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Policy Brief

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Maternal, Adolescent and Child Health in Focus: Midway Progress Report on SDGs in Ethiopia, Kenya, and Nigeria Amid the COVID-19 Pandemic

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Key Messages

- The COVID-19 pandemic, which occurred midway through the 2030 Sustainable Development Agenda, impacted the delivery of essential health services, including adolescent, maternal and child health (MCH), with considerable disruptions in specific subnational areas than in others.
- The COVID-19 pandemic also intensified persistent inequalities within countries at subnational levels. This worsening was particularly evident in maternal, child, and adolescent health (MCH) and was further aggravated by inadequate health budget funding. These ongoing disparities hinder achieving subnational-level Sustainable Development Goals (SDG) targets.
- Public health campaigns and guidelines issued by the central governments during the pandemic minimised its impact on child immunisation, antenatal care (ANC), and skilled birth attendance (SBA) coverage.
- Allocating more health funding to local government health budgets and expanding national health insurance are identified strategies to enhance the utilisation and quality of MCH services. These approaches can accelerate progress towards achieving the corresponding Sustainable Development Goal (SDG) targets.

Introduction

The Putting Countries Back on the Path to the Sustainable Development Goals (Back-on-Track) project was implemented in three sub-Saharan African (sSA) countries: Ethiopia, Kenya and Nigeria. The project was led by the African Institute for Development Policy (AFIDEP) and funded by the Children's Investment Fund Foundation (CIFF). As countries continue toward achieving the Sustainable Development Goals (SDGs), it is imperative to assess their progress and identify the necessary steps to fulfil their commitments, particularly on SDG 3, which focuses on ensuring healthy lives and promoting well-being for all. Back-on-Track aimed to use data and evidence in developing a roadmap of essential interventions that have the greatest potential to change people's lives and to help countries deliver on SDG 3, whose targets require a renewed focus on approaches to improve the availability, accessibility, utilisation, and quality of maternal, child, and adolescent healthcare services.

The COVID-19 pandemic significantly altered the global landscape (UNESCO, 2020). Declared a global public health emergency by the World Health Organization in 2020, the pandemic led to several non-pharmaceutical interventions (before the widespread availability of vaccines) to control the virus. These interventions, including movement restrictions, complete lockdowns, and the diversion of equipment and human resources, affected the delivery of other health priorities, such as services for adolescent, maternal,

newborn, and child health (MNCH) at the subnational level. These actions exacerbated pre-existing inequalities (compounded by suboptimal health budget and funding) in healthcare service utilisation and other socio-economic conditions (World Health Organization, 2021) in certain subnational areas (i.e., regions, counties, and states in the three countries).

In this policy brief, we track and evaluate the current status of SDG targets related to maternal, child, and adolescent health and provide a call to action for stakeholders and countries to get back on track to achieve SDG 3. Table 1 presents profiles (economic and MNCH metrics) for the three countries of focus.

Metric	Ethiopia	Kenya	Nigeria
GDP per capita	US $1,027.60 (in 2024)	US $2,099.3 (in 2024)	US $2,162.6 (in 2024)
Total Fertility Rate (TFR)[1]	3.7 (in 2024)	3.2 (in 2024)	5.0 (in 2024)
modern Contraceptive Prevalence Rate (mCPR)[2]	27.3% - AW 37.3% - MW (in 2023)	44.7% - AW 58.9% - MW (in 2023)	14.4% - AW 16.6% - MW (in 2023)
Neonatal Mortality Rate (NMR)[3]	27/1,000 LB (in 2019)	21/1,000 LB (in 2022)	39/1,000 LB (in 2018)
Under 5 Mortality Rate (U5MR)	46/1,000 LB (in 2019)	41/1,000 LB (in 2022)	132/1,000 LB (in 2018)
Maternal Mortality Rate (MMR)	426/100,000 LB (in 2020)	382/100,000 LB (in 2020)	1,047/100,000 LB (in 2020)
% of Skilled Birth Attendance (%SBA)	55.8% (in 2019)	89% (in 2022)	45.3% (in 2018)
% of Antenatal Care (%ANC4+)	44% (in 2019)	66% (in 2022)	56.2% (in 2018)

Table 1 : Country profiles for comparative economic, maternal and child health outcomes for Ethiopia, Kenya and Nigeria. AW = all women; MW = married women; LB = live births

