

EFFECT OF COVID-19 PANDEMIC ON SAFE ABORTION AND CONTRACEPTIVE SERVICES AND MITIGATION MEASURES: A CASE STUDY FROM A TERTIARY FACILITY IN ETHIOPIA

Lemi Belay, MD¹, Tesfaye Hurisa, MD¹, Ferid Abbas, MD¹, Mekdes Daba, MD, MPH¹, Biruck Abebe, MD¹,
Balkachew Nigatu, MD¹, Sarah Prager, MD, MAS^{1,2}

ABSTRACT

BACKGROUND: To protect the gains made in sexual and reproductive health in Ethiopia over the past several decades, care for childbearing women and newborn infants needs to continue during the pandemic. The provision of safe abortion and contraceptive services remains critical. When staff and services are under extreme stress there is a real risk of increasing avoidable harm. This case study aims to determine the effect of COVID-19 on contraception and safe abortion care services at a tertiary facility in Ethiopia.

METHOD AND MATERIALS: Data on safe abortion and contraception services were collected from service delivery units from March through May 2020. For comparison, and due to seasonal variation in caseload throughout the year, data were pulled from March through May 2019.

RESULTS: Deliveries and immediate postpartum family planning have decreased by 27.6% and 66.7% respectively during the pandemic compared to the same months last year. Overall, the number of clients presenting for family planning was reduced by 27%. Safe abortion services and comprehensive abortion care were reduced by 16.4% and 20.31% respectively. Likewise, family planning service utilization among safe abortion and post-abortion clients were reduced by 40.6%, and 39.7% respectively.

CONCLUSION AND RECOMMENDATIONS: The COVID-19 pandemic is impairing safe abortion and contraception services. Both contraception and abortion services have decreased following the COVID-19 pandemic compared to the same months of last year. These underscore that the Ethiopia Ministry of Health (FoH) and their partners (donors and non-government organizations) must take swift action, including prioritizing abortion care and contraceptive services during the pandemic. Additionally, health care providers should be reoriented, resources and staff must be maintained to ensure continuation of the service amid COVID-19 pandemic. Innovative methods, such as telehealth (voice or video calls), self-care interventions, and utilization of health extension workers, need to be maximized to maintain and increase access to these essential health services.

PLAIN ENGLISH SUMMARY: This a comparative case study conducted at a tertiary facility in Ethiopia to determine the effect of COVID-19 on safe abortion and contraception service. We collected data on safe abortion and contraception services from service delivery units from March through May 2020 and compared it with data from March through May 2019. There is a reduction in deliveries, safe abortion care, and all methods of contraception during three months of the COVID-19 pandemic compared to the same months of the last year. Therefore, government and partner organizations must prioritize contraception and safe abortion services. Besides, strategies to maintain and increase access to these essential health services such as self-care interventions, and utilization of health extension workers, need to be maximized.

KEYWORDS: COVID-19, sexual and reproductive health, contraception, safe abortion, case study

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¹ Saint Paul's Hospital Millennium Medical College, Addis Ababa, Ethiopia

² University of Washington, School of Medicine, Seattle, WA, USA

INTRODUCTION

Ethiopia has made tremendous progress in sexual and reproductive health (SRH) in the past two decades, especially in reducing maternal mortality and morbidity. Ethiopia's dedication to reducing maternal mortality is exemplary. The 2016 EDHS (Ethiopian Demographic Health Survey) showed that the pregnancy related maternal mortality ratio of Ethiopia was 412 per 100,000 live births, while 2000, 2005 and 2011 EDHS reported maternal mortality ratio was 871/100,000, 673/100,000 and 676/100,000 live births respectively¹⁻⁴. To increase access, all maternity services including antenatal care, labor and delivery, postnatal care, family planning, and post-abortion care were provided free of charge at public hospitals and health centers. In Ethiopia, primary health care facilities provide all types of family planning methods and first-trimester abortion services whereas second-trimester abortion services are provided at secondary and tertiary health care facilities. The tremendous healthcare burden caused by the COVID-19 outbreak is jeopardizing routine service delivery and undermining other health priorities. United Nations Population Fund (UNFPA) recently stated that Ethiopia's midwives grapple with the COVID-19 while ensuring safe delivery⁵. Health workers said to Voice of America that COVID-19 travel restrictions in Ethiopia are forcing pregnant women to give birth at home⁶. The aim of this case study is therefore to determine the effect of COVID-19 on contraception and safe abortion care services at a tertiary facility in Ethiopia.

