



2014

Status Report on Maternal, Newborn & Child Health





African Union Commission

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Status Report on Maternal, Newborn & Child Health

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This 2014 Maternal, Newborn, and Child Health (MNCH) Status Report is prepared to fulfil the statutory requirement of the 15th Ordinary Session of the African Union (AU) Assembly Declaration (Assembly/AU/Decl.1[XV]). It is the third in a series of reports that began in 2012. The 2014 report provides a detailed review of the MNCH situation in Africa since 2010 and makes recommendations aimed at focusing the continent's efforts on ending preventable maternal and child deaths by 2030.

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Abbreviations & Acronyms

AIDS	acquired immune deficiency syndrome
ANC	antenatal care
ARNS	African Regional Nutrition Strategy
ART	antiretroviral therapy
ARV	antiretroviral
AU	African Union
AUC	African Union Commission
CAP	Common African Position
CARMMA	Campaign for the Accelerated Reduction of Maternal Mortality in Africa
CEmONC	comprehensive emergency obstetric and neonatal care
CPR	contraceptive prevalence rate
CSO	civil society organization
D&C	dilatation and curettage
DPT	diphtheria, pertussis, tetanus vaccine
DRC	Democratic Republic of Congo
FP	family planning
GDP	gross domestic product
GVAP	Global Vaccine Access Programme
HIS	health information systems
HIV	human immunodeficiency virus
HMIS	health management information systems
HPV	human papilloma virus
M&E	monitoring and evaluation
MDG	Millennium Development Goal
MDSR	Maternal Death Surveillance and Response
MMR	maternal mortality ratio
MNCH	maternal, newborn, and child health
MPoA	Maputo Plan of Action
MTCT	mother-to-child transmission of HIV
MVA	manual vacuum aspiration
PMTCT	prevention of mother-to-child transmission of HIV
SRHR	sexual reproductive health and rights
TB	tuberculosis
UHC	universal health coverage
UNAIDS	Joint United Nations Programme on HIV/AIDS
WASH	water, sanitation, and hygiene
WHO	World Health Organization

Healthy women are the foundation of a strong community and healthy newborns are the future. This report details the status of maternal, newborn, and child health in Africa over the last five years and makes recommendations for focusing efforts towards ending preventable maternal and child deaths by 2030.



Photo by Genaye Eshetu (Ethiopia)

Foreword



Healthy women are the foundation of a strong community and healthy newborns are the future, yet we continue to lose many women and children to causes that are largely preventable. The 2014 Maternal, Newborn, and Child Health (MNCH) Status Report is part of the African Union contribution to enhancing maternal and child health on the continent. This is the third of a series of status reports prepared since 2012. The report details the status of MNCH in Africa over the last five years and makes recommendations for focusing efforts on ending preventable maternal and child deaths by 2030.

Strong political commitment, leadership, and national ownership have resulted in impressive child and maternal health gains. Under-five and maternal mortality have declined by nearly half since 1990 because of improved coverage of critical interventions. These achievements, however, mute the slower rate of reduction in neonatal mortality and improvements in access to health services by those most in need.

Despite this tremendous decline in child and maternal mortality, the continent fell short of the required rate of decline to achieve MDG 4 and 5 targets to reduce child mortality and improve maternal health. A number of African countries have made significant progress and managed to attain the MDG 4 and 5 targets. However, much still needs to be done – the majority of maternal and child deaths are due to preventable causes.

A focus on high-impact interventions such as immunization, improving nutrition, increasing skilled birth attendance and postpartum and intrapartum interventions, improving child and maternal death surveillance and response, and expanding male involvement in MNCH, among others, can greatly reduce preventable deaths. More importantly, these interventions require the overall strengthening of health systems, reducing health inequities, and maintaining a drive towards universal health coverage.

MNCH is unfinished business requiring renewed focus, vigor, and determination post-2015. Coupled with this should be renewed attention to put in place strong accountability mechanisms to end preventable maternal and child deaths. In addition, ownership of the bold and ambitious Africa-wide goals in the Common African Position on the Post-2015 Sustainable Development Agenda and Agenda 2063 is critical for Africa to determine its own destiny.

Maternal and child health will continue being a central issue for Africa, and it is imperative that strong political will, leadership, national ownership, and support is maintained post-2015 in order to consolidate the gains made, complete unfinished business, and sustain momentum towards Agenda 2063 aspirations.

The continent should continue striving to achieve the vision to end preventable newborn, child and maternal deaths in Africa by 2030. I therefore call upon all stakeholders to utilize the recommendations of this report to advance the MNCH agenda.

— H.E Dr. Kaloko S. Mustapha
Commissioner for Social Affairs



Executive Summary

Strong political commitment and national ownership among African Union (AU) Member States has resulted in impressive gains in child and maternal health in recent years. African leaders have shown commitment and high-level support to improving maternal, newborn, and child health (MNCH) through various declarations and decisions aimed at accelerating the achievement of the Millennium Development Goals (MDGs). Key continental policies, plans, and programs have maintained focus and advocacy on MNCH. The Continental Policy Framework on Sexual and Reproductive Health and Rights (SRHR), the Maputo Plan of Action (MPoA), and the Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA) are among the key instruments championing accelerated MNCH improvements across Africa. Recognizing its importance, the AU has espoused and broadly defined MNCH in its post 2015 policy instruments, namely the African Union Common Position on the Post-2015 Development Agenda and Agenda 2063.

Child health in Africa has improved markedly in recent years, as exemplified by dramatic declines in under-five mortality from 1990 levels, with large reductions witnessed between 2010 and 2013. Under-five mortality in Africa excluding North Africa declined from an average of 179 deaths per 1,000 live births in 1990 to 92 deaths per 1,000 live births in 2013.¹ The annual rate of decline of under-five mortality in the region averaged 4.2% between 2005 and 2013. By the end of 2013, the average under-five mortality rate had reduced by 48% from the 1990 baseline.¹ Less dramatic reductions have been seen in neonatal mortality rates in Africa excluding North Africa, declining 32% from 1990 to 2013.¹

The major causes of death among children under age five globally include preterm birth complications (17%),

pneumonia (15%), intrapartum-related complications (11%), diarrhea (9%), and malaria (7%).¹ Nearly half of all under-five deaths are attributable to undernutrition, which highlights the importance of food and nutrition security.¹ Most child deaths can be avoided by focusing on the prevention of infectious diseases, immunization, improving nutrition, and strengthening interventions around the neonatal period.¹

Great improvements have also been made in maternal health outcomes across Africa excluding North Africa. Maternal mortality has nearly halved from levels seen in the 1990s, and a number of African countries are making significant progress towards attainment of Millennium Development Goal (MDG) 5 to improve maternal health. The average maternal mortality ratio (MMR) in Africa excluding North Africa declined from 990 deaths per 100,000 live births in 1990 to 510 per 100,000 live births in 2013, with variation across the continent.² By the end of 2013, the average percentage reduction in MMR from the 1990 baseline was 49%.² Despite these gains, many women continue to die from preventable causes.

