The SARS-CoV-2 pandemic scenario in Africa: What should be done to address the needs of pregnant women?

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The SARS-CoV-2 (COVID-19) virus, first diagnosed in China in December 2019, causes an infectious and multisystem disease.1 Having evolved rapidly, with an exponential increase in the number of cases and deaths worldwide, COVID-19 was declared a pandemic by the WHO in mid-March 2020. Although in most Sub-Saharan African countries the pandemic is in its initial phase, as of September 8, 2020, the cumulative total cases of COVID-19 in Africa stands at 1 315 073 confirmed cases and 31 725 deaths.2

The COVID-19 pandemic has revealed the weaknesses of health systems in different settings, testing capacity, and strategies in low- and middle-income countries (LMICs).3 The growing number of COVID-19 cases has forced many countries to reorganize existing health services and reassign available healthcare professionals to combat COVID-19. As a result, a number of service delivery points have been closed due to the lack of available healthcare providers.

In response to the COVID-19 pandemic, many countries have enforced lockdown restrictions that resulted in the closing of schools, businesses, restaurants, markets, and religious gatherings, as well as limiting mass gatherings and border entry. The lockdowns, in some contexts, have led to the disruption or suspension of many essential health services including sexual and reproductive health (SRH) services, thus placing women of reproductive age under conditions of greater vulnerability and at greater risk of suffering the devastating effects of COVID-19.3,5

In LMICs, the disruption in SRH services such as family planning, prevention and treatment of sexually transmitted infections (STI), safe abortion services, and antenatal and postnatal consultations pose risks to women of reproductive age. The disruptions have generally been associated with low coverage of the health network, weak diagnostic capacity for SARS-CoV-2 detection, shortages of trained healthcare
personnel, and reduced demand for services in the available health facilities due to stigma and fear of acquiring SARS-CoV-2 infection.

This situation has the potential to contribute negatively to the incidence of high-risk pregnancies, near-miss, maternal and perinatal deaths in these LMICs, compromising objective 3.1 of the WHO Sustainable Development Goals, 2030 agenda, as a consequence.6

Although information on the clinical course of the disease, and the consequences on maternal and perinatal health, is still scarce, there is evidence that SARS-CoV-2 infection during pregnancy is associated with increased risk of perinatal complications, including fetal distress, premature birth, perinatal death, and increased rate of admission to intensive care units as well as need for mechanical ventilation.7–9

The risk of maternal and perinatal complications may be increased in: pregnant women with underlying medical conditions; black pregnant women; pregnant women from a disadvantaged social class; and contexts with limited access to adequate healthcare services for the management of COVID-19.10,11

Although, the impact of COVID-19 on pregnant women was considered a secondary priority,12 studies involving pregnant women with respiratory diseases caused by other respiratory viruses, in addition to recent data from studies of pregnant women with SARS-CoV-2 infection in middle- and high-income countries, highlight the need to pay special attention to this group of women, especially in settings where healthcare services are strained.

While global maternal deaths gradually declined between 2000 and 2017, disparities in patterns of mortality still exist within the Sub-Saharan Africa region alone, accounting for approximately 66% of deaths on the continent.13 Due to the increasing number of reported maternal deaths related to COVID-19 occurring mostly in LMICs, and deficiencies in the reporting of these cases, the need for prospective monitoring of COVID-19 cases among pregnant women in the context of LMICs is needed now more than ever.

As SARS-CoV-2 is a novel virus, knowledge of its impact on sexual and reproductive health (SRH) is only now emerging.14 Therefore, to understand the dynamics of SARS-CoV-2 infection and its impact on the obstetric population of LMICs and to minimize the effects of the pandemic on maternal and perinatal health, it is essential for African researchers to join forces in order to generate evidence to better elucidate the magnitude of the problem. To achieve this, the adoption of inter-institutional and multinational strategies is essential for optimizing the allocation of scarce resources to fight the pandemic.

In response to the SARS-CoV-2 pandemic in Sub-Saharan Africa, domestic and regional efforts have been undertaken by various partners in multiple sectors.15,16 A critical component to complement these strategies is establishing multi-center collaborative networks of African researchers to undertake surveillance studies of conditions related to maternal and neonatal morbidity associated with COVID-19, and inter-institutional support for the creation and implementation of care protocols. The building of a collaborative network to study the impact of COVID-19 on the obstetric population in Africa (African Network for fighting COVID-19 in pregnancy [ANCOCVID-19]) would enable a broader understanding of the patterns of disease evolution in different countries and different contexts, enabling a better understanding of the role of context-specific determinants in the evolution of infection by SARS-CoV-2 and the strengthening of measures to ensure access to essential reproductive health services during pandemics, lockdowns, and easing of restrictions.

Likewise, the implementation of robust surveillance systems and support of weaker systems by stronger partnerships may favor the collection of standardized information on related maternal and perinatal morbidity. Continuous monitoring of the impact of the disease on maternal and perinatal health, including strategies for remote monitoring of pregnant women through telephone calls and/or digital tools where available, coupled with the sharing of clinical information, will contribute to a better understanding of the dynamics of infection in this population and of the moment of greatest vulnerability for maternal and newborn health.

Thus, we call on all researchers in Africa to join in a continental effort to combat COVID-19 and reduce its impacts on maternal and perinatal health in Africa. This would encourage the provision of routine maternal and newborn services during and post-pandemic in Sub-Saharan Africa.

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CMC and RCP had the first insights, CMC and EMA proposed the first draft. CMC, EMA, KRK, LGB, JGC, NBO, PG, AKD, JS and RCP contributed equally to the writing and critical review of the manuscript. They also reviewed and approved the final version.

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CONFLICTS OF INTEREST
The authors have no conflicts of interest.

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**Obstetrics**

**Outcomes of subsequent pregnancies following Zika virus infection: A comparative case series**

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