Methodology

The Back-on-Track project used routine data from Health Management Information Systems (HMIS), population data from Demographic and Health Surveys (DHS), and the Institute for Health Metrics and Evaluation (IHME) to conduct statistical analyses for coverage trends (before and during COVID-19), projections, progress scenario building, and geospatial mapping of maternal, neonatal, and child health (MNCH) indicators. The projections considered three scenarios up to 2030: a reference scenario, a better-case scenario, and a worst-case scenario, along with calculating the required annual rates of change or reduction for each indicator to meet the SDG targets by 2030. The reference scenario assumes the achievement of the targets based on maintaining the business-as-usual status quo until 2030. The better-case scenario forecasts the achievement of the targets if countries advance at a rate equal to or greater than the top 15% of previous performers in sub-Saharan Africa (sSA). The worst-case scenario assumes the achievement of the targets if countries advance at a rate equal to or less than the bottom 15% of previous underperformers in sSA.

Essential indicators evaluated and tracked included child vaccination coverage, including Bacille Calmette-Guérin (BCG), diphtheria, pertussis (whooping cough), tetanus vaccine third dose (DPT3), oral polio vaccine third dose (OPV3), measles vaccine, and all other essential vaccines (full vaccination); maternal health coverage metrics, including the proportion of pregnant women having at least four antenatal care visits (ANC4+) and skilled birth attendance (SBA); modern methods family planning satisfaction; and modern contraceptive use among women 15–49 years.

The project assessed impactful interventions on adolescent health, maternal health, and water, sanitation, and hygiene in low- and middle-income countries (LMICs) by conducting systematic reviews using PubMed and Cochrane Library databases, among others. Additionally, it conducted political economy analyses (PEA) involving policy document reviews and key informant interviews to understand socio-political influences on MNCH agendas. The combined insights from the data analytics, evidence synthesis (systematic reviews), and PEA informed the development of roadmaps and recommendations to guide countries towards achieving MNCH SDGs and addressing the impacts of COVID-19 on healthcare service coverage.

Key Findings

1. Impact of COVID-19 on Ethiopia's Maternal and Child Health Indicators

The percentage of children receiving all essential vaccines in Ethiopia increased from 14.3% in 2000 to 44.1% in 2019. Child immunisation campaigns during the COVID-19 pandemic helped maintain coverage at the national level, currently at 72.4%. This percentage is projected to improve slightly to 78% by 2030, though below the 90% target. Achieving the SDG target requires an annual rate of change (AROC) of 6.7%.

Ethiopia's progress in neonatal and under-five child mortality indicates it is likely to be on track to meet its targets by 2030. The neonatal mortality rate (NMR) is expected to be 13.9 deaths per 1,000 live births, while the under-five mortality rate (U5MR) is expected to be 30.4 deaths per 1,000 live births in 2030. To achieve the SDG targets, an annual reduction rate (ARR) of 9.2% for NMR and 7.8% for U5MR is required.

Ethiopia's maternal mortality ratio (MMR) reduced from 1,165 in 2000 to 426 per 100,000 live births in 2020. By 2030, MMR is projected to be at 370 deaths per 100,000 live births, above the global target of 70 deaths per 100,000 live births. An ARR of 18.1% is needed to meet the SDG target. Ethiopia has set a national target of 140 deaths per 100,000 live births by 2030, requiring an ARR of 11.1%.

Antenatal care fourth visit (ANC4+) coverage at the national level was not affected by the COVID-19 pandemic, remaining at 60.3% pre-pandemic and increasing slightly to 61.8% during the pandemic (Chipeta et al., 2023). Skilled birth attendance (SBA) coverage was also not impacted significantly by the pandemic. Subnational regional declines highlight pre-existing inequalities due to conflict and climate change, i.e., in Benishangul-Gumz, Amhara and Afar. In summary, SBA coverage is expected to reach 81.2% by 2030. However, these projected coverage rates fall short of the targeted 95% coverage.

Demand for family planning satisfied with modern methods (mDFPS) increased from 15.3% to 61% between 2000 and 2016 and stagnated at 62.4% in 2019 (Khundi et al., 2024) (Figure 1). Nevertheless, mDFPS is projected to reach 70.6% by 2030, with an annual rate of change (AROC) of 1.9% required to meet the SDG target. Among adolescent girls and young women, modern contraceptive use was generally low at 42.5%, and educational levels, religion, marital status, parity, and household wealth influenced it.