About 73% of all maternal deaths worldwide were due to direct obstetric causes; deaths due to indirect causes accounted for 27.5%.³ Direct causes include postpartum hemorrhage (27.1%), pregnancy-induced or -related hypertensive disorders (14%), puerperal sepsis (10.7%), unsafe abortion (7.9%), and obstructed labor (9.6%).³ Maternal mortality can be reduced by focusing on the most common and preventable causes and high-impact interventions, including increasing skilled birth attendance, preventing postpartum hemorrhage, use of partographs, use of antibiotics for infections, strengthening maternal death surveillance and response, and involving males in MNCH activities.

It is crucial that AU member states focus on improving the quality of MNCH services, including clinical assistance and patient satisfaction and perception, to increase uptake of services. Reducing inequities in the delivery of health services and maintaining the drive towards universal health coverage is critical. Such inequities have the greatest impact on the most vulnerable communities and further exacerbate poor health outcomes. Poor MNCH outcomes are experienced more in rural areas, among low-income households, and among the less educated.

MNCH needs to remain a top priority on the post-MDG agenda, and it should be considered as unfinished business requiring renewed vigor and determination. This outlook should be coupled with renewed attention to increasing the accountability of all stakeholders, including governments, partner countries, organizations, and communities to end preventable maternal and child deaths.

High-level advocacy on MNCH, using instruments such as the CARMMA, should continue after 2015 and should aim to garner support for the ambitious Africa-wide goals as stated in the Common African Position on the post-2015 development agenda. The continent should continue striving to achieve the vision to end preventable maternal and child deaths in Africa by 2030.

In order to realize this vision, greater focus should be put on human resources for health. Policies and programs to recruit and retain adequate numbers of skilled health workers to deliver health services to women and children should be put in place. In addition, health workers should be equitably distributed between rural and urban areas. In tandem, there should be measures

to complement the overall strengthening of health systems. Well-functioning health systems require adequate components of human resources, medical commodities, equipment, financing, and management capacity as part of the long-term solution to reducing maternal and child deaths.

Greater investment and focus on robust systems for data generation and use, including civil registration and vital statistics, is essential. Adopting common approaches to measuring maternal mortality and registering deaths and births is crucial for strengthening monitoring and evaluation (M&E) systems, including the institutionalization of maternal death surveillance and response systems.

Furthermore, strong consideration should be made to strengthening health care financing mechanisms. This should include abolishing user fees for pregnant women and children, and increasing government budgeting and expenditure on public health interventions and services with consequent measures to ensure delivery of quality services. With many countries transitioning into lower-middle-income economies, there should be increased commitments to the Abuja Declaration to commit 15% of government spending on health to effectively reduce maternal and child deaths. The use of other innovative social insurance schemes to further finance health services may be viable options.

MNCH will continue to be a central issue for Africa, and it is imperative that strong political will, leadership, national ownership, and support is maintained in order to consolidate the gains made, complete unfinished business, and sustain momentum for attaining Agenda 2063 aspirations. ■

Introduction

Improving MNCH is a critical component of poverty reduction and development. Since the adoption of the Millennium Development Goals (MDGs) in 2000, African countries have made significant gains, however formidable challenges remain in the goal to end preventable maternal and child deaths on the continent by 2030.

The AU has led the creation of an enabling policy environment to accelerate the improvement of MNCH through the adoption of key policies and the initiation of important programs. These include the Continental Policy Framework on Sexual and Reproductive Health and Rights (SRHR), the Maputo Plan of Action (MPoA), and the 2009 Campaign for Accelerated Reduction of Maternal Mortality in Africa (CARMMA), among others. These initiatives set the stage for achievements registered between 2005 and 2014. More importantly, MNCH is articulated in the AU Agenda 2063 and Common African Position (CAP) on the Post-2015 Development Agenda.

Recognizing that African countries were unlikely to achieve the MDGs without significant improvements in sexual and reproductive health, the AU formulated and adopted the SRHR in 2005 and adopted the MPoA in 2006 for its operationalization. To maintain momentum in reducing maternal mortality and recognizing new challenges to women's health – such as the global financial crisis, unpredictable funding, climate change, and the global food crisis – the AU launched CARMMA in 2009 under the slogan "Africa Cares: No Woman Should Die While Giving Life."

In July 2010 in Kampala, Uganda, the AU Assembly (under declaration Assembly/AU/Decl.1[XV]) mandated the AU Commission (AUC) to report annually on the status of MNCH in Africa until 2015. The Assembly recognized the immense significance of MNCH on the

continent, but remained deeply concerned that Africa still had a disproportionately high level of maternal, newborn, and child morbidity and mortality due largely to preventable causes. This high-level commitment reaffirmed the commitment of Heads of State and Government to accelerate the improvement of women and children's health on the continent. In 2013, the International Conference on Maternal, Newborn, and Child Health in Africa held in Johannesburg, South Africa, further distilled concrete actions for improving MNCH in Africa. In addition, other AU commitments – such as the 2006 Abuja Declaration (where countries pledged to increase government funding for health to at least 15%) and the African Regional Nutrition Strategy for 2005-2015 – have positively influenced MNCH.

CARMMA has played a significant role in garnering high-level political support for MNCH challenges, and has been launched in 44 African countries since its launch. CARMMA has generated a wealth of information on MNCH in Africa, including the online African Health Statistics data platform (www.africanhealthstats.org), a ground-breaking data visualization tool to track the commitments of the MPoA and Abuja Call for Accelerated Action Toward Universal Access to HIV and AIDs, Tuberculosis (TB), and Malaria Services in Africa. In addition, the campaign has also conducted high-level advocacy and shared MNCH best practices across the continent. Country MNCH scorecards generated from the Africa Health Stats data platform are expected to renew focus on the critical areas of intervention to reduce maternal and child deaths. The scorecards can also serve as a key tool in the accountability and tracking of key indicators.