METHOD

This is a comparative case study of safe abortion and contraception services amid the COVID-19 pandemic at Saint Paul's Hospital Millennium Medical College (SPHMMC) in Addis Ababa, Ethiopia. SPHMMC is a tertiary teaching and referral hospital. Family planning and abortion care are among the service delivery areas which the hospital continued to provide during COVID-19 pandemic. These services are provided at a dedicated unit called the MICHU clinic. Both abortion care and family planning care are provided in this unit. The first case of COVID-19 was reported in

Ethiopia on March 13, 2020. Due to seasonal variation in caseload throughout the year, a comparison of three months (March-May 2020) was made with the same period in the preceding year (March-May 2019). The family planning unit registry was used to collect all the necessary information on abortion and family planning service provision. Both interval and post-abortion family planning were assessed. For data regarding delivery and postpartum family planning the data registry of the labor and delivery unit was used. Comparisons are reported as percentage differences.

Operational definitions

Safe abortion care (SAC): abortion care provided during an induced abortion.

Post abortion care (PAC): abortion care provided during a spontaneous abortion.

Interval family planning: family planning service not related to abortion and delivery.

Post-abortion family planning: family planning services provided during an abortion, both safe abortion and comprehensive abortion care.

Immediate postpartum family planning: family planning services provided at the time of delivery or before discharge from the hospital.

RESULTS

Three months data (March-May) from 2019 and 2020 were collected and compared. Safe abortion and post-abortion care services during three months of the pandemic were reduced by 16.4% and 20.31% respectively (Table 1).

Table 1: Safe and post-abortion care service.

Year/month	Safe abortion care (SAC) (N)	Post abortion (N) care (PAC)
Mar-May 201	323	507
Mar-May 2020	270	404
% reduction	16.40	20.31

Clients visiting MICHU clinic for interval family planning were reduced by 27% during the three months

of the pandemic. Family planning service utilization among safe abortion and post-abortion clients were reduced by 40.6%, and 39.7% (Table 2).

Table 2: Interval and post-abortion family planning uptake

Year/month	FP provision at MICHU clinic (N)	FP among SAC	FP among PAC
Mar-May 2019	368	318 (98.4%)	456 (89.8%)
Mar-May 2020	268	189 (70%)	275 (68%)
% reduction	27.17	40.56	39.69

Deliveries and immediate postpartum family planning during three months of the COVID-19 pandemic has decreased by 27.6% and 66.7% respectively compared to the same period last year (Table 2)

Table 2: Family planning uptake among postpartum women

Year/Month	Number of deliveries	Immediate postpartum family planning provided
Mar-May 2019	2720	609 (22.4%)
Mar-May 2020	1970	203 (10.3%)
% reduction	27.6	66.7

There is a reduction in all methods of contraception during three months of the COVID-19 pandemic. The greatest reductions are observed for tubal ligation, IUCD, and implants, at 85.7%, 63.4%, and 40.3%, respectively.

Table 3: Distribution of family planning by method

Method type	Year/month Mar-May 2019	Mar-May 2020	% reduction
Injectables	125	90	28
COCs	62	54	12.9
IUCDs	134	49	63.4
Implants	1065	635	40.3
BTL	7	1	85.7
Others	4	1	75

DISCUSSION

There is a reduction in deliveries, safe abortion care, and all methods of contraception during three months of the COVID-19 pandemic. Number of deliveries, safe abortion, post abortion family planning and postpartum family planning reduced by 27.6%, 16.4%, 40.5% and 66.7% respectively. However, the reduction of permanent and long-term contraception methods is significantly greater than the reduction in short term contraceptive methods. Though deliveries and overall safe abortion care numbers are both decreased, there is a much more considerable reduction of postpartum and post-abortion family planning, indicating that even clients in the health facility are potentially getting suboptimal services. Postpartum and post-abortion family planning are strongly considered essential during the pandemic, especially as one can use the opportunity to provide care while the patient is already in a health facility⁷⁻⁹. At SPHMMC postpartum and post abortion family planning were highly encouraged both before and during COVID-19 pandemic. However, the mismatch in services might be because of a lack of clear information among providers that these services are essential to continue during the pandemic, diversion of equipment, and decreased staff involved in the provision of the services. Though this case study is from one center, it indirectly verifies the early estimation by Marie Stopes International (MSI) that nearly 9.5 million people across MSI service country will miss out on case if service reduction continues for three months¹⁰.

If such disruptions in care continued unmanaged on background of already strained health care systems might result in non-pandemic-related maternal and neonatal morbidity and mortality, increased adolescent pregnancy, and other reproductive health crises as we've previously seen with other public health emergencies. Guttmacher institute published a projection of the impact of the pandemics on sexual and reproductive health (SRH) services using 2019 data on SRH services from 137 low-and middle-income countries from which Ethiopia is one¹¹. According to the projection, a 10% service reduction will result in nearly 48,558,000 additional women with an unmet need for modern contraceptives and 15,401,000 additional unintended pregnancies.