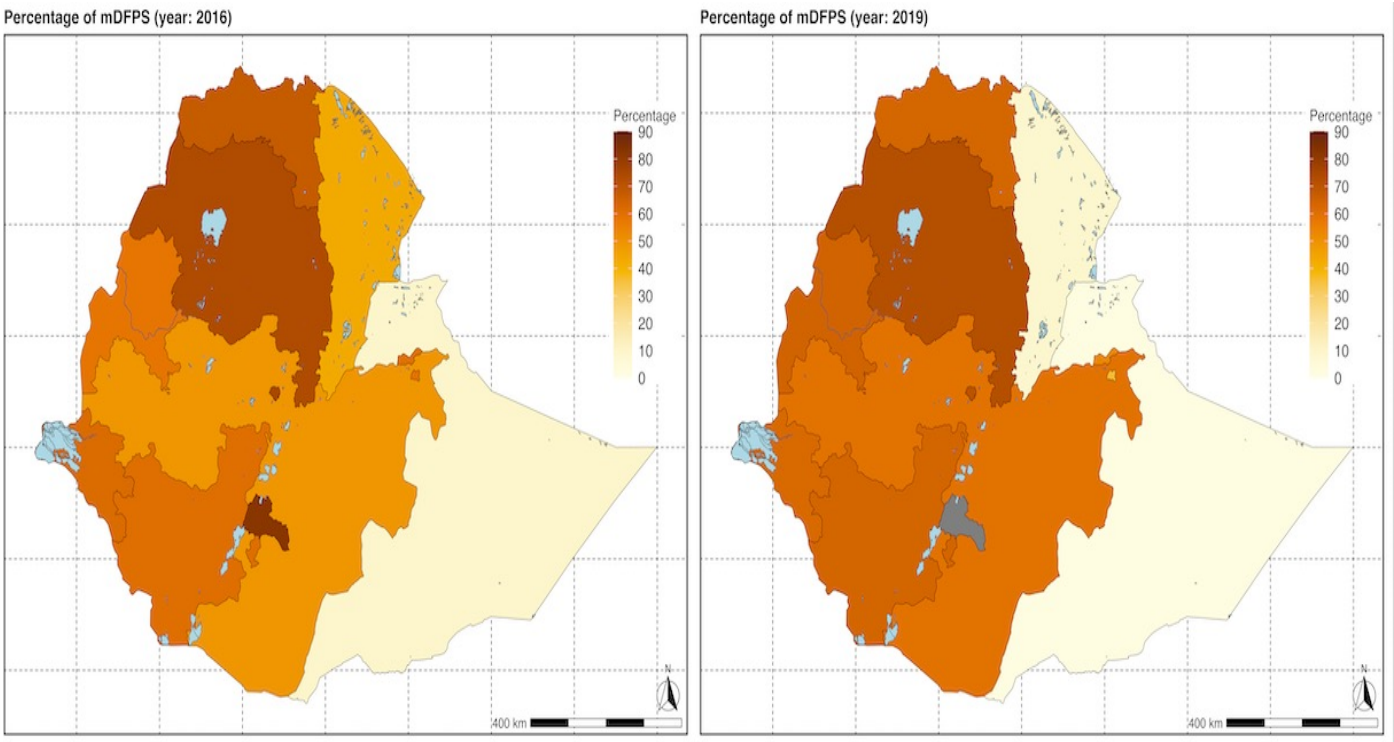

Figure 1: Percentage of demand for family planning satisfied with modern methods (mDFPS) for Ethiopia. Estimates based on unadjusted weighted averages. **Left Panel:** Map of the percentage mDFPS in 2016 (DHS). **Right panel:** Map of the crude percentage of mDFPS in 2019. Note: Data was not collected in Sidama region in 2019 (PMA).

