

Ethiopia's commitment towards achieving sustainable development goal on reduction of maternal mortality: There is a long way to go

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Abstract

Maternal mortality reduction has been recognized as a key healthcare problem that requires prioritizing in addressing. In 2015, the United Nations has set Sustainable Development Goals to reduce global maternal mortality ratio to 70 per 100,000 live births by 2030. Ethiopia as a member country has been working to achieve this Sustainable Development Goals target for the last decades. In this article, we discussed Ethiopia's commitment towards achieving Sustainable Development Goals in maternal mortality. Furthermore, the trends of maternal mortality rate in Ethiopia during Millennium Development Goals and Sustainable Development Goals are also highlighted. Although maternal mortality has been declining in Ethiopia from 2000 to 2016, the rate of death is still unacceptably high. This requires many efforts now and in future to achieve the Sustainable Development Goals target by 2030.

Keywords

Ethiopia, maternal health, maternal mortality, sustainable development goal

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Introduction

In 2000, all United Nations (UN) member state countries signed the commitment to the Millennium Development Goals (MDGs). The goals were eight global development goals that aimed at addressing social determinants of health and associated detrimental health outcomes.¹ Maternal mortality reduction and access to reproductive health services were among the key goals of the MDGs. Following the end of the MDGs (2015), the UN has developed Sustainable Development Goals (SDGs) which are committed to improving health and development for all member state countries including Ethiopia to be actively involved. Reduction in maternal mortality remains a priority under SDG 3: 'Ensure healthy lives and promote well-being for all at all ages'. The global target was reducing maternal mortality to 70 per 100,000 live births by 2030,² and all member countries should reduce maternal mortality ration (MMR) by at least two-thirds of their baseline.

Ethiopia's effort in universal health coverage focusing on maternal health service

In 2003, the Ministry of Health of Ethiopia launched a health extension programme to help in achieving universal health coverage (UHC) and to accelerate the country's progress in meeting MDGs and SDGs in all areas of the health sector.^{3,4} As part of this initiative, the Ethiopian government

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has been working in improving access to primary healthcare services in all regions of the country through deployment of specialized trained health professionals called health extension workers (HEWs).³ Many public health services packages have been included to be delivered by HEWs working in all regions of the country, including provision of basic maternal health services.⁵ Improving access to maternal health service such as antenatal care (ANC) and family planning services is among the main areas of HEW programmes' successful achievement between 2003 and 2018.³ UHC was supposed to ensure access to all necessary health services without financial hardship. However, concerns have been raised regarding the ability to achieve the UN's SDGs in low-income countries including Ethiopia due to financial constraints.⁶ This is because it requires reforms in health financing with ambition in increasing public funds in healthcare expenditure. For many low-income countries, increasing health expenditure funds and health financing reform implementation have been impacted by the lack of political commitment apart from budget deficit. In response to this, the Ethiopian Government has been working on different reforms.⁷ One of the reforms was the introduction of Community Based Health Insurance (CBHI) scheme in 2010. The scheme aims to strengthen healthcare financing within Ethiopia to improve access to primary health care and to meet SDG target in all areas of health sector, including maternal mortality.⁸ The national programme evaluation of CBHI of Ethiopia shows that there is a decline in out-of-pocket expenditure among the insurance scheme subscribers.⁸

Furthermore, to strengthen the maternal health system through skilled professionals, in 2009 the Ministry of Health of Ethiopia launched a specialized master's degree programme on integrated emergency obstetric surgery. Graduates of this programme have been deployed by government mostly in district hospitals to improve access to emergency obstetric care services, thereby reducing maternal death during delivery. Evidence shows that the deployment of these professionals has made notable achievements in access to emergency obstetric care services including surgery.⁹ Although efforts have been made by Ethiopian government to improve access to maternal health service through different initiatives, it has been criticized for the poor quality of care. A recent finding revealed that no more than 15% of health facilities in Ethiopia meet maternal health care quality standards.¹⁰

Trends in maternal health services utilizations in Ethiopia

According to the Ethiopian Demographic and Health Survey (EDHS) 2019 mini report, increase in trends of receiving ANC services from skilled providers has been noted overtime from 28% in 2005 and 34% in 2011 to 62% in 2016 and 74% in 2019 (Figure 1). Despite trends of increasing ANC care usage, there is disparity in different

