

Objective:

The objective of this study was to analyze the effect of COVID-19 on routine maternal and newborn health services in three referral facilities in Guinea.

Methods:

This was a cross-sectional study using routine facility data covering two years (2019-2021). COVID-19 effects were quantified using interrupted time series models. The use of services (intra-hospital deliveries and neonatal admissions) and outcomes (obstetric complications and neonatal deaths) were analyzed for the periods before (March 2019-February 2020), and during (March 2020-February 2021) the COVID-19.

Results:

The mean number of monthly deliveries did not vary significantly before and during COVID-19 but that of induced labor increased significantly during COVID-19 ($p < 0.001$). Also, the monthly mean of neonatal admissions significantly decreased during COVID-19 (167 versus 124; $p < 0.001$). The mean number of monthly hospitalizations significantly decreased (123 before COVID-19 versus 87 during; $p = 0.001$). The mean number of monthly neonatal admissions in the pre-COVID-19 period significantly increased. Immediately after the start of the epidemic in Guinea (March 12, 2020), admissions declined significantly (64 admissions, 95%CI 102-27; $p = 0.001$). The mean number of monthly maternal deaths increased significantly during the pandemic ($p = 0.002$), as did the number of babies with low birth weight ($p = 0.04$). In the pre-COVID-19 period, there was a monthly increase of three neonatal deaths (95%CI 1.5 - 4; $p = 0.001$) but from the start of COVID-19, the monthly trend declined significantly and continued throughout the COVID-19 period (5 deaths/month, 95%CI 7-3).

Conclusions:

The ongoing COVID-19 pandemic is jeopardizing efforts to achieve Millennium Development Goals for maternal and child health in urban settings in Guinea. For the country's health system to be resilient to crises such as COVID-19, there is a need for interventions to ensure the continuity of maternal and neonatal care.

Key messages:

- COVID-19 decreased monthly hospitalizations but increased maternal deaths in big urban maternities in Guinea.
- COVID-19 decreased neonatal admissions and deaths but increased low birth weight in referral neonatal units in Conakry, Guinea.

Effect of COVID-19 on maternal and neonatal healthcare services in Guinea: a hospital based study

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