Assessing the impact of COVID-19 on health care service delivery in Uganda

Overview
Following the declaration of Uganda’s first case of the 2019 Coronavirus Disease (COVID-19) on 20th March 2020, Government changed strategy from preventing importation of cases to suppressing transmission of the virus.

Whereas Government is on course in managing the pandemic, there are concerns that other health related issues like maternal, child and adolescent health, sexual and reproductive health, and non-communicable disease including mental health conditions have been neglected. The COVID-19 containment measures including curfew, restrictions on movement and a ban on public transportation impacted on people’s ability to access basic and essential health care services.

This briefing paper assesses the short term effects of COVID-19 on health service provision during lockdown and budget executions for FY 2019/20, and provides recommendations.

Data was collected by the Budget Monitoring and Accountability Unit (BMAU) through review of secondary data sources, and conducting key informant interviews.

Introduction
Governments response to the COVID-19 pandemic has been widely commended. Some of the measures adopted included: banning gatherings; closing schools and shopping malls; suspending public and private transport; prohibiting open-air markets in rural areas, the sale of non-food items in urban markets, and refugees and asylum seekers from entering the country.

These containment measures however disrupted the supply chain of some essential health supplies and commodities like those for sexual and reproductive health. It also limited access to essential medical services as all sick people were required to seek permission from the Resident District Commissioners (RDCs) to travel.

Key issues
- Increase in maternal and child mortality and morbidity.
- Reduced utilization of health services.
- Decline in family planning and contraceptives use
- Delayed implementation of planned health programs and activities in FY 2019/20.

With no COVID-19 related death registered so far in Uganda, the Ministry of Health (MoH) has leveraged previous investments and experiences gained from responding to epidemics such as Ebola, Marburg, and the Crimean-Congo Hemorrhagic Fever. Referral hospitals were turned into COVID-19 treatment centers and 859 patients1 of COVID-19 patients have been admitted and managed at these hospitals. This happened without additional health infrastructure which disrupted service delivery in the hospitals. For instance, Entebbe Regional Referral Hospital was converted into a COVID-19 facility, thus disrupting health service provision for other disease conditions.

Evidence from the MoH Health Management Information System (HMIS) indicates that the government’s measures to mitigate the spread of COVID-19 affected health service delivery. For instance, there was a reduction in out-patient department (OPD) attendances, inpatient admissions, limited access to family planning services, partly attributed to limited access to medication or supportive health care. The most affected being pregnant mothers, children, people living with human immunodeficiency virus (HIV), cancer patients among others.

Impact of COVID-19 on essential health services delivery
Increase in maternal and child mortality
The Government has made significant progress in reducing the rates of maternal and child mortalities, however, travel restrictions have

1 https://www.health.go.ug/covid/ accessed on 29th June, 2020

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threatened to reverse the gains made in this area. According to the HMIS data, maternal deaths increased from 176 in February 2020 before the lockdown to 254 in April when there was a total lockdown. Fresh still birth increased from 338 in February 2020 to 654 in April 2020, while early neonatal deaths (0-7 months) increased from 360 in February to 648 in March 2020. Media reports have also pointed out maternal and child deaths in communities due to failure to access health services in time.

**Limited access to health services due to mobility restrictions**

Provision and access to health services has been significantly affected by travel restrictions. According to MoH, only 15%\(^2\) of the public sector health workers are accommodated at health facilities. This means majority of the health workers do not stay at health facilities, and therefore could have found difficult to travel to their places of work to provide both emergency and non-emergency services during the lockdown. The situation was worse in instances where the authorities did not have means to transport health workers to and from work. This disrupted health service provision and limited access to health care in such areas.

There was low patient turn up at public health facilities. According to the HMIS\(^3\) OPD attendances reduced by 9% from 6,785,641 in February 2020 to 6,181,668 in April 2020, while inpatient census declined by 24% from 461,399 in February 2020 to 354,642 in April 2020. This shows limitations in access to health services. The ultimate impact is the escalation of diseases and in some instances loss of lives.

**Risk of increased out-of-pocket expenditure for health**

According to the MoH Annual Health Sector Performance Report FY2018/19, the household out-of-pocket expenditure was 42%\(^4\). The Ministry has over the years been improving access to health services to reduce this expenditure. However, this is unlikely to be achieved because of failure to reach government health facilities. The population has resorted to self-medication and in other cases private clinics.

This therefore meant delineating them from the free medical services as provided by the State, hence increasing household expenditure on health services. On the other hand, self-medication has catastrophic effects to human health as it is often done without proper diagnosis and prescriptions.

**Disruption of the supply chain for the sexual and reproductive health commodities**

According to MoH Guidelines for Reproductive and Maternal Health, all women should have access to safe birth, the range of antenatal and postnatal care services together with screening tests.

With the closure of non-emergency services and transport restrictions sexual and reproductive health commodities and services were not easily accessible to the population. Permission had to be sought from the RDCs for travel to access family planning services and antenatal care that were initially considered as non-emergency services.

According to the HMIS, the number of family planning contraceptives dispensed reduced from 2,277,930 in February 2020 to 765,280 in April 2020, while the antenatal care\(^5\) (ANC) attendances also reduced during the same period. This shows that many people could not access these services during the lockdown.

**Escalation of death due to other disease conditions**

Many patients with HIV, diabetes, mental health and other non-communicable diseases were not able to reach health facilities to replenish their daily dosages for a given period as instructed by the health workers. The ultimate effect is that this

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\(^2\) MoH Joint Review Mission presentation on health worker force October 2019

\(^3\) All HMIS information used in this brief was obtained on 20\(^\text{th}\) May 2020.