2. Impact of COVID-19 on Kenya's Maternal and Child Health Indicators

Kenya's provision of essential child vaccines increased from 44.0% in 1990 to 79.4% in 2022. There was a slight, though insignificant, decline in full immunisation coverage during the COVID-19 pandemic, declining from 79.7% to 78.9%. Five of the 47 Kenyan counties had declined coverage; however, country-wide vaccination campaigns helped maintain high rates across Kenya during the pandemic. Essential vaccine coverage
The neonatal mortality rate for Kenya is expected to be 13.7 deaths per 1,000 live births and under-five child mortality at 29.4 deaths per 1,000 live births by 2030, close to the set global targets. The maternal mortality ratio (MMR) will continue to decline—projected at 281 deaths per 100,000 live births by 2030, a decline from 382 deaths per 100,000 live births in 2020 and 470 deaths in 2000. The Kenya government, through its Kenya Vision 2030, targets reducing MMR to 113 deaths per 100,000 live births, which necessitates an annual reduction rate (ARR) of 8.5%.

COVID-19 did not significantly impact antenatal care (ANC) and skilled birth attendance (SBA) coverage. Nationally, ANC4+ coverage was at 49.6% pre-pandemic and 51.4% during the pandemic, though six counties experienced a decline in coverage, namely Kiambu, Turkana, Kajiado, Embu, Nairobi and Mombasa. SBA coverage increased from 64.8% pre-pandemic to 76.0% during the pandemic, though three counties (Turkana, Marsabit and Embu) experienced a decrease in SBA coverage (Chipeta et al., 2023). In 2030, SBA and ANC4+ are projected to be at 87.8% and 71.7%, respectively.

Since experiencing a sharp decrease in the demand for family planning satisfied with modern methods (mDFPS) between 1990 and 1993, Kenya has had a steady increase, from 42.9% in 1993 to 79.4% in 2022, with western and central counties having mDFPS above 56% (Khundi et al., 2024) (Figure 2). mDFPS is projected to reach 81.2% by 2030. Modern contraceptive use among all sexually active adolescent girls and young women is currently at 56.18%, with contraception use determined by education, religion, and household wealth.

The project assessed impactful interventions on adolescent health, maternal health, and water, sanitation, and hygiene in low- and middle-income countries (LMICs) by conducting systematic reviews using PubMed and Cochrane Library databases, among others.

