implementation of these measures in four West-African countries—Mali, Burkina Faso, Senegal and Guinea—and discusses people's willingness to comply with them. We draw on our experiences in crisis management through a collaborative project known as 'COVID-19 en Afrique Francophone'.<sup>5</sup> The countries participating in this project were selected on the basis of a call for applications as part of an initiative by the Francophone Africa and Fragility Network, which brings together more than 100 national and international experts.<sup>6</sup>

## EPIDEMIOLOGICAL STATUS OF COVID-19

In terms of population, Senegal has the highest number of cases, deaths and tested peoples. It is followed by Guinea concerning the number of cases. Burkina Faso reported the lowest number of cases and deaths and Mali the lowest number of tested people (table 1).

## Summary box

- ▶ Mali, Burkina Faso, Senegal and Guinea, four West-African countries, have put in place several physical distancing measures that made it possible to contain the spread of COVID-19 in Western countries without too much questioning about their acceptability by their populations.
- ▶ We describe these measures and discuss the importance of considering the socio-cultural, economic and political context to choose the most appropriate and effective measures.
- ▶ We propose ways to explore strategies that are potentially better adapted to the African context.

The number of cases and deaths in the four countries is low compared with Western countries.<sup>7</sup> However, no scientific evidence is available on the determinants of this difference. Meanwhile, many assumptions are provided. These assumptions include the low testing capacity, the difference in health-seeking behaviour patterns, the effectiveness of control measures, the sensitivity of the virus to heat and humidity, the young age of African populations, the crossed-immunity, the genetic factors and the previous exposure to coronavirus.<sup>7-9</sup>

## DIVERSITY IN PHYSICAL DISTANCING MEASURES IN THE FOUR COUNTRIES

The main measures of physical distancing have been decreed at the national or local level in the four countries and consist of a mix of a ban on mass gatherings, border closures, curfews, quarantine of cities and reduction of working hours (table 2).

These measures were decreed relatively quickly, but have been gradually operationalised through a top-down approach. The decisions to implement them were taken



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**Table 1** Overview of COVID-19 cases, deaths and tests by country as of 22 August 2020

| Countries    | Population | Cases | Deaths | Tests  | Cases/1M pop | Deaths/1M pop | Tests/1M pop |
|--------------|------------|-------|--------|--------|--------------|---------------|--------------|
| Mali         | 20.325.303 | 2667  | 125    | 32716  | 131          | 6             | 161          |
| Guinea       | 13.178.580 | 8876  | 53     | 18094  | 674          | 4             | 1373         |
| Senegal      | 16.800.813 | 12559 | 261    | 134349 | 748          | 16            | 7997         |
| Burkina Faso | 20.976.858 | 1297  | 55     | 34845  | 62           | 3             | 1661         |

Source : <https://www.worldometers.info/coronavirus/> and Ministry of Health of Burkina Faso. pop, population.

either by the President of the Republic or ministers and sometimes by provincial or state governors to affirm a strong political will and to ensure their rapid application. However, application varied by the situation, ranging from coercion to simple recommendations. The vigour with which restrictions on gatherings were implemented seemed to vary from country to country. To prevent the 'import' of the virus, border closures and

flight suspensions were decreed by all countries, except for special flights, cargo ships and medical evacuations. These measures had also proved to be successful in slowing down the spread of viruses in the previous SARS and Ebola epidemics. A curfew was introduced by all four countries, sometimes coupled with the declaration of a state of health emergency. Looking at the setup of quarantine measures within cities, unanimous approval had

