Uptake of reproductive, maternal and child health services during the first year of the COVID-19 pandemic in Uganda: A mixed methods study

DATA DOCUMENTATION

1. Introduction

Uganda reported its first case of COVID-19 on March 21, 2020 and its first death on July 15, 2020. Uganda took swift stringent measures to combat COVID-19 including being among the first African countries to impose travel restrictions, ban large public gatherings and close schools. These lockdown measures were enacted on March 18, 2020, even before a first case was reported in the country, and strictly enforced.

While these measures may have helped curb effects of the pandemic in Uganda, the Uganda Presidential directives and the subsequent country lockdown may have impacted the supply chain, health service delivery and access to services. Ensuring continuity of non-COVID services, including reproductive health (RH) services such as family planning (FP), maternal (antenatal care (ANC), intrapartum and postnatal care (PNC)), neonatal and child health (MNCH) services, was an emerging challenge. This was especially critical given high maternal and infant mortality, as well as challenges in family planning access among rural populations, the urban poor, youth and other marginalized populations that lead to high rates of unintended pregnancies and abortion in Uganda. There is an urgent need to document and analyze how COVID-19 affected the utilization of RH/FP and MNCH services, and the innovations implemented to minimize disruptions in service delivery. As such, this research took a mixed-methods approach to quantitatively track RH/FP service utilization and qualitatively interview key informants to better understand challenges and adaptations to service delivery.

Goal & Objectives

The general objective of this study was to track the impact of the COVID-19 pandemic on the availability of products and FP/RH and MNCH service delivery and use, and to document adjustments and innovations to bridge gaps in service provision and uptake. Specific objectives are listed below:

1. To track the utilization of RH/FP and MNCH services including ANC and PNC
2. To describe the availability of supplies, commodities and human resources for these services
3. To document innovations and adaptations that the government of Uganda and NGOs are implementing to ensure the continuity of services

2. Study design

A mixed methods approach, including cross-sectional approach for the qualitative component, and a prospective approach for the quantitative tracking of routine services, was used to meet the objectives. It involved three main components: 1) analysis of routine service statistics, 2) key-informant interviews (KIIs) and 3) review of policy and program documents.

Quantitative component

The team abstracted key quantitative indicators from national routine service statistics hosted from Health Management Information System (HMIS) to examine trends in RH and MNCH service uptake, supplies and commodity availability. The team abstracted data from 2018-2020 to capture statistics

from before, during and after lockdown restrictions. The analysis included data from all public and private facilities in the 135 districts in Uganda that submit data to the national HMIS. For this study, the indicators of interest reflect a female population of reproductive age, children and newborns receiving services between January 2018- December 2020.

Qualitative component

KIIs were conducted to explore the challenges faced in service continuity during COVID-19, and adjustments and innovations adapted to continue service delivery to the end-users. The team interviewed a wide range of participants who were involved in FP/RH services including: RH and MNCH implementing partners, district commodity storehouse keepers and RH/MCH/FP focal persons, health facility in-charges and volunteer health teams (VHTs). To the extent possible, major private-for-profit care providers in the selected districts will also be included (Table 1). All participants were over 18 years old.

Table 1. Key informant interviews by participant group

Group	Number of participants
Health facility in-charge	8 (1 per district)
SRH/MNCH focal person	8 (1 per district)
Commodity storehouse managers	8 (1 per district)
Volunteer health team members	8 (1 per district)
RH-MNCH implementing partners (IP)	8 (1 per district)
Private providers	8 (1 per district)
Total	**48**

To ensure inclusion of key informants across diverse settings in Uganda who may have markedly different experiences, the team selected eight districts across various service delivery performance levels stratified by urban/rural setting (Table 2). District service delivery performance is determined by the Uganda Ministry of Health District league table (DLT) ranking for 2019 that assigns a score to each district based on utilization of services and health system resources. The identification of KII participants by urban/rural setting and various levels of health system performance was intended to include a variety of experiences in the analysis but was not intended to, or be capable of, identifying differences between types of setting and performance.

Table 2: Districts for inclusion in qualitative data collection by performance and location

Performance	Best	Worst	Total
Rural District	Serere (East)	Nabilatuk (North)	4
	Bushenyi (West)	Amudat (North East)	
Urban* District	Masaka (Central)	Mubende (central)	4
	Jinja (East)	Kakumiro (West)	
Total	4	4	8

*Defined as the districts that are closest to the capital Kampala within the “best and worst” performing category.

Review of program and policy documents

The team reviewed policy, program reports, and other key program documents used by the implementing partners to operationalize the continued service delivery during the lockdown, as well as

any service delivery field reports. These data were intended to supplement the KIIs and provide a clearer understanding of the stopgap measures taken and their potential impact on service delivery.

3. Data collection

KIIs were conducted between December 2020-January 2021. Interviews were conducted in English by phone or using online platforms. HMIS data were extracted in Spring 2021.

4. Data management

Quantitative data

The team at the Makerere School of Public Health (MakSPH) obtained approval from the Ministry of Health (MoH) to use data from the HMIS to conduct this secondary data analysis. The MoH division of Health Information provided MakSPH with access to the specific data to track RH/FP and MNCH services. DHIS2 data were provided in wide format in Excel. The dataset had the number of service up-takers by district, year and month. The data were analyzed in Stata version 15. The dataset was reshaped into long form, check for missing values within each variable, and missingness of districts that do not report across the three years. Data were also checked for outlier values using graphical methods. The team worked with MoH FP Monitoring and Evaluation contact person to perform data cleaning, including addressing outliers and missing data. Due to MoH regulations, quantitative data will not be shared publicly.

Qualitative data

Audio recordings of the IDIs were transcribed by the MakSPH team. The finalized transcripts were uploaded to the project SharePoint. Audio recordings were then deleted. Data were analyzed using an Excel matrix. To protect participant confidentiality, qualitative data from this study will not be shared publicly.

5. LIMITATIONS

The study has some important limitations. The eHMIS data may be prone to accuracy challenges during capture. We minimized this by ensuring that the data were cleaned for outliers during the analysis. Due to challenges related to identifying and interviewing clients during COVID-19, we were unable to interview clients and our results lack their unique perspective on challenges or adaptations regarding access to care during lockdowns. Finally, as interviews were conducted in December 2020 regarding challenges and adaptations from the lockdown period in March and April 2020, participants may have had difficulty in remembering events occurring during the lockdown period.