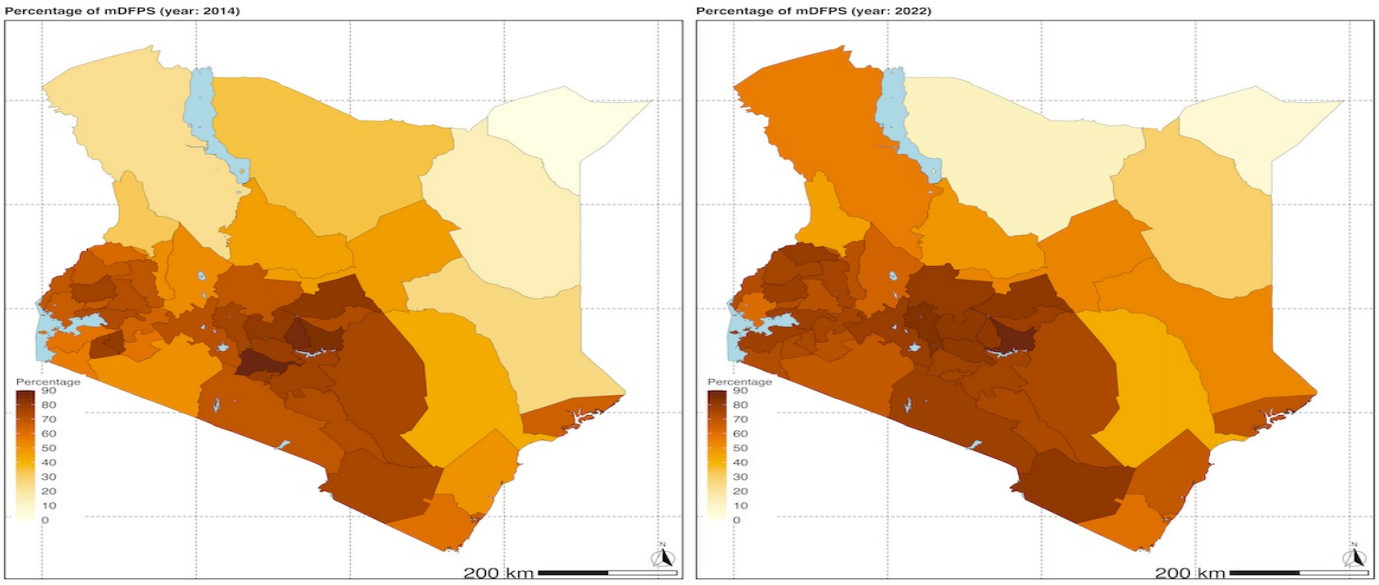

Figure 2 : Percentage of demand for family planning satisfied with modern methods (mDFPS) for Kenya. Estimates based on unadjusted weighted averages. **Left Panel:** Map of the percentage of mDFPS in 2014 (DHS). **Right panel:** Map of the crude percentage of mDFPS in 2022 (DHS).

3. Impact of COVID-19 on Nigeria's Maternal and Child Health Indicators

Nigeria is the furthest from achieving the SDG targets among the three countries. It is unlikely to reach the target of 90% percentage of children receiving all essential vaccines by 2030. The rate increased from 13% in 2003 to 31.3 % in 2018 and is projected to be 41.2% by 2030. An AROC of 9.2% is therefore required to achieve the SDG target.

Neonatal mortality (NMR) is projected to remain stagnant at 39 per 1,000 live births until 2030. In contrast, under-five child mortality (U5MR) is expected to decrease significantly, from 132 per 1,000 live births in 2017 to 57.2 per 1,000 live births by 2030. Nigeria's maternal mortality rate will continue to be high at 501 per 1,000 live births in 2030, though down from 1,047 per 100,000 live births as of 2020 based on the WHO-modelled estimates.

Progress towards achieving greater coverage in antenatal care (ANC) and skilled birth attendance (SBA) has stalled, making it unlikely for the country to meet its SDG targets. In 2018, ANC4+ was 56%, while SBA was 45%. These will improve to below 56.2% for ANC4+ and 45.3% for SBA in 2030.

Demand for family planning satisfied with modern methods (mDFPS) will also likely not be met. Though as high as 38.8% in 2013, mDFPS fell to 35.7% in 2018 (Khundi et al., 2024) (Figure 3) and is projected to be around 51% in 2030. Modern contraceptive use among all sexually active adolescent girls and young women is generally low at 8.4%, influenced by education, religion, parity, household wealth and marital status.

In summary, it must be noted that health campaigns anwd guidelines issued by the national governments for child vaccinations, antenatal care, and skilled deliveries during the pandemic in Ethiopia and Kenya contributed significantly to minimising the pandemic's impact on these services. Nevertheless, data analytics show that healthcare utilisation in Ethiopia, Kenya, and Nigeria has remained suboptimal before and during the COVID-19 pandemic. The pandemic has exacerbated existing inequalities at the subnational level. Focusing solely on the pandemic's impact at the national level often obscures the more pronounced effects observed at the subnational level.