As a result of the AU's advocacy efforts, strong political commitment, leadership, and national ownership, im-

pressive gains have been made in MNCH across Africa. However, nearly half of all global under-five deaths in 2013, representing 3.1 million children, occurred in Africa excluding North Africa.¹ Most of these deaths were from preventable or easily treatable causes such as pneumonia, diarrhea, malaria, and neonatal complications within 28 days of birth.

The number of under-five deaths in Africa excluding North Africa declined from 3.8 million in 1990 to 3.1 million in 2013. Africa excluding North Africa accelerated the decline in under-five mortality with the average annual rate of reduction increasing from 0.8% between 1990 and 1995 to 4.2% between 2005 and 2013.¹ To achieve MDG 4 on reducing child mortality, an annual rate of reduction of at least 4.4% from 1990 to 2015 was required. Very few countries in Africa excluding North Africa were able to reach and maintain this rate.⁴ However, the fall in child mortality is unprecedented, and shows the results of collective efforts to improve child health.

Although noticeable gains have been made, progress in reducing maternal deaths in Africa excluding North Africa has been slower. The maternal mortality ratio (MMR) in Africa excluding North Africa fell by 49% from 1990 to 2013, from 990 deaths per 100,000 live births to 510 deaths per 100,000 live births.² The average rate of reduction of the MMR of 2.9% per year is far below the rate of 5.5% required to meet the MDG 5 goals on improving maternal health.² The MMR in Africa excluding North Africa remains exceedingly high compared to the rest of the world. In developing regions globally, the ratio was 230 maternal deaths per 100,000 live births in 2013, compared to 510 deaths per 100,000 live births in Africa excluding North Africa.²

The lack of skilled personnel and poor availability of essential medicines, among other factors have contributed significantly to the high burden of maternal deaths in Africa. Unskilled personnel continue to attend most births in the region with only 47% of all births attended by skilled health personnel in 2013 in Africa excluding North Africa.⁵ The main causes of maternal death include

postpartum hemorrhage, infection, pregnancy-related hypertensive disorders, unsafe abortion, and obstructed labour. Focusing on these factors is critical to achieving Africa's vision of ending preventable maternal deaths by 2030.

Continent-wide and national data on coverage levels and MDG attainment often obscure important disparities among population subgroups. Several factors contribute to inequities in health, including socioeconomic status, gender, place of residence, and ethnic group. Generally, there are poorer health outcomes in rural areas, among low-income households, and among women with low educational status. There is currently a paucity of information on health inequity data. The collection of gender and equity disaggregated data is therefore crucial.

Ending the preventable deaths of women and children in Africa will greatly enhance the ability of member states to improve their economies. Pressure on national health systems will ease and there will be fewer resources spent on treating complications arising from pregnancy and childbirth. Importantly, reducing preventable deaths will contribute to redressing the gender disparities inherent in communities by ensuring that more women and children not only survive, but also thrive and contribute to sustainable economic development.

This report details the status of MNCH on the continent from 2010 to 2014, including a brief summary of the key policies and tools that have been critical to moving the MNCH agenda forward. In addition to documenting the status of neonatal, child, maternal, sexual and reproductive health, the report documents the challenges, opportunities, and lessons learned over the years. It proposes recommendations on how to further position MNCH issues in order to attain the goal of ending preventable maternal and child deaths by 2030. Finally, the report also includes country profiles on 10 key MNCH indicators. ■



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CHILD AND NEWBORN HEALTH SUMMARY

- While there was a dramatic 48% decline in the under-five mortality rate in Africa between 1990 and 2013, the region still accounted for 49.5% of global under-five deaths in 2013.¹
- Reductions in neonatal mortality have been slow and the proportion of neonatal deaths as a share of under-five deaths in the region increased from 26% in 1990 to 34% in 2013.¹
- By the end of 2013, eight African countries (Egypt, Eritrea, Ethiopia, Liberia, Malawi, Niger, Tanzania, and Tunisia) had met the MDG 4 target of reducing the under-five mortality rate by two thirds.⁶

1. Child and Newborn Health

Child health has improved significantly in Africa over the past twenty-five years. Under-five mortality fell by 48%, from 179 deaths per 1,000 live births in 1990 to 92 per 1,000 live births in 2013 in Africa excluding North Africa.¹ The rate of decline averaged 2.9% per year in the region.¹

While Africa excluding North Africa still has the highest child mortality rate and least overall progress globally, the region has seen an increasingly faster decline in child deaths with the annual rate of reduction rising from 0.8% in 1990-1995 to 4.2% in 2005-2013.¹

Globally, the neonatal mortality rate fell from 33 deaths per 1,000 live births in 1990 to 20 deaths per 1,000 live births in 2013. Africa excluding North Africa saw a 32% reduction in neonatal mortality from 46 deaths per 1,000 live births in 1990 to 31 in 2013.¹

Much of this mortality can be attributed to preventable causes, including poor nutrition, lack of immunization, and HIV infection, as subsequently outlined. Despite increased immunization coverage and noticeable reductions in undernutrition and HIV prevalence among children, further action must be taken to accelerate reductions in preventable child morbidity and mortality.

1.1 Child Mortality

The under-five mortality rate is a key indicator of child wellbeing, including health and nutrition status. It is also a key indicator of the coverage of child survival interventions and, more broadly, of social and economic development.¹ Over the past two decades, the under-five

mortality rate in Africa excluding North Africa has been declining at unprecedented levels. While 36 African countries had an under-five mortality rate greater than 100 deaths per 1,000 live births in 1990, in 2013 only 12 countries in the region had a rate that high.¹

Nevertheless, reductions in child deaths are still far below those required to attain MDG 4 in Africa excluding North Africa. The region's under-five mortality rate remains the highest in the world and more than 15 times the average for developed regions.¹ Faster progress in reducing child mortality in the rest of the world has led to an increasingly higher concentration of child deaths in Africa excluding North Africa, the only region in the world in which the number of births and child population is expected to rise substantially in the coming years.¹ Figure 1.2 on page 3 shows the 1990 baseline of under-five mortality and the rates from 2010 to 2013.¹

The main causes of death among children under-five in Africa excluding North Africa include:

- **Neonatal causes:** Deaths within the first 28 days of life accounted for nearly 44% of all under-five deaths globally and 34% of all under-five deaths in Africa excluding North Africa in 2013.¹ Most of these deaths derive from complications from preterm birth, newborn infections, and complications arising during childbirth.

