


# Newborns and Under-5 Mortality in Ethiopia: The Necessity to Revitalize Partnership in Post-COVID-19 Era to Meet the SDG Targets

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Yonas Getaye Tefera<sup>1</sup>  and Asnakew Achaw Ayele<sup>1</sup>

## Abstract

The Sustainable Development Goals (SDGs) were adopted during the United Nations meeting in 2015 to succeed Millennium Development Goals. Among the health targets, SDG 3.2 is to end preventable deaths of newborns and children under 5 years of age by 2030. These 2 targets aim to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births. Ethiopia is demonstrating a great reduction in child mortality since 2000. In the 2019 child mortality estimation which is nearly 5 years after SDGs adoption, Ethiopia's progress toward reducing the newborns and under-5 mortality lie at 27 and 50.7 per 1000 live births, respectively. The generous financial and technical support from the global partners have helped to achieve such a significant reduction. Nevertheless, the SDG targets for newborns and under-5 mortality reduction are neither attained yet nor met the national plan to achieve by the end of 2019/2020. The partnership dynamics during COVID-19 crisis and the pandemic itself may also be taken as an opportunity to draw lessons and spur efforts to achieve SDG targets. This urges the need to reaffirm a comprehensive partnership and realignment with other interconnected development goals. Therefore, collective efforts with strong partnerships are required to improve the determinants of child health and achieving SDG target reduction until 2030.

## Keywords

newborns mortality, under-5 mortality, child mortality, SDG, Ethiopia

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## Background

The Sustainable Development Goals (SDGs) were adopted during the United Nations meeting in 2015 to succeed Millennium Development Goals (MDGs) which was the main global agenda since the beginning of 2000. All heads of state agreed to 17 interconnected SDGs with a promise to “leave no one behind” and to achieve this grand ambition by 2030.<sup>1</sup> The consolidated and solitary health-specific goal (SDG 3) is ensuring healthy lives and well-being for all. Among the health targets, SDG 3.2 is to end preventable deaths of newborns and children under 5 years of age by 2030. These 2 targets aim to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births.<sup>2</sup>

## Overview of Child Mortality in Ethiopia during the MDG Era [2000-2015]

Ethiopia was one of the top countries with the highest child mortality rate during the beginning of new millennium.<sup>3</sup>

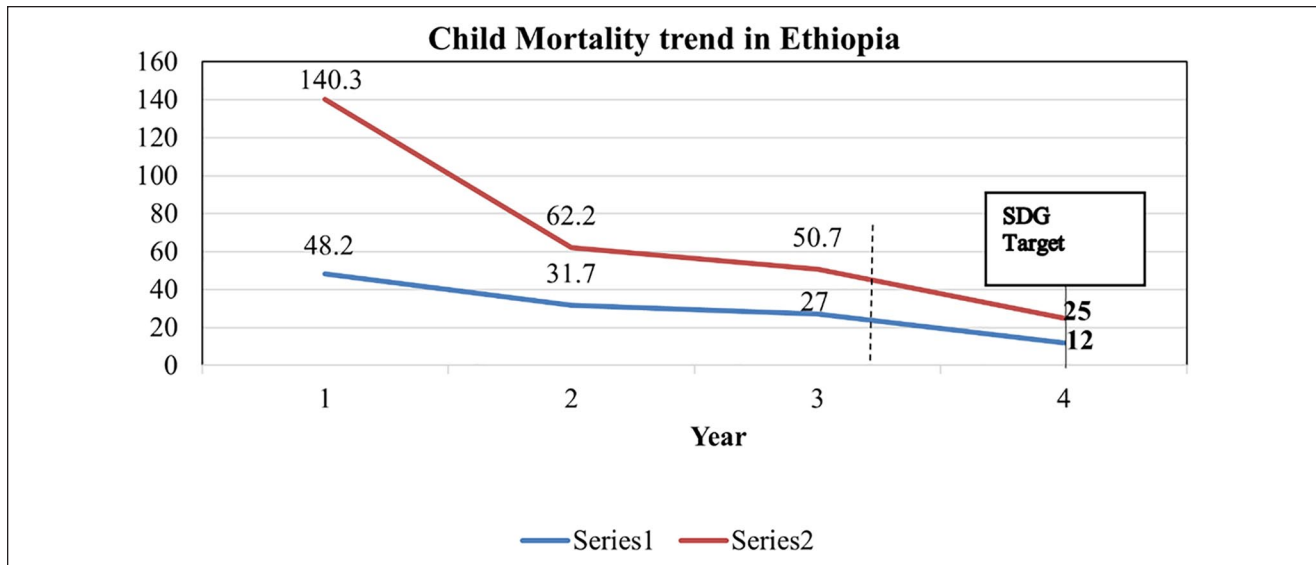
Following the MDG commitment, Ethiopia successfully attained the MDG 4 by reducing two-thirds of under-5 mortality 3 years before the target year.<sup>4</sup> The newborn mortality per 1000 live births decreased from 48.2 in 2000 to 31.7 in 2015. During the same time interval, under-5 mortality dropped from 140.3 to 62.2.<sup>5</sup> Despite the country's progress in reducing child mortality rate, there were differences sub-nationally. The inequality rate in child mortality per 1000 live births ranged from as low as 39 in Addis Ababa to as high as 125 in Afar.<sup>6</sup> Such inequality of child mortality in Ethiopia had a direct relationship with the subnational variation of Universal Health Coverage (UHC) which ranged from 10% in the Afar region to 52.2% in Addis Ababa.<sup>7</sup>

