

# The effect of the COVID-19 pandemic on essential malaria services in northern Uganda

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## Introduction

Experiences from countries first hit by the COVID-19 pandemic in early 2020, such as Italy and Spain, demonstrate how quickly COVID-19 can overwhelm any health system and disrupt the delivery of routine health services at every level. This places many populations at risk of dying from existing preventable and/or treatable conditions, such as malaria. Uganda confirmed the first COVID-19 case in March 2020 and the government promptly instituted a total lockdown in the same month. This study was conducted to assess the impact of COVID-19 on routine malaria services.

## Methods

- We interviewed eight district health team members, 40 health workers, 160 village health team members and 618 households from the four study districts.
- District Health Information Software 2 data were analysed and significance tests performed at five percent to establish the significance of the observed changes.
- We entered data from interviews electronically and analysed for trends and associations using three time periods: before COVID-19, lockdown and after lockdown.
- Further analysis was conducted to rule out the effect of seasonality on the malaria burden.

## Results

- In-patient attendance dropped from 20,152 before COVID-19 to 15,094 during lockdown and increased to 17,928 after lockdown (Figure 1).
- OPD (out-patient department) attendance dropped from 187,737 before COVID-19 to 164,132 during lockdown and increased to 183,993 after lockdown (Figure 2).
- Weekly reporting dropped from 92.6 percent before COVID-19 to 84.9 percent during lockdown to 91.1 percent after lockdown (Figure 3).
- Severe malaria cases increased from 63 before COVID-19 to 213 during lockdown and increased to 286 after lockdown.
- Restricted movement (lockdown) affected access to and delivery of malaria services.