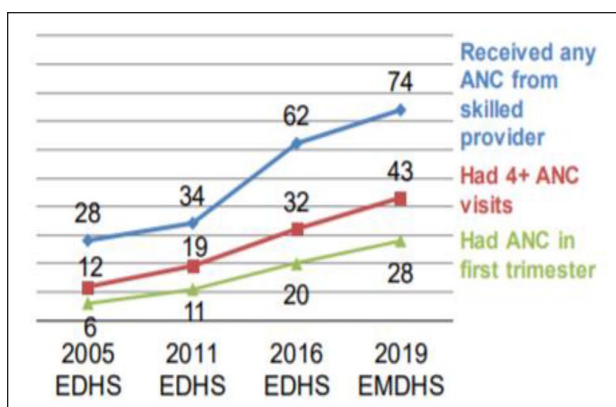


Figure 1. Trends in percentage of women aged 15–49 years who had a live birth from 2005 to 2019.

Source: EDHS 2019 mini report.

settings. For example, according to 2019 EDHS data report, the percentage of women living in rural areas who have received ANC from a skilled provider who gave birth in the last 5 years was 70%, while the percentage of urban residents was 85%. Furthermore, the disparity is also noted in regional states. The percentage of women living in the Somali regional state of Ethiopia who have received ANC was 30.2%, while this percentage was 96.9% in Addis Ababa city administration. Furthermore, as part of ANC components, screening for chronic disease such as hypertension and screening for infection were increased significantly from 2005 to 2019.¹¹ The increase in this trend helps in addressing potential causes of maternal mortality in Ethiopia. Similarly, trends of institutional delivery have been increased from 26% in 2016 to 48% in 2019.¹¹ In contrast, trends of home delivery have been decreased from 73% in 2016 to 51% in 2019. Despite the decline in overall home delivery, still this percentage (51%) is unacceptably high and needs the effort of improving institutional delivery primarily in rural areas where most women deliver at home without a skilled birth attendant. According to the EDHS 2019 report, a large proportion of women aged 15–49 years who gave birth (64%) did not visit health facility post-delivery.¹¹ Much effort is also needed to improve postnatal care health facility visits as one of the major causes of maternal mortality is death due to complications of post-delivery.

Trends of maternal mortality in Ethiopia: achievements of MDGs and SDGs

The introduction of new health care taskforce – HEWs – and the implementation of CBHI to assist in health care financing are among the most important reforms that the government of Ethiopia has made in the past two decades. The effectiveness of these strategies lies in the improvement in health access and reduction in mortality. For the purpose of this narration, the historic trends of maternal mortality

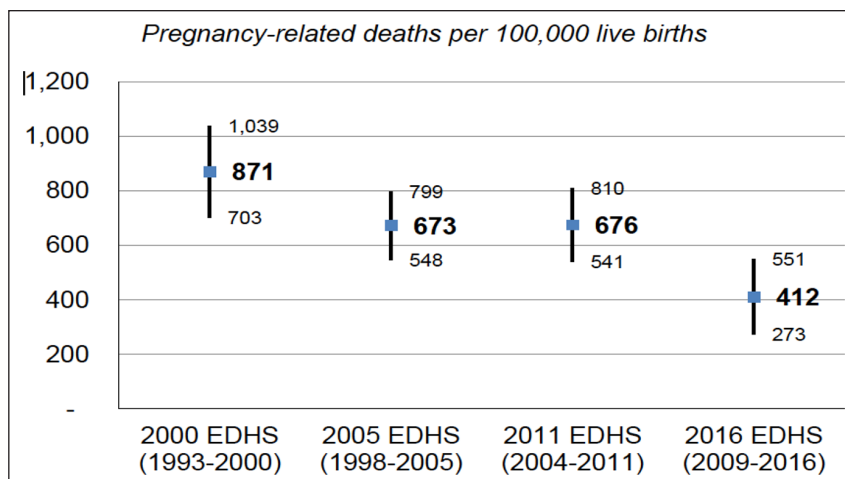


Figure 2. Trends in maternal mortality in Ethiopia from 1993 to 2016: Ethiopian Demographic and Health Survey, 2016.

