

The neglected role of Faith-based Organizations in prevention and control of COVID-19 in Africa

Phesheya Ndumiso Vilakati^a, Simone Villa^{bd,*}, Riccardo Alagna^c, Bongani Khumalo^d, Sarah Tshuma^e, Virginia Quaresima^c, Nicole Rose Nieman^f, Daniela Maria Cirillo^c, and Mario Carlo Raviglione^b

^aCabrini St Philip's Clinic, Missionary Sisters of the Sacred Heart of Jesus, eSwatini; ^bCentre for Multidisciplinary Research in Health Science, University of Milan, Via Francesco Sforza 35, 20122, Milan, Italy; ^cIRCCS San Raffaele Scientific Institute, Milan, Italy; ^dHealth and Clinical Consultant Programs, Cabrini Ministries Africa, Ethiopia; ^eHealth and Clinical Consultant Programs, Cabrini Ministries Africa, eSwatini; ^fPrograms and Operations, Missionary Sisters of the Sacred Heart of Jesus, Rome, Italy

*Corresponding author: Tel: +39 02 5503 4763; E-mail: simone.villa@unimi.it

Received 27 May 2020; revised 20 July 2020; editorial decision 23 July 2020; accepted 29 July 2020

The COVID-19 pandemic has exposed health system weaknesses of economically wealthy countries with advanced technologies. COVID-19 is now moving fast across Africa where small outbreaks have been reported so far. There is a concern that with the winter transmission will grow rapidly. Despite efforts of African Governments to promptly establish mitigating measures, rural areas, especially in sub-Saharan Africa, risk being neglected. In those settings, faith-based and other non-governmental organizations, if properly equipped and supported, can play a crucial role in slowing the spread of COVID-19. We describe our experience in two rural health facilities in eSwatini and Ethiopia highlighting the struggle towards preparedness and the urgency of international support to help prevent a major public health disaster.

Keywords: Africa, COVID-19, FBOs, NGOs, preparedness

Background

Since the first reported outbreak of the coronavirus disease 2019 (COVID-19) in China, the disease has quickly spread across the globe and has reached Africa where cases and deaths have increased by 29% (19 255 new cases) and 21% (493 new deaths), respectively, during the week between May 5 and 12, 2020.¹ There is serious widespread concern about the lives and economic toll that COVID-19 could claim across Africa if the epidemic progresses with the same rate of devastation seen in the economically wealthier parts of the world. Although several demographic or immune-related factors seem to play a role in mitigating the severity of cases in many African countries,² there is serious concern about underestimation due to insufficient testing. Especially in the sub-Saharan countries, COVID-19 may have devastating effects as the response required is challenged by inherent fragilities in the national health systems, high population density in metropolitan slums, a lack of services in rural settings, generally poor sanitation, food insecurity and undernutrition, as well as the high burden of comorbidities such as HIV infection and tuberculosis.

In Africa, faith-based organizations (FBOs)—the values of which are based on religious and faith beliefs—which manage a vast number of health facilities in many low-income countries (for instance, approximately 40% of total health services

and more than 1000 hospitals are managed by Catholic FBOs in Africa),^{3–6} play an essential role in providing healthcare and prevention services, community education, and financing. FBOs are also undoubtedly crucial in promoting public awareness and addressing social and behavioral factors associated with COVID-19 spread. However, due to their importance for local communities, FBOs could become rapidly overwhelmed if the pandemic accelerates.

FBO response: a snapshot from two countries

We report here the status of preparedness to face COVID-19 and the assessment of needs of two health facilities run by us, the Missionary Sisters of the Sacred Heart of Jesus: Cabrini St Philip's Clinic in the rural Lubombo Region of eSwatini and St. Mary's Catholic Primary Hospital in the semi-rural area of Dubbo in the Southern Nations, Nationalities, and Peoples' Region of Ethiopia (as displayed in Table 1). In both missions, we have developed strategies to identify suspected COVID-19 cases and to isolate them in dedicated areas of the facility. In both, we have implemented a systematic triage at patients' point of entry and appropriate infection control measures. However, the existing shortage in supply⁷ may hinder the performance and

Table 1. Brief checklist of the facilities managed by the Missionary Sisters of the Sacred Heart of Jesus: St Mary's Catholic Primary Hospital (Ethiopia) and Cabrini St Philip's Clinic (eSwatini)

	St Mary's Catholic Primary Hospital (Ethiopia)	Cabrini St Philip's Clinic (eSwatini)
<i>General</i>		
Catchment area	400 000	25 000
No. beds	93	0
<i>Infection control</i>		
Isolation room(s)	Yes	Yes
Alcohol-based hand sanitizer for patients	Yes (limited stock)	Yes
No-touch bins	Yes	Yes
Routine cleaning room	Yes	Yes
<i>PPE in stock</i>		
No. gloves	0	3000
No. medical masks	0	80
No. FFP2–3 masks	0	0
No. goggles or face shields	0	15
No. of gowns	0	15
<i>Staff</i>		
No. medical doctors	5	0
No. registered nurses	47	6
No. other HCW staff	50	12
No. non-HCW staff	121	6
<i>Diagnostics</i>		
Radiological unit	Yes	No (at approx. 60 km)
In-house laboratory	Yes	Yes
No. swabs and kits for SARS-CoV-2		
RT-PCR testing	0	0
Estimated time to RT-PCR (days)	> 7	3–5
<i>Coordination with other health facilities</i>		
Protocol to safely transport patients	No	Yes
Nearest hospital (kilometers)	60	45–60

