

# Indirect Consequences: A literature review of the collateral effects of the COVID-19 pandemic across sub-Saharan Africa

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**Research Question:** According to literature published in the initial phases of the COVID-19 pandemic, what are indirect effects of COVID-19 and how might they affect 1) the provision of accessible, equitable, high-quality, and efficient healthcare services, 2) healthcare-seeking behavior, and 3) health outcomes in sub-Saharan Africa?

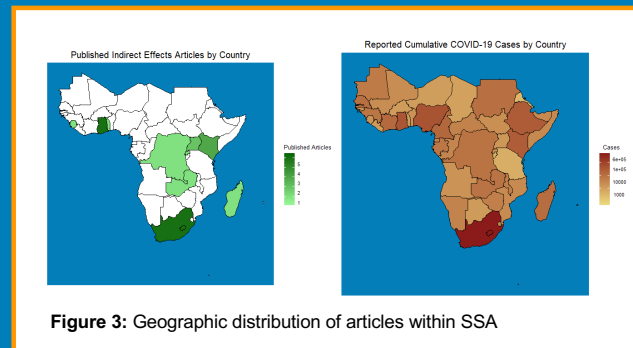
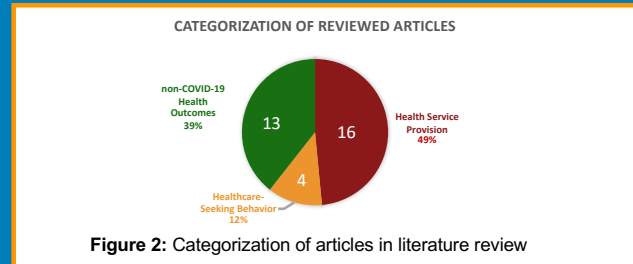
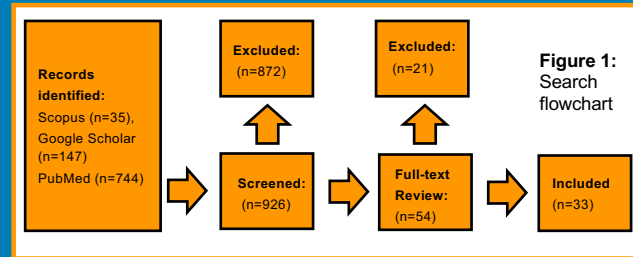
## BACKGROUND

The COVID-19 pandemic has disrupted healthcare systems worldwide, including those in sub-Saharan Africa (SSA). These disruptions include direct consequences of community transmission of SARS-CoV-2 and indirect consequences of the pandemic. It is crucial to understand the indirect ways in which COVID-19 may uniquely challenge health systems across SSA so that health systems strengthening efforts may be prioritized.

## DESCRIPTION OF ORGANIZATION

The Acute Care and Emergency Referral Systems Project (ACERS) in Ghana was formed in partnership between Columbia University, Ghana Health Service, the Regional Institute for Population Studies in Ghana, and Catholic Relief Services. The project takes a health systems approach and seeks to improve maternal and neonatal health and survival through the provision of quality emergency obstetric and newborn care (EmONC). ACERS is part of the Strengthening Emergency Systems sidHARTE program, led by Dr. Rachel Moresky.

## FIGURES



## METHODS

We conducted a literature review using key terms related to the indirect effects of COVID-19 on PubMed, Google Scholar, and Scopus. Titles and abstracts were screened by two reviewers for inclusion, followed by a full revision of the text by two reviewers if the article was determined to meet the inclusion criteria.

Inclusion criteria: studies were included if they 1) reported data from countries in SSA, 2) included data concerning the effects of the COVID-19 pandemic on health systems, including health-seeking behavior, service provision, and non-COVID-19 health outcomes.

**Main Findings:** While preliminary results indicate significant decreases in health service provision and healthcare-seeking behavior in SSA, even as the disease burden for non-COVID-19 conditions has increased, there is a paucity of literature focused on the impact of the pandemic on health systems in sub-Saharan Africa.

## DISCUSSION

**Health Service Provision:** A range of health services have been disrupted in SSA as a result of COVID, including vaccinations [1], rheumatology services [2], cancer treatment [3,4], HIV testing [5,6], asthma treatment [7], and surgical procedures [8].

**Healthcare-Seeking Behavior:** Fear of virus transmission [9] and transport limitations [10] are frequently cited as causes for reduced health-seeking behavior.

**Health Outcomes:** While research suggests increased burden of non-COVID-19 diseases [11], there is a paucity of literature on changes in NCD prevalence as a result of the pandemic.

## REFERENCES