\(^4\) Health Sector Final Accounts of FY 2015/16.

\(^5\) ANC1 reduced from 299,035 attendances in February 2020 to 290,898 in April 2020 while ANC4 reduced from 197,851 in February attendances to 140,322 attendances in April 2020.
is likely to worsen the disease condition and result into deaths. Preliminary data from the HMIS indicated 590 deaths due to other infectious/communicable diseases with pneumonia accounting for 40.6%, and 227 cardiovascular diseases among others during the lockdown period (March and April 2020).

**Increase in the disease burden**

All public health efforts and resources in this period have been geared towards addressing the COVID-19 cases and the public has been greatly sensitized in this area, however, public health awareness creation in other areas of health care may have been over looked. Uganda still has the potential to reap dividends in reducing the disease burden if health promotion and prevention campaigns are enhanced to include all other preventable diseases. Health service provision has greatly been redirected to the pandemic response i.e. identify, quarantine, test and treat.

Shortage of personal protective equipment has been highlighted which has put the health workers at risk with some shying away from work due to the fear of contradicting the virus. This is likely to increase absenteeism of health workers due to fear of contracting COVID-19. Those who need the services may not be attended to thus increasing the disease burden.

**Diversion of resources from critical projects**

Uganda’s adoption of a number of containment measures to curb the spread of the virus has exacerbated the strain on essential health care services as human and financial resources are diverted to respond to this public health emergency. The World Bank for example reallocated Ug shs 57 billion (US$15millions) from the Uganda Reproductive, Maternal and Child Health Project, MoH reallocated Ug shs 1.3billion from the Support to Mulago Hospital Rehabilitation Project among others towards the response and management of COVID-19 in Uganda.

There were reallocations from other projects and programs in the health sector towards the COVID-19 response. This diverted funding from other health programs planned to be provided under the projects, thus affecting patients who rely on these programs for free and affordable health services.

In terms of human resource, each patient in the Intensive Care Unit (ICU) also known as the high dependence unit requires four nurses per day to attend to him/her. This means if we got patients that require the ICU, more health workers would be required to attend to these patients thus over stretching the already inadequate human resources in the country.

In the management of patients admitted to the various health facilities, a number of health workers were removed from their core duties towards management of the COVID-19 patients. For instance, the Uganda Peoples Defence Force (UPDF) medical services released over 80 personnel to the civilian health care, thus affecting the UPDF medical services. In additional, Entebbe Regional Referral Hospital was closed from the general public towards management of COVID-19 cases.

**Failure to implement critical services**

Because of the pandemic, it is increasingly becoming difficult to implement health programs that involve concentration of people in one area. Such programs include immunization outreaches, interview of health workers for recruitment⁷, and blood collection on full scale, among others. This is because the public must exercise social distancing as a way of preventing the spread of the virus. According to the HMIS with 60% reporting by 15th May, 2020 the Expanded Program on Immunization (EPI) outreaches reduced from 17,192 in February 2020 to 5,175 in April 2020.

During the FY2019/20 semi-annual monitoring, the health sector achieved only 47% of its planned targets. In addition, due to social restrictions, it might be difficult to start and complete the procurement process for the projects in entities

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⁶ The programme activities were stay put and funds directed under emergency contingency window.

⁷ For posts with large volume of applications that must go through the aptitude tests.
where this was not completed. The ultimate result will be poor budget performance and execution, rolling over of projects with the associated cost overruns and failure to achieve the planned set targets for outputs and outcomes.

Conclusion

The efforts by the government through MoH to respond to COVID-19 are commendable, however, this has had unintended impact on the health sector due to travel restrictions and special focus on the pandemic at the detriment of other services.

It is important that government addresses the binding health system constraints such as limited infrastructure, limited availability of emergency medical services, and inadequate human resources among others. This will ensure adequate preparedness in the future should such pandemics strike or should the current one escalate while maintaining the standard health care services.

Recommendations

The MoH should strengthen and build a resilient health system by:

- Increasing capital investments for health to bridge the infrastructure gap requirements. This will improve the national capacity for management of severe medical conditions and emergencies with focus on intensive care units and isolation wards to enable provision of health services during epidemics. Additional focus should be to decentralize this capacity with emphasis on Regional Referral Hospitals.

- Scaling up the recruitment of health workers including intensivists, emergency care personnel and other human resource cadres on permanent basis to enable the health facilities provide all medical services even when epidemics breakout.

- Strengthening the health promotion and prevention activities through the mass media beyond COVID-19 and malaria. This should include other areas of health care which have the potential of increasing disease during this period of fighting the pandemic.

- In partnership with development partners and other stakeholders, ensure that there is sustained and uninterrupted access to sexual and reproductive health supplies to prevent unintended pregnancies and related maternal mortality. The population should also have access to contraceptive information during this time of the pandemic. Availability of sexual and reproductive health supplies will help reduce the burden on the health systems to manage the consequences of unintended pregnancies.

- In partnership with Parliament and Ministry of Finance, Planning and Economic Development, the MoH should accelerate the implementation of emergency medical services by ensuring that the policy is in place. All regional call and dispatch centers should be established and functional for improved response to emergency medical care which is key in responding to pandemics of this nature and other emergency medical services.

- Strengthening immunization services to mitigate immunization drop outs as a result of failure to reach health facilities

References

- Annual Health Sector Performance Report FY 2018/19
- Annual Budget Monitoring Report FY 2018/19
- Human Resources for Audit Report, MoH, 2017
- Sexual and Reproductive Health and Rights, Maternal and Newborn Health & COVID-19
- Ministry of Health: Health Information Management System