

TRENDS OF INTRA-FACILITY BIRTHS OUTCOMES BEFORE AND DURING COVID-19 ERA IN DAR ES SALAAM, TANZANIA

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Background: While substantial progress has been made in reducing maternal deaths, there was a risk that the COVID-19 pandemic may have reversed the progress made in maternal and newborn health over the last decade. Consequently, maternal, and newborn outcomes became a significant area of interest during the pandemic. This study aimed to compare the number of childbirths as an indicator of maternal health service utilization, as well as to compare maternal and newborn outcomes before COVID-19 (2011-2019) and during the COVID-19 pandemic (2020/2021) in 22 health facilities in Dar es Salaam.

Methodology: A retrospective cohort study was conducted at 22 health facilities in Dar es Salaam from March to June 2022, to assess the impact of the COVID-19 pandemic on maternal and newborn health. Data from pregnant women who attended these facilities from 2011 to 2021 was manually extracted. Descriptive analysis was conducted, presenting various indicators such as the number of childbirths, maternal mortality ratios, and rates of neonatal mortality, stillbirths, and cesarean sections. The year was used as the main variable of interest, distinguishing between pre-pandemic (2019) and pandemic (2020-2021) periods. Simple linear graphs illustrated the outcomes in specific years, and mean comparisons were

made using paired sample t-tests with a significance level of 5%. The analysis was performed using SPSS version 25.0.

Results: Between 2011 and 2021, 888,375 childbirths occurred in 22 Tanzanian health facilities. The COVID-19 outbreak led to a 11% decrease in childbirth volume in 2020, but this was not statistically significant. Despite increased rates in cesarean section, stillbirth, neonatal mortality, and maternal mortality ratio, none of these changes yielded statistical significance within the dataset.

Discussion: During the COVID-19 pandemic, childbirth rates decreased due to lockdown measures, fear of transmission, and shifting birthing preferences towards home deliveries and traditional attendants. However, cesarean section trends varied regionally. Tanzania experienced an increase in COVID-19 cases, while Zimbabwe and Mozambique experienced a decrease due to pandemic restrictions and reduced hospital attendance. Maternal mortality ratios were high in Tanzania due to workforce reassignments and inadequate protective equipment, while Zimbabwe experienced an increase without a specific wave breakdown. Neonatal mortality rates declined consistently in Tanzania and Iran.

Conclusion: The COVID-19 pandemic significantly impacted maternal and neonatal

morbidity and mortality, leading to decreased childbirth volume, increased caesarean section rates, neonatal mortality, stillbirths, and

increased maternal mortality ratio. Tanzania needs strategies to combat these effects.