<sup>1</sup>University of Gondar, Gondar, Ethiopia

### Corresponding Author:

Yonas Getaye Tefera, Department of Clinical Pharmacy, School of Pharmacy, College of Medicine and Health Science, University of Gondar, Gondar 6200, Ethiopia.  
Email: yonas1get@gmail.com





**Figure 1.** Trends of newborns and under-5 mortality rate in Ethiopia since 2000.

Adapted from “Levels & trends in child mortality UNICEF” by UN Inter-agency Group for Child Mortality Estimation, 2020 and “The 2017 voluntary national reviews on SDGs of Ethiopia: Government commitments, national ownership, and performance trends.” By National Plan Commission, 2017, Addis Ababa. Series 1 (blue line)- Newborns mortality per 1000 live births; Series 2 (red line)- Under-5 mortality per 1000 live births.’ in the footnote of figure 1.

Basically, the difference in the UHC was also explained by variations in the availability of health workforce, infrastructure development, socioeconomic status, and literacy rate. The low literacy rate, poor healthcare-seeking behavior, minimal expenditures in health services were identified as the reasons to low UHC service coverage in Ethiopia.<sup>7-9</sup> This regional disparity requires narrowing the inequity gap of basic health determinants and expanding access to primary health care in hard reach areas such as pastoral and semi-pastoral regions by mobilizing resources efficiently in a transparent and equitable manner.<sup>9,10</sup> Thus, it gave homework for the country to accentuate commitment toward health equity in achieving UHC to pave the way for SDG.

### Newborns and Under-5 Mortality in Ethiopia Since 2015: How Far Behind to the SDG Target?

Generally, Ethiopia’s commitment to meet the overall SDGs is quite commendable and appears to be moving forward despite of its low SDG global rank. Ethiopia is ranked 136 out of 166 countries with an overall performance index score (55.2) which is above the regional average score (53.1).<sup>11</sup> In the 2019 child mortality estimation which is nearly 5 years after SDGs adoption, Ethiopia’s progress toward reducing the newborns and under-5 mortality lie at 27 and 50.7 per 1000 live births, respectively.<sup>5</sup> Yet it is below the planned national target which aimed to reduce newborns mortality to 10 per 1000 live births and under-5 mortality to 30 per 1000 live births for the fiscal year 2019/2020.<sup>12</sup> Therefore,

the current newborns and under-5 mortality should reduce by more than half to reach the SDG target in 2030 (Figure 1). WHO has also stated that Ethiopia is still one of the top ten countries that have the highest mortality of children under-5 years with 178 000 deaths in 2019 alone.<sup>13</sup> This reaffirms there is a long way to go in the next 10 years to achieve the SDG target of reducing newborns and under-5 mortality by 2030.