- **Infectious diseases:** Infectious diseases, including malaria, acute respiratory infections, pneumonia, measles, and diarrhea contribute to nearly a third of all deaths in children under five globally. Pneumonia, diarrhea, and malaria accounted for approximately 1.3 million, or 40%, of under-five deaths in Africa excluding North Africa in 2013.¹
- **Nutritional causes:** The effects of malnutrition take a large toll on child health. It was estimated that undernutrition, including fetal growth restriction, stunting, wasting, and vitamin deficiencies contributed to 45% of all under-five deaths in 2011.⁷

By the end of 2013, Egypt, Eritrea, Ethiopia, Liberia, Malawi, Namibia, Tanzania, and Tunisia had met the MDG goal of reducing the under-five mortality by two-thirds of the 1990 levels. Seven countries are on track to achieve their targets by 2020 and nine additional countries have reduced under-five mortality by more than 50%. Three countries experienced a setback in reducing under-five mortality, with 2013 rates higher than their 1990 baselines, largely because of the high HIV burden in those countries. Figure 1.1 below shows a summary of progress towards attaining MDG 4 and Figure 1.2 on the next page details the percentage change in under-five mortality on the continent at the end of 2013.¹

Figure 1.1. Progress against MDG 4, reductions in child mortality, by the end of 2013

By the end of 2013, eight countries had achieved MDG 4, seven were on track, nine showed remarkable progress, and twenty-six showed insufficient progress. Three countries had under-five mortality rates higher than the baseline.

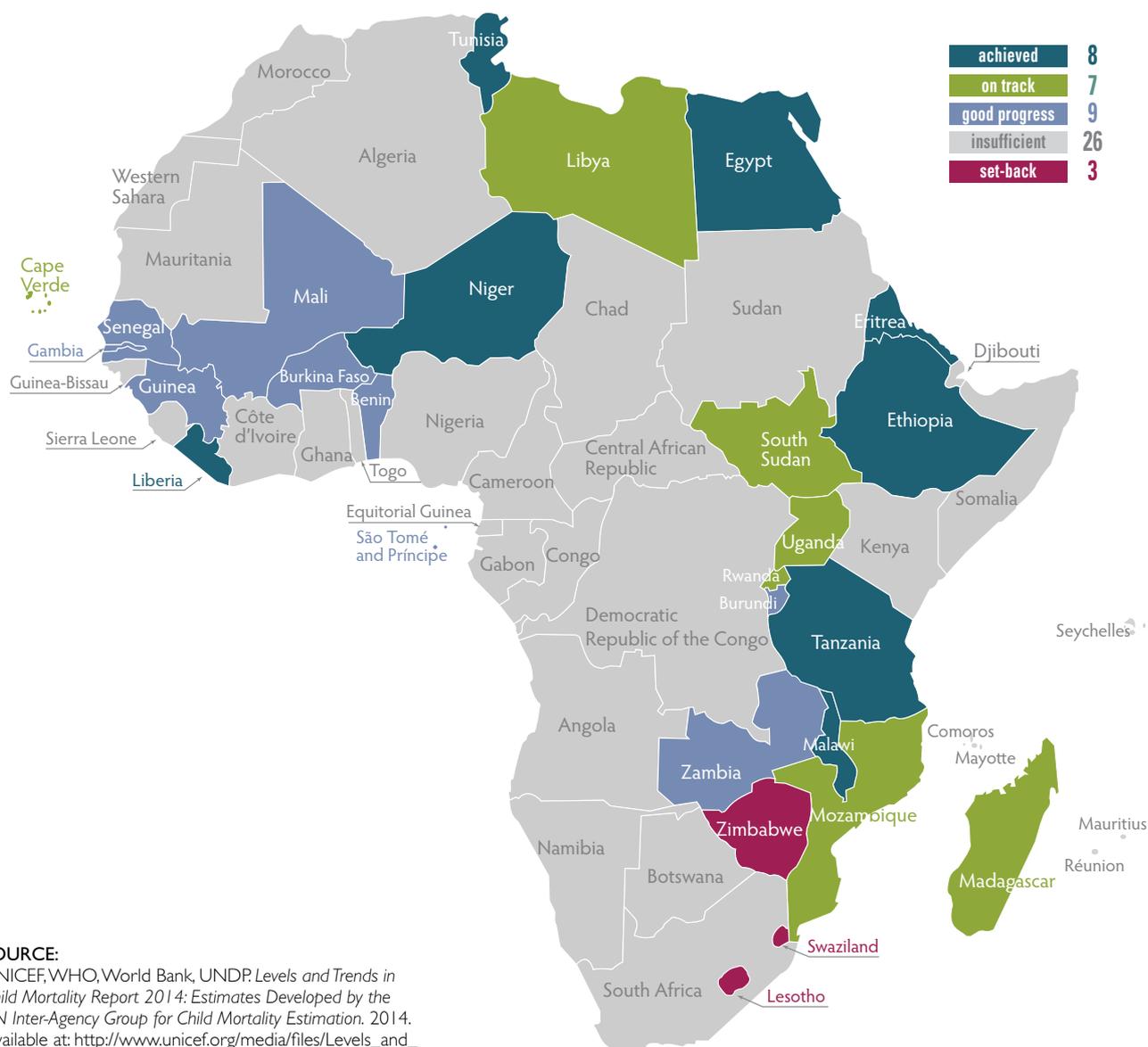
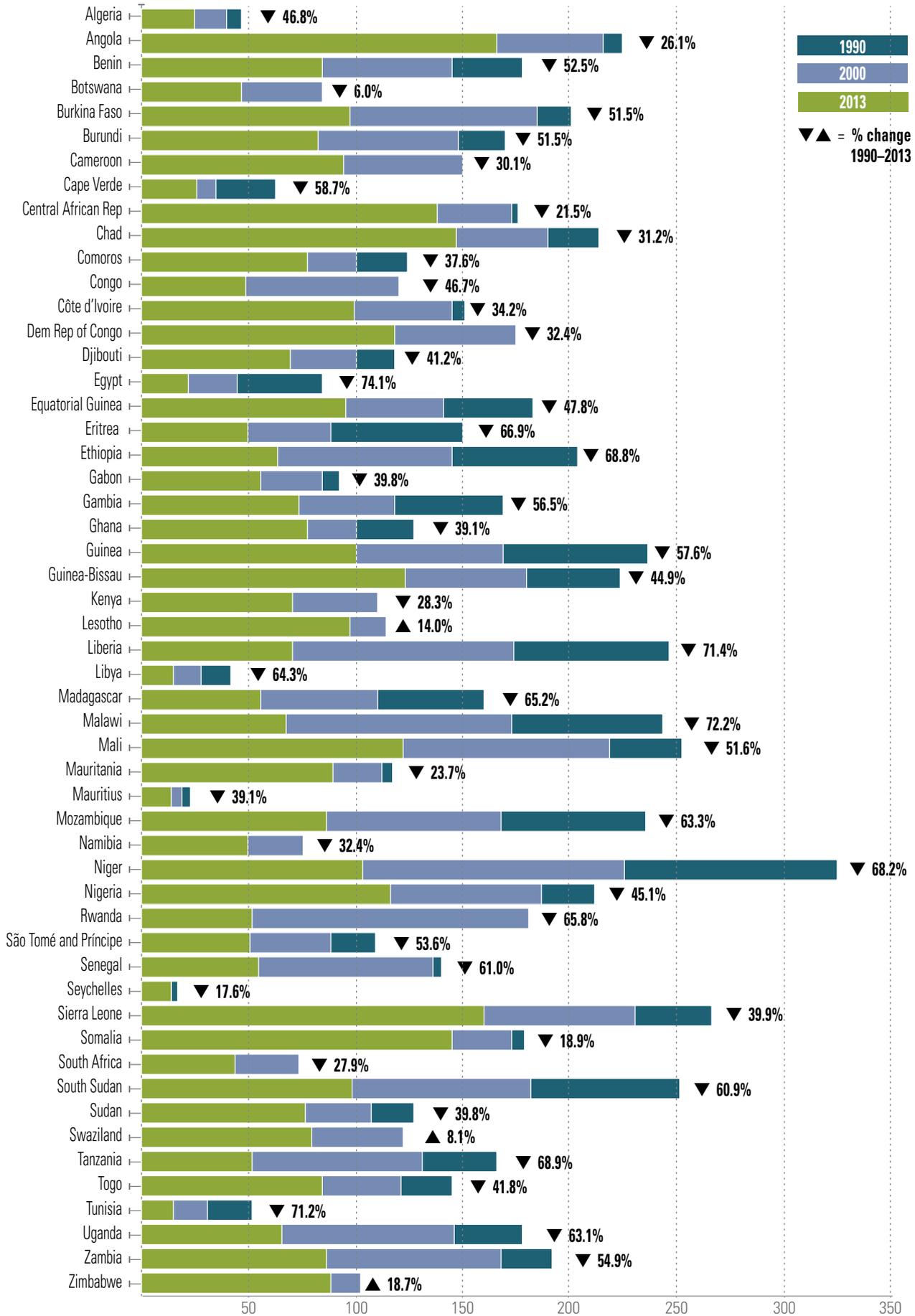