Abbreviations: FFP, filtering facepiece; HCW, healthcare worker; PPE, personal protective equipment; RT-PCR, reverse transcriptase polymerase chain reaction; SARS-CoV-2, severe acute respiratory disease coronavirus 2.

sustainability of the response in the short term period, especially if the influx of patients intensifies. Our hospital in Ethiopia, staffed by a low number of healthcare workers (HCWs) for the population served (25.5 HCWs and 1.3 medical doctors per 100 000 people, respectively), has at the moment very insufficient personal protective equipment (PPE) for both HCWs and patients, thus increasing the chance of nosocomial outbreaks. Our rural out-patient clinic in eSwatini, which has a higher ratio of HCWs (72/100 000 people) but no medical doctor, has PPE estimated to last for about a month in the best-case scenario, which is however rapidly changing due to intensification of patient influx in recent days.

Key missing components in the preparedness of our two centers, besides PPE supply, are nasal swabs for molecular diagnostic tests and effective therapeutic options (e.g. oxygen support devices, anti-inflammatory and antiviral medicines commonly used in high-income settings, as well as broad-spectrum antibiotics).⁸ Existing in-house basic laboratories cannot perform nucleic acid amplification tests on nasal swabs—both because

these are technically challenging and are lacking in reagents⁹. Also, in normal circumstances, up to a week is required to obtain results from the referral laboratory, whose activities can be rapidly overwhelmed if cases increase, thus delaying diagnosis, isolation, and treatment.

All these elements, together with the low availability of beds in the two health facilities—a limited number of beds in Dubbo, and none in the out-patient clinic in eSwatini—and the small number of well-equipped tertiary facilities nearby, suggest that effectively addressing COVID-19 in these settings is a challenge.

Conclusions and forward view

In the African continent, preparedness for a pandemic like COVID-19 is a challenge given the need for rapid adaptation of already constrained health systems, scarcity of laboratories and reagents to test, limited training capacity, and poverty of resources in care provision and in general.¹⁰ Yet, the simple

administrative structure of FBOs, with decision-making capacity at the grassroots level, makes them flexible and agile to rapidly adapt and respond to a health emergency, as long as fundamental tools are made available. However, due to the general shortage in PPE, diagnostic kits, and effective therapeutic options in countries like Ethiopia and eSwatini, most funds and key supply and equipment may be directed to governmental facilities rather than engaging the numerous FBOs and other non-governmental organizations (NGOs) providing care. In addition, many African governments will not be able to confront this pandemic alone and international support is urgently needed.¹¹ This support, however, needs to be directed not solely to governmental facilities but also to the highly committed NGOs and FBOs that, operating at the grassroots level, are best placed to provide health services to people living in impoverished conditions, especially in rural settings. FBO and NGO facilities are often the only entry point for rural and semi-rural populations. They need to be engaged, urgently supported, and properly equipped to safely contribute to handle the pandemic and simultaneously manage the regular burden of the endemic diseases ravaging the continent.

Authors' contributions: NRN, DMC, and MCR designed the study; PNV, ST, and NRN implemented the study; SV, RA, and VQ analyzed and interpreted the data; PNV, SV, RA, BK, and VQ made major contributions to the writing of the paper; all authors read and approved the final version of the paper.

Funding: None.

Competing interests: None declared.

Ethical approval: Not required.

References

- 1 Africa CDC. Outbreak brief # 11: coronavirus disease 2019 (COVID-19) pandemic. Africa CDC Centres Dis. Control Prev. 2020. <https://africacdc.org/download/statement-on-medications-to-treat-novel-coronavirus-disease-covid-19/>.
- 2 Quaresima V, Naldini MM, Cirillo DM. The prospects for the SARS-CoV-2 pandemic in Africa. *EMBO Mol Med.* 2020;12(6):e12488.
- 3 Olivier J, Wodon Q. The role of faith-inspired health care providers in sub-Saharan Africa and public-private partnerships: strengthening the evidence for faith-inspired health engagement in Africa. The International Bank for Reconstruction and Development / The World Bank. 2012.
- 4 World Health Organisation. The World Health Report 2004: Changing history. Geneva; 2004. https://www.who.int/whr/2004/en/report04_en.pdf?ua=1.
- 5 World Health Organization. Building from common foundations: the World Health Organization and Faith-Based Organizations in primary healthcare. Geneva; 2008. http://apps.who.int/iris/bitstream/10665/43884/1/9789241596626_eng.pdf.
- 6 Agenzia Fides. Statistiche della Chiesa Cattolica. Città del Vaticano; 2019. http://www.fides.org/it/stats/66809-VATICANO_Le_statistiche_della_Chiesa_cattolica_2019.
- 7 Ranney ML, Griffeth V, Jha AK. Critical supply shortages: the need for ventilators and personal protective equipment during the Covid-19 pandemic. *N Engl J Med.* 2020;382(18):e41.
- 8 Baker T, Schell CO, Petersen DB, et al. Essential care of critical illness must not be forgotten in the COVID-19 pandemic. *The Lancet.* 2020;395(10232):1253–4.
- 9 Makoni M. Keeping COVID-19 at bay in Africa. *Lancet Respir.* 2020;2019(20):2019–20.
- 10 Makoni M. Africa prepares for coronavirus. *Lancet.* 2020;395(10223):483.
- 11 El-Sadr WM, Justman J. Africa in the path of Covid-19. *N Engl J Med.* 2020;383(3):e11.