### Causes and Determinants of Child Mortality in Ethiopia

In Ethiopia, the main causes of newborns death are preterm complications, intrapartum complications, sepsis, pneumonia, and tetanus<sup>14</sup> while lower respiratory infections, diarrheal diseases, and neonatal syndromes are taking the lead in under-5 mortality.<sup>15</sup> Low birth-weight, home delivery, lack of skilled birth attendants, low vaccination rate, poor access to maternal and child health services, born from poor and illiterate women in rural settings are the common predictors to newborns and under-5 mortality in Ethiopia.<sup>16-19</sup> In general, equality and inequity to basic health determinants are predictors of child mortality.<sup>20</sup>

### Partnership in Ethiopia’s Progress towards SDG in Reducing Child Mortality

Ethiopia has one of the fast-growing economy among the developing world. However, the country has not sufficient

resources to meet the SDG grand ambition alone. As the second-most populous nation in Africa, the massive vulnerable population health burden could not be manageable singlehandedly. Therefore, Ethiopia's progress in the SDG health targets including reduction of newborn and under-5 mortality necessitates a global solidarity to keep health as a human right for the virtue of humanity and agreed promises of UN declarations.

The remarkable reduction of child mortality achieved in Ethiopia during the MDGs and now in the SDGs era may not be accomplished without the generous financial and technical support of different donors and global partners. As clearly outlined in the 5 year national strategy for newborn and child survival in Ethiopia (2015-2020), partnership required to address specific causes of death since the underlying determinants of childhood mortality are beyond the health sector<sup>21</sup> and working in alignment with other SDGs will bring health equity by improving health determinants. Therefore, active cooperation and participation of other sectors are required to improve access to quality education (SDG 4), clean water and sanitation (SDG 6), adequate power supply (SDG 7), economic growth (SDG 8), infrastructure developments (SDG 9), and reduce inequalities (SDG 10) which are the direct contributors or indirect determinants of childhood mortality.

Partners both local and international organizations are supporting in planning, harmonization, implementation, monitoring, and evaluation of newborn and child health services in Ethiopia starting from the ministry to lower levels of health facilities by integrating into different technical working groups. These partners are different UN agencies (such as UNICEF, UNFPA), Global funding agencies (World Bank, Global fund, GAVI-Vaccine Alliance), Private global philanthropy (Bill and Melinda Gates Foundation), Save the children, CDC, other international development partners, for example, USAID, national professional associations, community-based organizations, and private sectors.

The global partners such as USAID, CDC, GAVI, and others are playing a great role in sanitation, primary health care, essential medicines, empowerment and capacity building training of health workers, strengthening health systems and data centers, providing free child health services, increasing the child immunization and family planning coverages through their technical assistances and financial investments. UNICEF and Save the Children also supports various initiatives on child education, rights, and protection which are directly or indirectly contribute to child health improvement. UNICEF's work is focusing on the child-centered SDGs in Ethiopia and embracing the potential of inter-sectoral synergies by emphasizing partnership as a proven means to maintain child security and health.<sup>22</sup> The Global Fund signed over US\$2.1 billion and disbursed US\$1.9 billion since 2003 to Ethiopia. A grant of US \$475 million signed for 2 years period alone (July 2015 to

December 2017).<sup>23</sup> This fund has been used for procurement of essential medicines and health system strengthening which contributes to the improvement of health outcomes including reduction of child mortality. In June 2019, the Global funding facility also approved the US \$60 million with the World bank's US \$150 million for projects in Ethiopia to assist the effort toward overall development goals.<sup>24</sup>

Generally, on top of supporting the basic child health services, strengthening, and realignment of partnerships aimed at the overarching development goals are required since they are either determinants of health directly or indirect contributors to child mortality. The ministry of health and authorities in Ethiopia may better focus to strategize priorities and map partnerships for effective implementation of SDG projects. On the other side, the stakeholders involved may also realign their priorities and reconsider investments in health determinants besides supporting the ongoing health programs and clinical services.

### **COVID-19 Pandemic and Its Impact on the SDG Progress**

Currently, the health system is overwhelmed by COVID-19 cases since its declaration as a global pandemic. The UN Department of Economic and Social Affairs reported COVID-19 threatens to reverse the progress of SDG 3 including childhood mortality as most countries halted childhood vaccinations and basic health services as a part of COVID-19 public health restrictions.<sup>25</sup> The COVID-19 epidemic has already eroded the health systems by disrupting the routine health services and constraining access to food and essential nutrition services which could potentially contribute to plenty of additional deaths in children under 5 years of age.<sup>26</sup> The routine healthcare services including maternal and child health services are compromised in Ethiopia as part of the recovery response. This interruption of newborn care, prevention, and treatment of childhood illnesses including immunization services could impede the progress toward achieving the SDG target of reducing neonatal and under-5 mortality. The deteriorating socio-economic crisis due to COVID-19 could also delay the progress to SDG achievement. Hence, the SDG health targets in developing countries may be one of the most affected during the Post-COVID era if partnerships overlook the anticipated health crisis or most of the resources and coordinated efforts are shifting to economic recovery alone.<sup>27</sup> At this critical period global partners are focused on the pandemic response while the support toward existing health services including child health programs was weakened. Ethiopia is a developing country that is battling with the COVID-19 pandemic and economic recession like any other nation; international cooperation is needed to recover from the pandemic and assist the progress toward SDG attainment. Therefore, it is a high time to reaffirm partnership and

global collaboration to uphold the progress made toward the SDG attainment in Ethiopia.