Figure 1.2. Reductions in child mortality 1990, 2000, and 2013 (by country and percent change)



NOTE: SADR data not available.

SOURCE: Levels and Trends in Child Mortality Report 2014

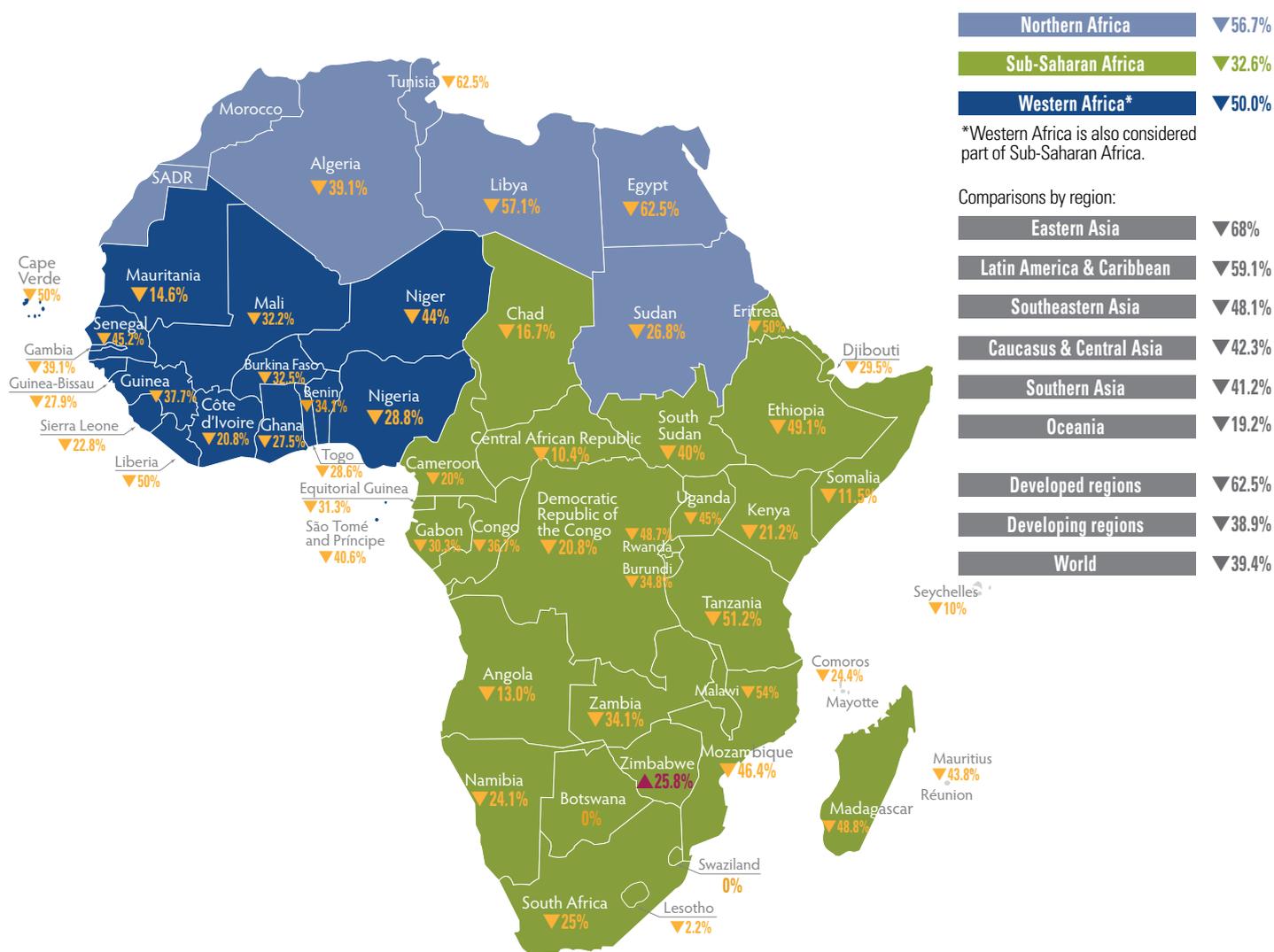
1.2 Newborn Mortality

Even though specific targets on newborn mortality were not set in the MDGs, this measure provides additional insight to the under-five mortality trends. Recent declines in neonatal mortality have not kept up with the declines in under-five mortality. From 1990 to 2013 there was a 47.6% fall in the under-five mortality rate in Africa excluding North Africa and a 32% decline in neonatal mortality for the same period.¹ However, reductions in neonatal mortality are critical given that approximately one third of all under-five deaths in Africa occur during the neonatal period.¹