will be briefed. Despite significant reductions in maternal mortality globally, it remains high in developing countries, mainly in sub-Saharan African countries. As of 2017, the pooled MMR of sub-Saharan Africa region was 534 per 100,000 live births.¹² Ethiopia is one of the countries in sub-Saharan region with high maternal mortality.^{13,14}

Achievements of MDG-5

Maternal mortality in Ethiopia in the period 1990–2016 was high and could not achieve the MDG target of a three-quarter of maternal death reduction. Different studies have reported trends of MMR in Ethiopia. These reports are variable and inconsistent in results.

For example, the MMR of the year 2005 reported by the World Health Organization (WHO) was 865, while the EDHS estimates of 2005 report were 673 per 100,000 live births.^{15,16} Another study from the global burden of disease estimate reported by Tessema et al.¹⁷ also shows that the MMR of Ethiopia in 2005 was 687 per 100,000 live births. The difference in results could depend on the methodology, sample size, data source and maternal mortality estimation methods. For the purpose of this narration, maternal mortality estimates completed by the Ethiopian public health institute through the EDHS programme have been used. This is because the EDHS data are the only nationally representative data source in estimation of MMR which is periodically collected and reported. According to the 2016 EDHS data, the MMR in Ethiopia was 871 per 100,000 live births.¹⁸ Following action for commitment to the MDG, between the years 2000 and 2005, the MMR had declined slightly (673/100,000 live births).¹⁸ At the end of MDGs, the MMR was 412 per 100,000 live births.¹⁸ This result was above the MDG target, and thus Ethiopia was unable to achieve the target by 2015. The maternal mortality in Ethiopia from 1993 to 2016 is presented below (Figure 2). The data are taken from Ethiopian demographic survey report.¹⁸

Post-MDG-5 and SDG-3.1 achievements on maternal mortality of Ethiopia

The UN's SDG goal 3.1 target was to achieve a maternal mortality ratio of less than 70 per 100,000 live births.² Ethiopia as a member country adopted the goals and has been giving great attention particularly to maternal mortality reduction over the past years. Efforts have been made to achieve the target by 2030. Despite the decline in maternal mortality in Ethiopia, still the mortality is high and not close to the SDG target. According to the estimation by the World Bank, WHO, UNICEF (United Nations Children's Fund), UNDP (United Nations Development Programme) and the UN Department of Population Health, the MMR was 401 per 100,000 live births in 2017. This means Ethiopia is only achieving 10% mortality reduction since 2015. In fact, the MMR reported in this study is lower than the MMR reported by EDHS 2016, which was 412 per 100,000 live birth. As mentioned above, there is inconsistency in MMR reports in Ethiopia. However, both trends indicate that Ethiopia has not even achieved the goal set in 2017 during the launching of quality network, which was lowering the MMR from 412 to 199 per 100,000 live births by 2020.

Maternal mortality and COVID-19

It is likely that the current pandemic will be with us for the coming years. It also needs to be acknowledged that many health services have been impacted by the pandemic, and the impact on maternal health services delivery must not be underestimated. Strict government restrictions and diminished healthcare-seeking behaviours among pregnant mothers due to fear of the transmission of COVID-19 may pose challenges in access to maternal health services. Although there are no published

data on global maternal mortality during the current pandemic including in Ethiopia, it is expected to increase due to the disruption of health services. This will increase the burden for developing countries like Ethiopia where still maternal mortality rate is unacceptably high. Great attention should be given for special populations such as pregnant women in the time of such crisis. Therefore, Ethiopian government needs to make sure that pregnant women are accessing basic maternal health services to decrease the MMR.

Conclusion

Ethiopia has been paying great attention to reduce the maternal mortality rate in the country for the past two decades. Despite the decline in reduction, the rate of death is still high. Achieving the SDG target of lowering the maternal mortality to 70 per 100,000 live births by 2030 is challenging. The ANC coverage disparity in different settings, the poor quality of maternal health care, and the current COVID-19 crisis are the warning signs that the country needs to consider seriously. The existing high maternal mortality coupled with the current COVID-19 in Ethiopia might slow down the country's progress of meeting SDGs by 2030. To achieve the ambitious goal of SDGs, increasing maternal health service coverage in all areas of the country needs to be ensured. Doubling the current effort with great commitment will be the ultimate solution to curb maternal mortality, thereby achieving the SDG target. Furthermore, some regional states of the country need greater attention, especially those with high maternal mortality and low utilization of ANC service such as Somali regional state. The disparity of both maternal mortality and access to maternal health service within regional states of Ethiopia needs to be addressed and additional efforts to counterbalance the country's effort in meeting SDGs have to be made.