### **Partnership Realignment and Leverage Collective Efforts to Curve the Current Challenges and Fasten Targets Achievement in the Post-COVID Era**

While acknowledging the partners, comprehensive support so far, it has to continue efficiently in the next decade to meet the SDG target. Integrated newborn and child survival interventions such as quality of care during antenatal, birth, and postnatal periods along with other health determinants are required to reduce newborn mortality from the present rate of 30 to 12 per 1000 live births and under-5 mortality from 50.4 to 25 per 1000 live births.<sup>5</sup> This can be accomplished through a comprehensive collaboration to direct and indirect health determinants. Nevertheless, the previous partnership was mainly working to direct health services and neglected the other determinants of child health. Therefore, the partnership should strategize to focus on indirect determinants of health and social inequalities aside from improving the basic health services.<sup>28</sup>

The vulnerable population within the lower socio-economic strata and ethnic minorities are disproportionately affected by the current COVID-19 crisis in spite of the deterring consequences across all sectors and population groups.<sup>26</sup> From this unprecedented pandemic experience, it can be realized that no one is safe until everyone is ensured to be safe and collaborations may be strengthened to uplift those left behind. So, it should be taken as an opportunity to spur efforts to achieve universal health coverage. The experiences could help to leverage the implementation of the SDGs by spearheading the commitments and mobilizing all resources to achieve targets earlier or as planned in the next decade.<sup>25,26</sup> Therefore, working toward the UN's 2030 SDG Agenda to ensure no one left behind would not be regarded as an option rather a necessity for a remarkable milestone to propel human development forward.<sup>26</sup>

### **Lessons Learned from MDGs and Implication to SDGs**

The first 5 years of SDGs have resulted in relatively slow progress in the reduction of child mortality which is below the national plan projected to attain during the first phase of SDGs implementation. Ethiopia's peculiar achievement in meeting most of the targets of the health-related MDGs was explained by its comprehensive and multi-stakeholder approach for health development.<sup>10</sup> Despite the successes, the gains were not equitable and there were regional disparities including urban and rural areas. The inequity gap

identified during the MDG period would remain as a challenge in achieving the health-related SDGs too. Thus, it requires the country's commitment to implement efficient and comprehensive strategies which specifically target more marginal populations and geographic areas.<sup>10,29</sup> Furthermore, comprehensive evaluation of SDGs policy and programs implementation to identify what was going as planned, the limitations and unforeseen challenges experienced, and drawing lessons for the next decade of action to deliver the goals and targets. Moreover, it is not too late to learn from the implementation of policies to reach the MDGs and capitalize on the strengths to improve the integration of the SDGs into national development planning, partnership priority and financing frameworks.<sup>29</sup>

### **Conclusion**

Ethiopia is achieving a substantial reduction of newborns and under-5 mortality since 2000. The generous financial and technical support from the global partners have helped to reach this huge achievement. However, the SDG targets for newborns and under-5 mortality reduction are not attained yet. This urges the need to continue comprehensive partnership and realignment with other interconnected development goals. The COVID-19 crisis should also be taken as an opportunity to draw lessons and spur efforts to achieve the SDG targets. The ministry of health and authorities in Ethiopia may better focus to strategize priorities and map partnerships for effective implementation of SDG projects. The stakeholders involved may also realign their priorities and consider investments to overarching development goals besides the continuing support to basic child health programs. Therefore, collective efforts with strong partnerships are required to improve determinants of child health and achieve SDG target reduction until 2030.

### **Author Contributions**

YGT conceived the idea, reviewing literature, and writing the first draft. AAA provided inputs to revise the draft. Both authors approved the final version of the manuscript.

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### **ORCID iD**

Yonas Getaye Tefera  <https://orcid.org/0000-0002-9205-9442>



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