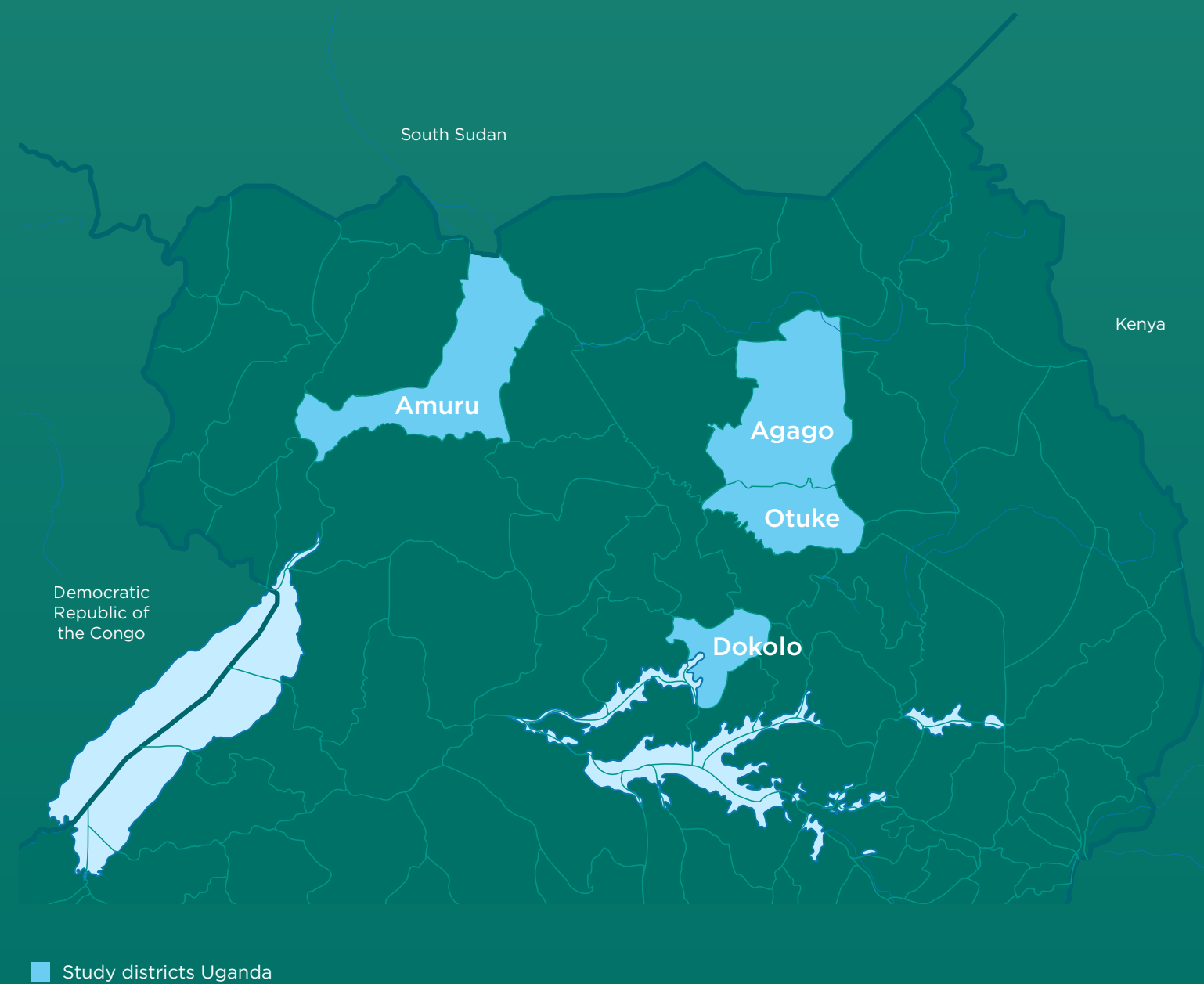
## Conclusion

The COVID-19 pandemic and government lockdown response affected access to and delivery of essential malaria services. To address these concerns, the Ministry of Health and districts should strengthen health education on malaria alongside that on COVID-19 prevention measures. Districts should use routine supportive supervision to foster adherence to standard operating procedures in health facilities. Health facilities should separate COVID-19 patients and suspected cases from other patients and deliver essential malaria services effectively.

## References

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# Supporting health facilities in Uganda to adhere to COVID-19 preventive measures was essential to deliver malaria services effectively