The first day and week of life are the most critical for newborn survival. In 2013, 36% of all newborn deaths occurred during the first 24 hours of life, while another 37% occurred within the next six days.¹ In 2013, the majority of global deaths occurring at this stage of life were caused by preterm birth complications, complications during labour and delivery, and infectious diseases. Given that most neonatal deaths are preventable, deliberate policies and renewed actions focusing on improving quality of care around the time of childbirth are needed for achieving tangible and sustainable gains in reducing mortality during this critical time.

Figure 1.3. Change in neonatal mortality rate, 1990 to 2013

Declines in neonatal mortality have not kept pace with under-five mortality.





1.3 Nutrition

Nutrition is a vital component of child health. Reducing undernutrition could directly improve child mortality rates, as it is linked with nearly two-thirds of all child deaths.⁷ By 2014, an estimated 158.6 million children under-five globally were stunted, 50 million were estimated to be wasted, and 95.5 million were estimated to be underweight.⁸ Over one third of those children live in Africa.⁸ In 2014, 35.7% of all children under-five in Africa excluding North Africa were estimated to experience stunting, while an estimated 19.7% of the child population was underweight.⁸ While the global trend in stunting and underweight prevalence continues to decrease, Africa has experienced the smallest relative decrease.⁸ Between 1990 and 2014, the prevalence of stunting in Africa excluding North Africa decreased by 13.1% and the prevalence of underweight decreased by 10%.⁸

Nutrition is a multifaceted issue and inextricably linked to matters of poverty, education, and gender relations. Long-term consequences of early childhood undernutrition leave millions of children worldwide with overt or veiled physical and mental impairment. Stunted children are more likely than their peers to repeat grades and drop out of school, thereby reducing their income-earning capability as adults.⁹ Undernutrition can also lead to significant effects on earning potential at the country level. A study in four African countries showed that the annual costs associated with child undernutrition reach values equivalent to 1.9 to 16.5% of gross domestic product.⁹

Given the immense importance of nutrition to child health, increased focus on nutrition, particularly for children below the age of three and for pregnant women, is essential. Interventions in the first 1,000 days of a child's life can have the highest impact on survival and long-term learning and productivity. Undernutrition should be urgently addressed with deliberate national policies and more resources to sustain and accelerate gains made in decreasing child mortality. Adoption and utilization of continental strategies such as the African Regional Nutrition Strategy (ARNS) to inform national nutrition plans will increase the focus on nutrition. Increased advocacy highlighting the consequences of undernutrition as espoused in the ARNS should be enacted and implemented. Eliminating stunting in Africa is a necessary step for inclusive development on the continent.

1.4 Immunization

Immunization is one of the most cost-effective interventions in global public health, estimated to avert two to three million deaths worldwide every year. Immunization coverage of the diphtheria, tetanus, pertussis vaccine (DTP3, which is often used as a proxy for routine immunization coverage) was 84% globally in 2013.¹⁰ In Africa excluding North Africa, the 2014 DTP3 coverage was 77% with wide disparities across countries.¹⁰ Figure 1.4 on page 7 shows the percentage of children vaccinated with DTP3 in Africa in 1990 and 2010-2014.

The impact of vaccines goes beyond the immunized child. Vaccines contribute to the reduction of infectious diseases in the community through offering herd immunity (where even the unimmunized benefit), and the reduction health care expenditure for households. Vaccines also give children a better chance for cognitive development and a healthy, economically productive life. In 2012, leading experts on health economics ranked childhood immunization as one of the three most cost-effective interventions to improve global welfare.¹¹ Expanded vaccine coverage could yield an 18% return on investment by 2020.¹¹

1.5 HIV in Children

An estimated 2.6 million children (defined as under 15 years of age for HIV/AIDS statistics) are living with HIV, according to 2014 figures.¹² Most of these children live in Africa excluding North Africa.¹² The majority of these children acquired HIV from their infected mothers through pregnancy, childbirth, and breastfeeding. Globally, the likelihood of mother-to-child transmission (MTCT) ranges from 15% to 45%, however effective interventions may reduce this likelihood to less than 5%.¹³ Unfortunately, necessary treatment is often unavailable for children. In 2014, in Africa excluding North Africa,

only 22% of all children requiring antiretroviral therapy (ART) received it, compared to 37% of the total population in need.¹²

Furthermore, many challenges exist in diagnosing and treating HIV in children. These include difficulties related to early infant diagnosis, which requires expensive and often unavailable tests to differentiate HIV-exposed and HIV-infected children. The availability of pediatric antiretroviral drug formulations has greatly increased, however the absolute number of combinations is still inadequate.

Pediatric HIV is a preventable illness, thus prevention of mother-to-child transmission (PMTCT) is the most critical intervention. The Joint United Nations Programme on HIV/AIDS (UNAIDS)-led Global Plan for the elimination of new HIV infections in children by 2015 helped to significantly reduce mother-to-child transmission thereby ensuring more children are born free of HIV. Further information on PMTCT efforts is outlined in Section 3.2.