**Table 2** Physical distance measures and their implementation in the four countries

|   | Mali   | Senegal  | Burkina Faso   | Guinea  |
|---|--|--|--|---|
| Declaration of the first COVID-19 case (date) | 24 March 2020  | 02 March 2020  | 09 March 2020  | 12 March 2020   |
| Ban on mass gatherings                        | Interdiction of mass gatherings of more than 50 people. Collective prayers were prohibited but had poor compliance. Schools and universities closed 1 week before the first COVID-19 case. No interdiction of interurban transport. No closure of markets but regulation of opening hours. | Interdiction of mass gatherings of more than 50 people. Closure of schools and universities. Collective prayers were prohibited and had moderate compliance. Schools and universities closed some weeks after the first case. No interdiction of interurban transport. Closure of markets. | Interdiction of mass gatherings of more than 50 people. Closure of schools and universities. Collective prayers were prohibited but had poor compliance. Interdiction of all intercity public transport. Closure of markets. | Interdiction mass gatherings of more than 200 people and then reduced to 20 people. Closure of schools and universities. Limitation of the number of passengers in public transport to 3 persons per car, 1 per motorcycle and 5–7 per minibus in the city of Conakry. No closure of markets but regulation of opening hours. |
| Closure of borders                            | Suspension of commercial flights, followed by complete closure of borders 1 week before the first COVID-19 case.   | Closure of borders 3 weeks after the first COVID-19 case.  | Closure of borders announced for 2 renewable weeks.  | Closure of borders with all high-risk countries who had announced more than 200 COVID-19 cases.   |
| Curfews                                       | A curfew was introduced by all four countries according to various schedules, sometimes coupled with the declaration of a state of health emergency.   |  |  |   |
| Quarantine of cities                          | Quarantine was not considered relevant.  | Only one quarantined village: Boyinugal (Tambacounda).   | Quarantine of all cities reporting a COVID-19 case.  | Only the capital city (Conakry) partially quarantined.  |
| Reduction of working hours                    | Working hours were reduced from 08:00 to 14:00. Teleworking and rearrangement of workspaces were recommended.  | Working hours were reduced from 09:00 to 15:00. Teleworking and rearrangement of workspaces were recommended.  | Working hours were reduced from 08:00 to 14:00. Teleworking and rearrangement of workspaces were recommended.  | No formal restrictions by the government. However, companies, NGOs and institutions adjusted their timetables and operational modus, to end the working day at 14:00. Teleworking and rearrangement of workspaces were recommended.   |

NGO, non-governmental organisation.

not been reached. These measures define the restriction of all movement between the quarantined city and the rest of the country. Finally, some countries reduced the daily working hours to a health emergency. Looking at the setup of quarantine measures within cities, unanimous approval had not been reached. These measures define the restriction of all movement between the quarantined city and the rest of the country. Finally, some countries reduced the daily working hours to minimise contact between workers and allow them to return home before the time that the curfew began.

### WILLINGNESS TO COMPLY WITH PHYSICAL DISTANCING MEASURES IS UNCERTAIN

As in high-income countries, the rationale for these measures given by the authorities was to slow down the spread of COVID-19, to 'flatten the curve' and thus enable health systems to cope with the influx of complicated cases.<sup>2 10 11</sup> Yet, despite the efforts made by these four countries, their current health systems are too weak to adequately respond to the needs. Therefore, these measures have encountered important constraints in these poorly prepared countries<sup>12</sup> and are sometimes even considered to be counterproductive.<sup>11</sup> They are indeed straining their already fragile and informal economies, leading to a significant loss of income for families. Additionally, these measures have had a strong impact on the existing social and cultural realities in particular, compromising their acceptability within the communities. They are likely to have potentially serious psychosocial consequences, to contribute to deprive many patients of care and to lead to political disturbances.<sup>1 11</sup> Moreover, the ultimately limited benefits of these measures in reducing COVID-19-related mortality make it important to weigh their merits against their negative impacts.

On a completely different level, physical distancing measures have clearly not been successful in preventing contact between people in these countries. The willingness to comply with the populations and even by some of the authorities has not been optimal. For example, within the same country, only certain types of gatherings could be prohibited; however, prayers in mosques and churches could not be restricted due to the political weight of religious groups. In Mali, an international religious gathering, with thousands of participants, was able to take place in the region of Sikasso. Similarly in Senegal, a religious gathering in Tamba could not be banned. It was attended by thousands of worshipers including those from neighbouring countries, resulting in this region being declared a COVID-19 hotspot. Baptisms, weddings and Friday prayers were relocated to villages bordering The Gambia. In Burkina Faso, prayers in places of worship were not immediately banned and markets remained open for a long time.