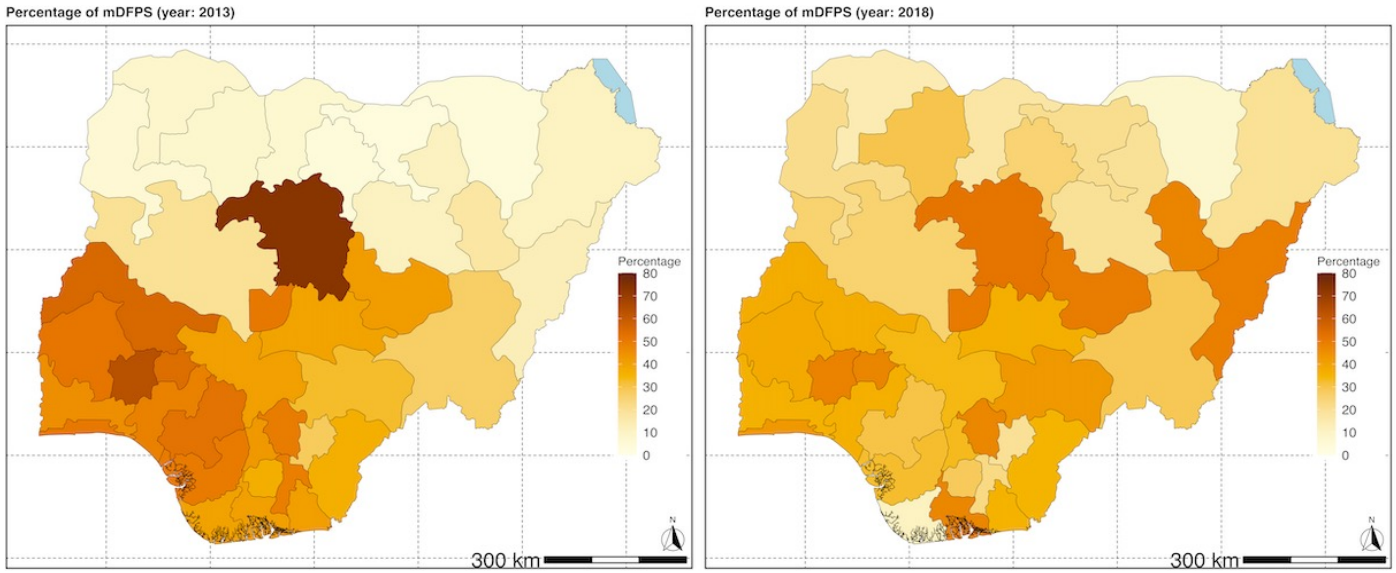

Figure 3: Percentage of demand for family planning satisfied with modern methods (mDFPS) for Nigeria. Estimates based on unadjusted weighted averages. **Left Panel:** Map of the percentage of mDFPS in 2013 (DHS). Right panel: Map of the crude percentage of mDFPS in 2018 (DHS).

4. Evidence Synthesis on Successful Interventions that Have the Potential to Improve Lives at Scale

The review of systematic reviews highlighted various interventions that can address the challenges faced by different vulnerable groups, such as women, adolescents and children.

Interventions to prevent unintended pregnancies among adolescents: Unintended adolescent pregnancies are a significant public health issue. Annually, about 12 million teenage girls in developing countries become pregnant, with nearly 10 million of these pregnancies being unintended. School- and community-based strategies aimed at preventing unintended pregnancies can effectively reduce rates, improve contraceptive use, enhance attitudes and knowledge, and delay sexual debut (Mohamed et al., 2023). The following interventions have been identified to avoid unintended pregnancies among adolescents:

- **Abstinence programmes and comprehensive sex education:** These approaches actively discourage premarital sex, focus on delaying sexual debut, and provide comprehensive education on sexual and reproductive health to improve outcomes related to adolescent pregnancy.
- **Skill-building interventions:** Provide instruction and practice to enhance skills, such as teachers delivering better sexual and reproductive health (SRH) classes or academic tutoring for adolescents.
- **Peer-led interventions:** Involve teaching or facilitating health promotion by having peers share specific health messages with community members.

Interventions for improving healthcare service uptake among pregnant women to reduce maternal mortality: Despite the availability of efficient medical services and procedures, health service uptake is low and maternal mortality is still high in LMICs (Mzembe et al., 2023). The following interventions have been identified to improve maternal health outcomes among pregnant women in LMICs.

- Mobile health interventions have improved access to and uptake of antenatal care (at least four ANC4+ visits as recommended) and skilled birth attendance.
  Facility-based interventions have increased antenatal and postnatal care visits, uptake of postpartum family planning methods, and antiretroviral therapy (ART) for pregnant women living with HIV.
- Community-based interventions, including pre and postpartum visits by community health workers, effectively encourage antenatal and postnatal care, manage maternal and neonatal sepsis, counsel for postpartum depression, and promote good infant care practices such as exclusive breastfeeding, hygiene, and Kangaroo Mother Care.

Water, sanitation, and hygiene (WASH) interventions to prevent diarrheal diseases in children under five:

Children in LMICs are highly vulnerable to diarrheal diseases due to poor WASH conditions, a significant public health challenge. Inadequate WASH services significantly impact children under five, increasing their susceptibility to these diseases. Water-related interventions, like handwashing, directly reduce diarrheal diseases among children under five in LMICs, compared to the more distal effects of sanitation and hygiene interventions.