CHILD IMMUNIZATION: AT A GLANCE

Africa has not only increased immunization coverage, but has also eliminated some diseases through wide-scale vaccination programs. Over the past few decades, global immunization efforts have eradicated smallpox, lowered the global incidence of polio by 99%, and dramatically reduced illness, disability, and death from diseases such as diphtheria, tetanus, whooping cough, pneumonia, meningitis, diarrhea, and measles. Several African countries have been early adopters of new vaccination commodities, including those for:

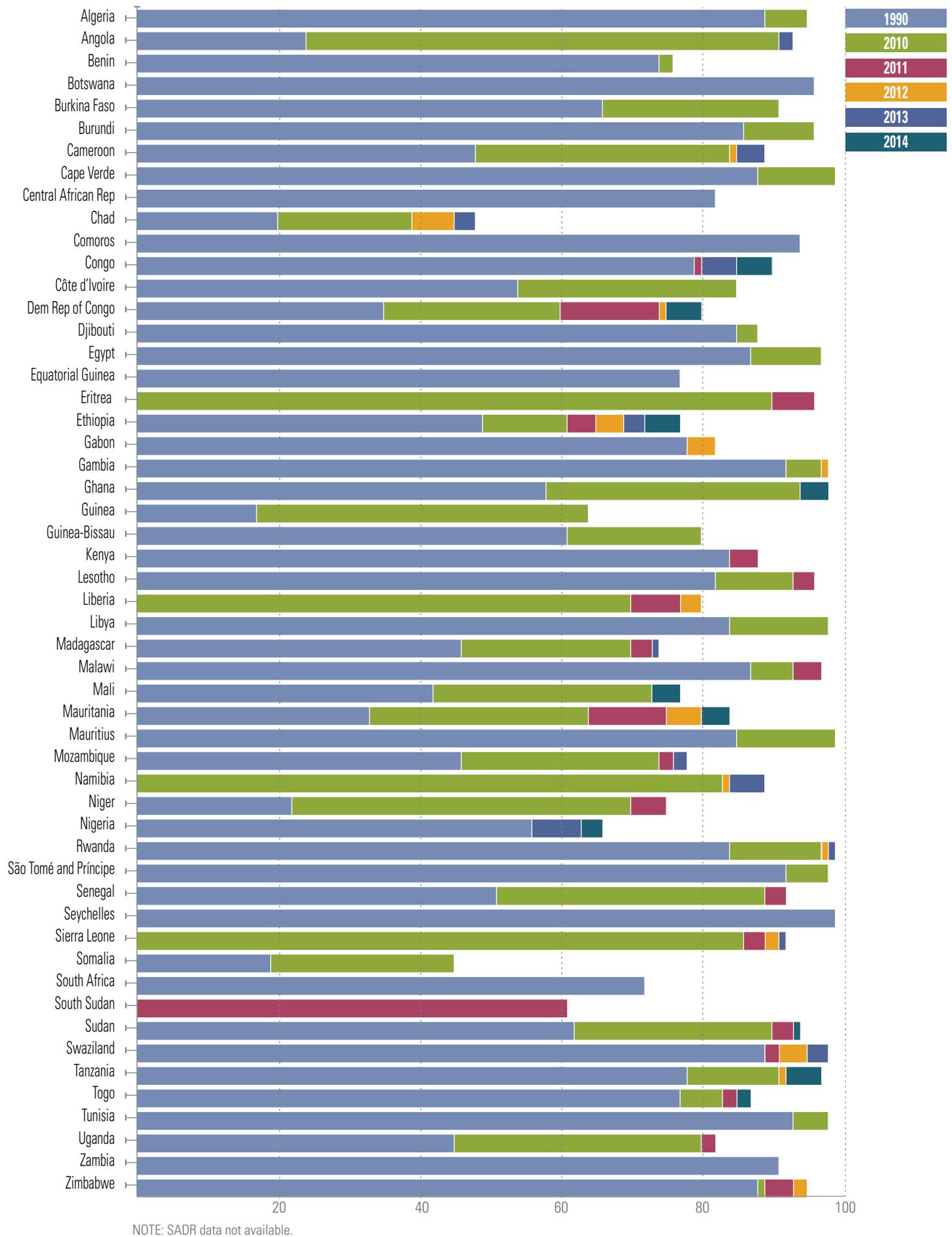
- Rotavirus, which can confer some level of immunity against the leading cause of childhood diarrhea;
- Pneumococcal vaccine, which can confer some immunity against *Streptococcus pneumoniae*, one of the most common bacterial causes of pneumonia;

- *Haemophilus influenzae*, which protects against the most common cause of pneumonia in neonates; and
- Neonatal Hepatitis B, which provides lifelong protection against Hepatitis B infection.

All of these vaccines are available in public vaccination programs in most African countries, as a result to sustained political will, international support, and innovative public-private partnerships.

Ensuring equity and coverage across Africa and within countries requires sustained effort and resources. As African countries grow economically, they should actively finance vaccines and immunization programs, focusing particularly on children and adolescents. Additionally, integrating immunization with other services, such as reproductive health services for mothers and adolescents, would provide immediate mutual gains.

Figure 1.4. Percentage of children vaccinated with DTP3



NOTE: SADR data not available.

SOURCE: WHO immunization monitoring, available at: http://apps.who.int/immunization_monitoring/globalsummary/timeseries/tswucoveredtp3.html



MATERNAL HEALTH SUMMARY

- Maternal mortality has nearly halved from levels seen in the 1990s.²
- The average rate of reduction of maternal mortality fell below MDG target of 330.²
- About 300,000 women died worldwide due to complications in pregnancy and childbirth in 2013.²
- Africa excluding North Africa accounted for 62% of global maternal deaths in 2013.²
- Between 2009-2013, only 47% of women in Africa excluding North Africa delivered with the assistance of skilled birth attendants.⁵

2. Maternal Health

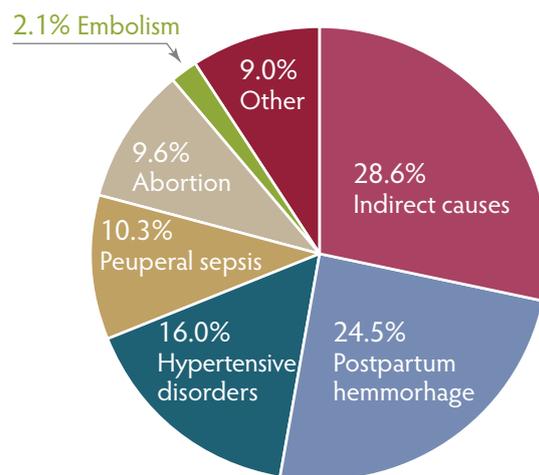
2.1 Maternal Mortality

High-level political will and leadership has led to commendable progress in reducing maternal mortality in Africa. The global MMR fell by almost 50% between 1990 and 2013.² In Africa excluding North Africa, the average MMR declined by 49% from levels of 990 deaths per 100,000 live births in 1990 to 510 deaths per 100,000 live births in 2013 (see Figure 2.2 next page).² These gains, however, are still insufficient to attain MDG 5 and bring about significant health benefits to mothers and children. The average rate of reduction of maternal mortality in Africa excluding North Africa between 1990 and 2013 was about 2.9% per year, falling short of the desired reduction of 5.5% per year to attain the goal of reducing the MMR by three quarters between 1990 and 2015.²