Authors' contributions

A.A. conceived the idea and wrote the first draft, Y.G. searched the literature and revised the draft, and L.E. revised and proof-read the final manuscript.

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References

1. World Health Organization. Millennium Development Goals (MDGs). [https://www.who.int/news-room/fact-sheets/detail/millennium-development-goals-\(mdgs\)#:~:text=The%20United%20Nations%20Millennium%20Declaration,are%20derived%20from%20this%20Declaration](https://www.who.int/news-room/fact-sheets/detail/millennium-development-goals-(mdgs)#:~:text=The%20United%20Nations%20Millennium%20Declaration,are%20derived%20from%20this%20Declaration)
2. United Nations. Goal 3: Ensure healthy lives and promote well-being for all at all ages. <https://www.un.org/sustainabledevelopment/health/>
3. Assefa Y, Gelaw YA, Hill PS, et al. Community health extension program of Ethiopia, 2003–2018: successes and challenges toward universal coverage for primary health-care services. *Glob Health* 2019; 15(1): 1–11.
4. Workie NW and Ramana GN. *The health extension program in Ethiopia*. Washington, DC: UNICO Studies Series, 2013.
5. Banteyerga H. Ethiopia's health extension program: improving health through community involvement. *MEDICC Rev* 2011; 13(3): 46–49.
6. Evans DB and Etienne C. *Health systems financing and the path to universal coverage*. Geneva: World Health Organization, 2010.
7. FMOH. *Health sector transformation plan*. Addis Ababa: Federal Ministry of Health of Ethiopia, 2015.
8. EHIA. *Evaluation of community-based health insurance pilot schemes in Ethiopia: final report*. Addis Ababa: Ethiopian Health Insurance Agency, 2015.
9. Gobeze AA, Kebede Z, Berhan Y, et al. Clinical performance of emergency surgical officers in southern Ethiopia. *Ethiop J Health Sci* 2016; 26(5): 463–470.
10. Biadgo A, Legesse A, Seifu A, et al. Quality of maternal and newborn health care in Ethiopia: a cross-sectional study. *BMC Health Serv Res* 2021; 21: 679.
11. EPHIEE I. *Ethiopia mini demographic and health survey 2019: key indicators*. Rockville, MA: EPHI and ICF, 2019.
12. The World Bank. Maternal mortality ratio (modeled estimate per 100,000 live births) Sub-Saharan Africa. <https://data.worldbank.org/indicator/SH.STA.MMRT?locations=ZG> (accessed 06 June 2021).
13. Kassebaum NJ, Bertozzi-Villa A, Coggeshall MS, et al. Global, regional, and national levels and causes of maternal mortality during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. *Lancet* 2014; 384(9947): 980–1004.
14. Say L, Chou D, Gemmill A, et al. Global causes of maternal death: a WHO systematic analysis. *Lancet Glob Health* 2014; 2(6): e323–e333.
15. World Health Organization. *Maternal mortality in 2000–2017 internationally comparable MMR estimates by the Maternal Mortality Estimation Inter-Agency Group (MMEIG), WHO, UNICEF*. Geneva: World Health Organization, 2015.
16. Ethiopian Public Health Institute-EPHI, Federal Ministry of Health-FMoH, ICF. *Ethiopia mini demographic and health survey 2019*. Addis Ababa: EPHI, 2021.
17. Tessema GA, Laurence CO, Melaku YA, et al. Trends and causes of maternal mortality in Ethiopia during 1990–2013: findings from the Global Burden of Diseases study 2013. *BMC Public Health* 2017; 17(1): 1–8.
18. CSACE I. *Ethiopia demographic and health survey 2016*. Addis Ababa: CSA and ICF, 2016.