The same magnitude (10%) reduction in service will also result in an estimated 1,745,000 additional women experiencing major obstetric complications resulting in 28,000 additional maternal deaths. Similarly, it will result in 2,591,000 additional newborns experiencing major complications resulting in 168,000 additional newborn deaths. Furthermore, it will result in 3,325,000 additional unsafe abortions resulting in 1,000 additional maternal deaths from unsafe abortion.

Evidence from the past Ebola virus outbreak in 2013–2016 in Western Africa showed the negative, indirect effects that such crises can have on SRH. According to an analysis of data from Sierra Leone's Health Management Information System (HMIS), decreases in maternal and newborn care due to disrupted services and fear of seeking treatment during the outbreak contributed to an estimated 3,600 maternal deaths, neonatal deaths, and stillbirth, a quantity that approaches the number of deaths directly caused by the Ebola virus in the country¹². Evidence also shows that after the Ebola epidemic, the number of antenatal care visits and facility deliveries in Guinea had not recovered to prior levels even after six months¹³. This implies that the pandemic had sustained effects on the country's already inadequate level of care.

Several interventions have been proposed to mitigate the impact of the current pandemic on SRH services. Resources and staff must be maintained for sexual and reproductive health services. It is imperative to reorient health care providers about the essential nature of SRH services, with a special focus on postpartum and post-abortion family planning. It is also critical that innovative methods, such as telehealth (voice or video calls) be utilized to maintain these essential services for low-risk mothers to decrease the spread of COVID-19. Telemedicine and self-care early medication abortion and family planning methods should also be encouraged to increase access to care amid the pandemic¹⁴.

Self-care early abortion and contraceptive service include remote evaluation and prescription of misoprostol with or without mifepristone, combined oral contraceptive pills, progesterone-only pills, barriers methods, and emergency contraceptive methods. Self-care family planning service includes telehealth, making contraceptives available without a prescription; decentralizing the distribution

of contraceptives, and delivery of services at people's homes when possible¹⁵. Utilization of Health Extension Workers (HEWs) and the Women Development Army (WDA), which are already well developed in Ethiopia, can play a significant role in reaching the rural and underserved communities during the pandemic. Though self-care service protocols are very important in increasing access to services and reducing the risk of virus transmission, it should be implemented within provider and client understanding and setting context. Furthermore, public sectors, private-sector actors, and their partners should strengthen national and regional supply chains to make sexual and reproductive health medications and supplies more accessible to providers and patients during the pandemics.

CONCLUSIONS

The COVID-19 pandemic is already having adverse effects on safe abortion and contraception services. Both family planning and abortion services have dropped since the initiation of the COVID-19 pandemic. The lessons from the past Ebola outbreak and the overwhelmingly burdened healthcare system related to the COVID-19 pandemic imply that there is probable maternal morbidity and mortality that will result from the indirect impact of the pandemic in the absence of focused responses from the government to protect the gains made in sexual and reproductive health in Ethiopia over the past several decades.

This underscores that the Ministry of Health Ethiopia (FoH) and their development partners (donors and non-government organizations) should take swift action. Specifically, they should reorient health care providers about the essential and priority nature of abortion care and contraceptive services to continue during the pandemic. Additionally, resources and staff must be maintained to ensure continuation of the service. Furthermore, there is a need to adopt innovative methods, such as telehealth (voice or video calls), self-care, and utilization of health extension workers to maintain and increase access to these essential health services.

CORRESPONDING AUTHOR:

Lemi Belay

Email address: lemi.belay@gmail.com

ABBREVIATIONS

BTL-Bilateral Tubal Ligation
CAC-Comprehensive Abortion Care
COC- Combined Oral Contraception
ESOG-Ethiopian Society of Obstetrics and Gynecology
FMOH-Federal Ministry of Health Ethiopia
HEW-Health Extension Workers
HMIS- Health Management Information System
IUCD- Intrauterine device
SAC- Safe Abortion Care
SPHMMC- Saint Paul's Hospital Millennium Medical College
SRH- Sexual and Reproductive Health
WDA-Women Development Army

DECLARATIONS

Ethics approval and consent to participate
Formal ethical clearance and permission to participate is not applicable for this case study.
Consent for publication
Permission to conduct the study and publish was taken from Saint Paul's Hospital Millennium Medical College (SPHMMC) ethical review team.
Availability of data and materials
All data used in this case study were included in the manuscript.
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The authors declare no conflict of interest in this review.
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