5. Key Insights on Healthcare Service Delivery Challenges: Findings from Key Informant Interviews, Evidence Synthesis and Data Analytics

The political economy analyses (PEA), data analytics and evidence syntheses revealed four cross-cutting challenges affecting the healthcare system and the delivery of MNC healthcare services across the three countries. These challenges are:

- ***Low funding towards health:*** All three countries fail to meet their commitments to the Abuja Declaration, which mandates allocating 15% of the national budget to health. The health sector is consistently underfunded and overly reliant on donor funding, which is declining as global priorities shift. Figure 4 presents national health budgeting data for the three countries from 2017 to 2021. Additionally, the efficient use of available resources is hindered by a lack of coordination between central governments (Ministries of Health) and decentralised units and between the health ministry, other key government ministries, donors, and civil society organisations in all three countries.

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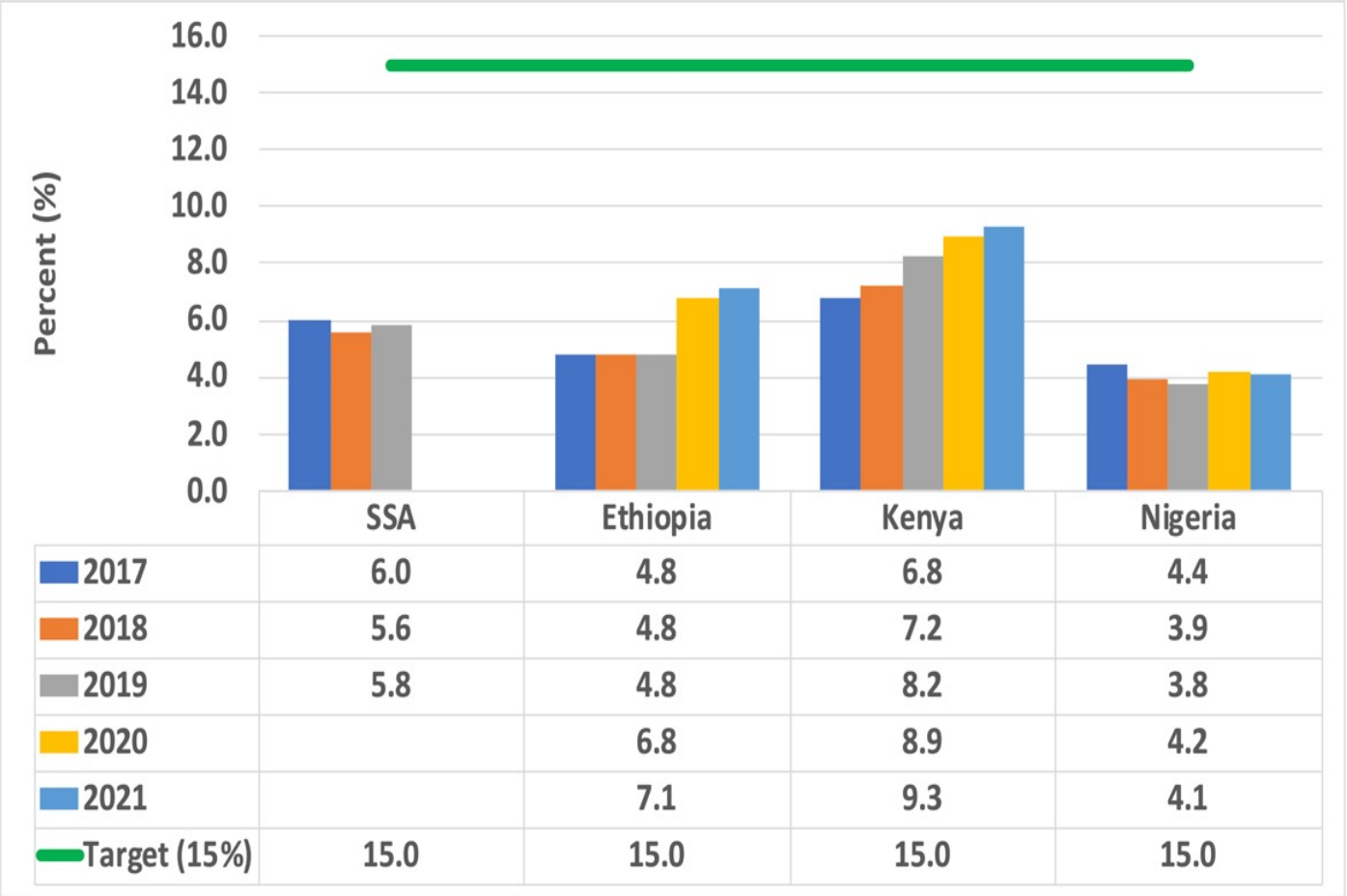