## Supplementary visuals

Figure 1: In-patient department attendance

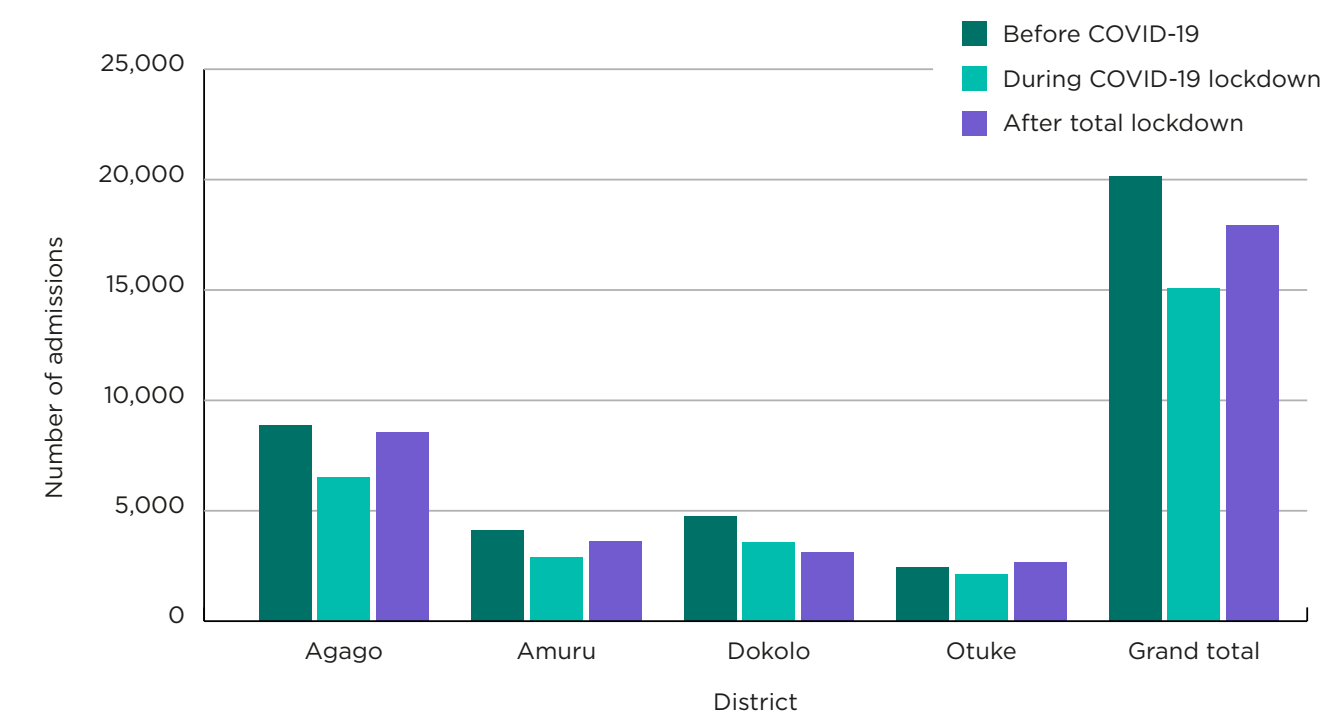


Figure 2: Out-patient department attendance

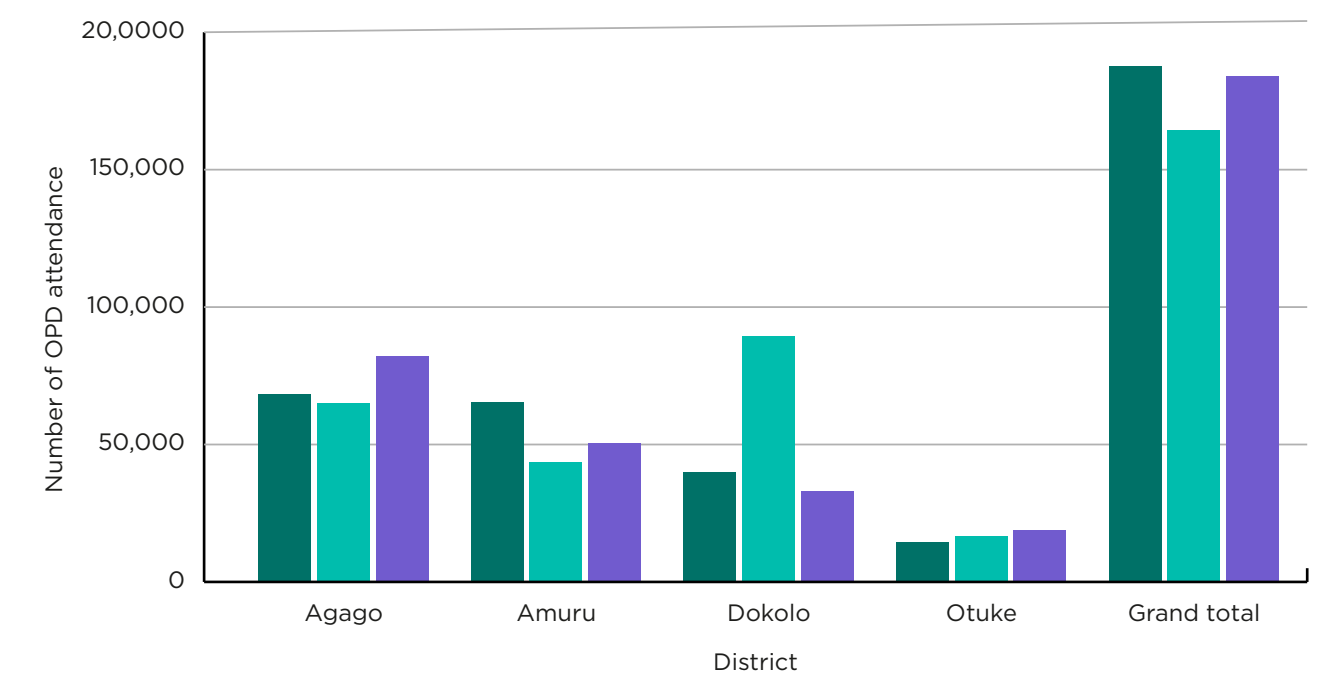
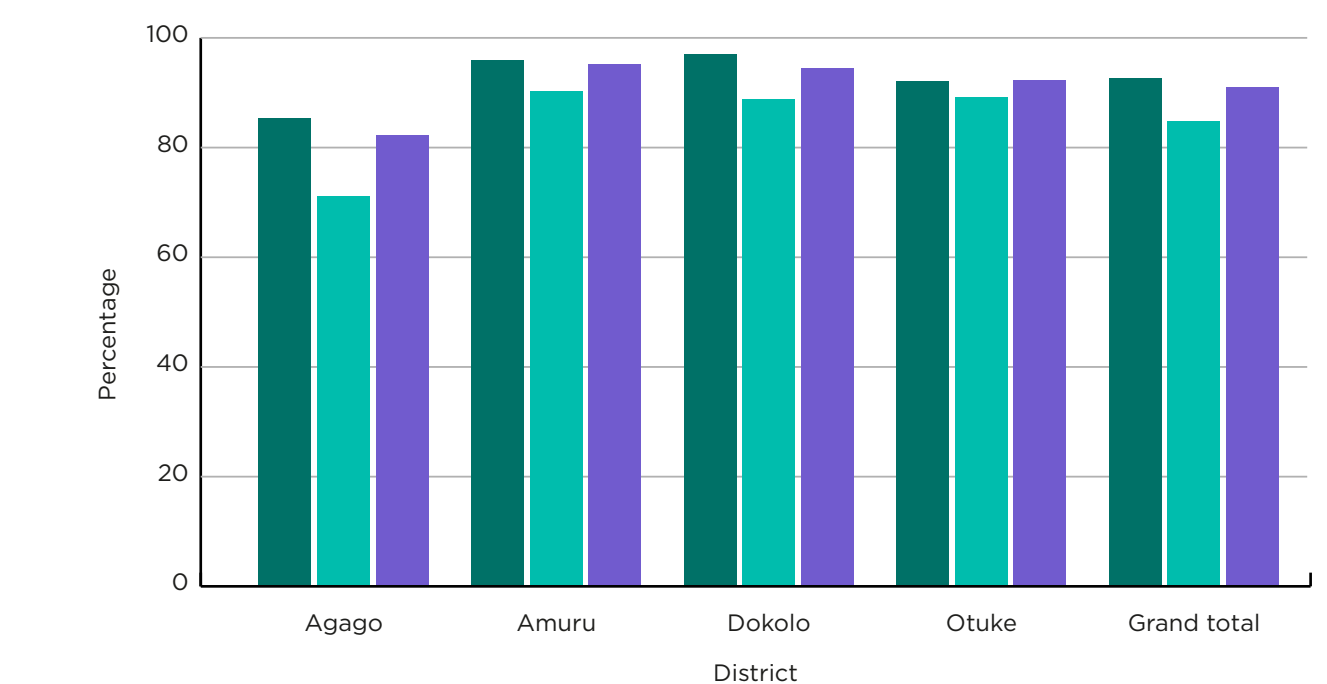


Figure 3: Average weekly reporting rates



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