Also, despite the ban on gatherings, legislative elections were maintained by the Malian authorities and a ballot was organised in Guinea. Giant public demonstrations

were organised as part of political campaigns, resulting in some several candidates contracting COVID-19 and some deaths. Subsequently, the results of these polls were popularly reported in mass gatherings. In Mali, markets were never closed and public transport remained crowded.

The measures put in place in these countries could not prevent close contacts between people, particularly in residential housing and between neighbouring families, during commuting and in work environments.

Mali closed its borders before cases appeared, whereas the other three countries closed their borders only several days after the first cases appeared. Perhaps, this could explain why Mali was the last country to report its first cases. Even so, the closure of the borders seems more relevant early in the pandemic to reduce the risk of importing cases. Its sustainability can be questioned when community transmission is already taking place, given the huge risk of negative socioeconomic impact. The porous nature of the borders between neighbouring African countries also has its limitations to prevent movement, a reality that the Minister of Health of Mali acknowledged as well.<sup>13</sup> Moreover, the ban on international travel may also constitute an obstacle to support the international response and preparedness operations for COVID-19.<sup>14</sup>

### A TIME OF ABRUPT BACK-PEDALLING

Although the number of COVID-19 cases is still increasing, all four countries have revised some measures under popular pressure, the impossibility of enforcing them and their controversial impact. Burkina Faso reopened its schools and several big markets. The reopening of mosques and churches has been authorised. The quarantine has been lifted in all cities. The resumption of urban and interurban transport has been effective. The curfew timings have been reduced. In Mali, it has simply been lifted entirely. In Senegal, the reopening of places of worship and certain markets and shops has been authorised and examination classes were resumed. In Guinea, the curfew was lifted for towns in the interior of the country but was maintained for Conakry, Dubréka and Coyah (from 22:00 to 05:00) and gatherings of 20–30 persons were again authorised.

### CONCLUSION

The low number of cases and deaths in the four countries included in this work can be explained by many factors. Also, several measures of physical distancing have been implemented to varying extents in these countries. These strategies are very similar to those applied in high-income countries, but the contexts are very different, which seems to have led to suboptimal results.<sup>1 11</sup> Several factors such as the age structure of the population, the political and security stability and the capacity of the country to implement them need to be taken into account. Their importance in slowing down the spread of COVID-19 is beyond doubt; however, the negative socioeconomic impact on the population needs to be taken into account

even more for poor countries. Indeed, the disruptions caused by these measures have a high cost for the countries concerned.<sup>11</sup> Similarly, their potential to reduce mortality related to COVID-19 seems to be compromised by the weakness of the health systems in these countries. People's compliance with the measures implemented is further jeopardised by prevailing social, religious, political and economic norms. Finally, these measures were only partially implemented in these four countries, reducing their potential impact. They have generated popular uprisings, forcing the authorities to reconsider some of the decisions made without thinking about a real exit strategy. Indeed, as the spread of the virus continues, it is very difficult to decide when and how to gradually relax these measures. Experts should, therefore, agree on the most effective and realistic measures. Handwashing, although difficult in some contexts where populations do not even have access to safe drinking water, must be maintained. Similarly, situations conducive to super-spreading of the virus can be reduced by implementing appropriate local solutions.<sup>11</sup> Therefore, wearing masks should be considered as a priority strategy when physical distancing is not possible. Although less obvious to implement, other avenues such as mass screening, isolation of cases, contact tracing and quarantine must be quickly explored. This requires significant efforts to strengthen the existing health systems. Further research is essential to draw lessons from the implementation of these measures, identify best practices and evaluate the socio-economic impact and their appropriateness in African contexts.

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