	SSA	Ethiopia	Kenya	Nigeria
2017	6.0	4.8	6.8	4.4
2018	5.6	4.8	7.2	3.9
2019	5.8	4.8	8.2	3.8
2020		6.8	8.9	4.2
2021		7.1	9.3	4.1
Target (15%)	15.0	15.0	15.0	15.0

Figure 4: Trends in the percentage of the national budget allocated to the health sector (2017–2021). Data Source: WHO – Global Health Expenditure Data (GHED).

- ***Low healthcare usage:*** Data analytics show suboptimal healthcare utilisation before and during the pandemic. The limited utilisation of healthcare services has been noted to result from various interconnected factors. Financial constraints, such as inadequate health insurance, high out-of-pocket expenses, and low income levels, frequently hinder access to essential medical care. Furthermore, timely and high-quality healthcare services are impeded by the limited availability of healthcare facilities, particularly in rural and remote regions in the three countries. Moreover, findings from systematic reviews show that many individuals are unaware of preventive measures and disease management (Nthakomwa et al., 2024), leading to delayed or insufficient healthcare-seeking behaviour. This is due to a lack of health awareness and education. Cultural beliefs and social stigmas may also influence healthcare-seeking behaviour, as some communities rely on traditional healers or home remedies instead of formal medical care. This practice is further exacerbated by factors such as gender inequality (Mohamed et al., 2023).

  Additionally, healthcare utilisation is further discouraged by inadequate medical supplies and essential medications, exacerbated by infrastructure and supply chain challenges in weak healthcare systems. Insufficient healthcare resources and capacity to satisfy the population's needs result from limited government funding and investment, as noted in Figure 4, exacerbating these issues. Other crises, such as conflicts within countries like Nigeria and Ethiopia, further disrupt healthcare service delivery (Mankhwala et al., 2024). Although the COVID-19 pandemic has had a minimal impact at the national level, healthcare access disruptions have occurred at certain subnational levels due to the strain on health systems and pre-existing inequalities. The constrained capacity of resources and healthcare workers in such settings has impacted the delivery of routine and quality healthcare services.

- ***Governance structure and sector collaboration:*** Critical maternal, newborn, and child health (MNCH) matters are managed centrally or in partnership between central and local/regional governments. However, a gap emerged between the Federal Ministry of Health (FMoH) and local governments (regional or state health bureaus) in executing policies and programmes, especially in Nigeria and Ethiopia. While the FMoH establishes standards, monitors implementation, and offers supportive supervision, it lacks adequate oversight to ensure local governments are held accountable for implementing programs and policies effectively.

- ***Lack of quality data:*** Issues affecting data included incompleteness, differing reporting rates, inaccuracy, entry errors, duplicates, and varying computation methods between different sources, which were observed across the three countries. Additionally, there was a notable absence of population-level data during the COVID-19 pandemic to allow a full assessment of its impact on healthcare access. Data access in Ethiopia and Nigeria was a significant challenge.

CALL-TO-ACTION:
National Governments and Development Stakeholders

- ***Improve health financing, especially at the community level:*** National governments should honour their commitment to the Abuja Declaration of allocating 15% of the national budget to healthcare. The governments should also explore alternative finance options, including working with the private sector, to expand health insurance schemes, especially at the community level.

- ***Scale up community-based health programmes for maternal, neonatal, and child health (MNCH):*** These should cover the healthcare continuum—preconception, periconception, antenatal, childbirth, postnatal and primary healthcare. The governments should adequately integrate MNCH services into those offered in local clinics and hospitals and expand health extension programmes (HEP) to increase healthcare utilisation.

- ***Enhance health data and database Enhance health data and database systems:*** National governments and relevant stakeholders should standardise the collection of routine maternal and child health data and build the capacity of their staff to analyse it. They should also make data easily accessible to CSOs and researchers, whose analyses will inform interventions to address MCH policy and programme gaps.

- ***Leverage school and community platforms to deliver comprehensive sexual education:*** This should include skill-building interventions to improve the quality of instruction, as well as peer-led interventions to share relevant and appropriate information.

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