Figure 2.2 shows MMRs across Africa in 2013. Between 1990 and 2013 there was a noticeable trend of MMR reduction in the majority of those countries. By the end of 2013, Cape Verde, Equatorial Guinea, Eritrea, and Rwanda had achieved MDG 5a of reducing the MMR by three quarters of the 1990 baseline by 2015. Angola, Egypt, Ethiopia, and Mozambique were not far behind, with at least a 60% decline in MMR between 1990 and 2013. An additional 27 African countries had reduced their MMR by over 40% by 2013.⁵ These figures illustrate the significant progress that has occurred in Africa over the last few decades.

Most maternal deaths are due to preventable or treatable causes. More than 70% of all maternal deaths worldwide between 2003 and 2009 were due to direct obstetric causes, and deaths due to indirect

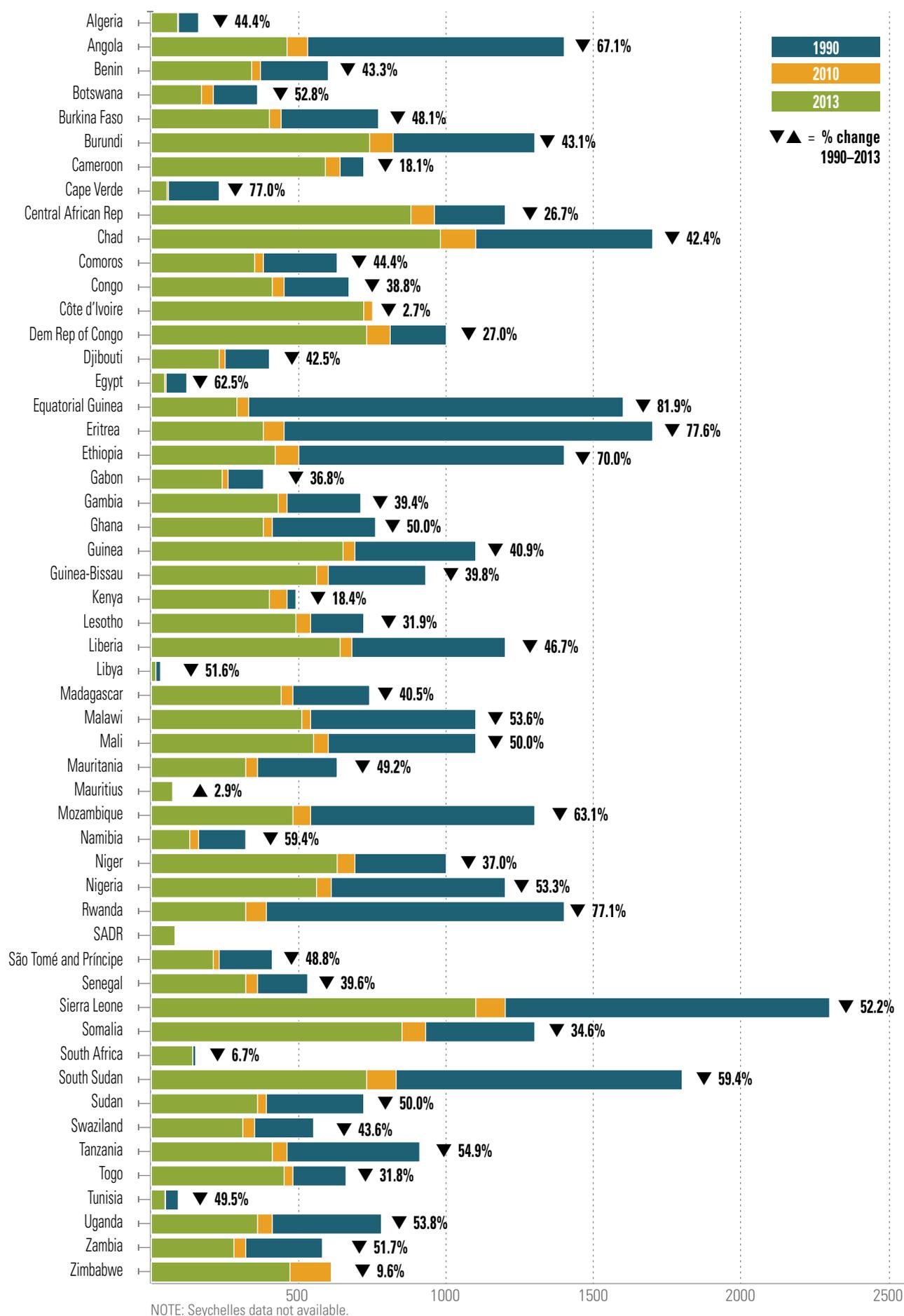
Figure 2.1. Causes of maternal death



SOURCE: *Global causes of maternal death: a WHO systematic analysis*, available at: [http://www.thelancet.com/journals/langlo/article/PIIS2214-109X\(14\)70227-X/fulltext](http://www.thelancet.com/journals/langlo/article/PIIS2214-109X(14)70227-X/fulltext)

causes accounted for 27.5%.³ Hemorrhage, hypertensive disorders, and sepsis together cause more than half of all maternal deaths in Africa excluding North Africa.³ Postpartum hemorrhage resulting from uterine atony, retained products of conception, and vaginal, perineal, or cervical tears account for 24.5% of all maternal deaths in Africa excluding North Africa (see Figure 2.1 above).³ In the region, pregnancy-related hypertensive disorders are responsible for 16% of maternal deaths and birth-related infections are responsible for 10.3%.³ Other causes of maternal death include abortion (9.6%), embolism (2.1%), and other direct causes (9.0%; these primarily include malaria, HIV, and trauma).³

Figure 2.2. Maternal mortality per 100,000 live births by country, 1990, 2010, 2013



SOURCE: WHO GH Observatory, available at: <http://apps.who.int/gho/data/node.main.15>

Figure 2.3 below shows MMRs across Africa in 2013. Between 1990 and 2013 there was a noticeable trend of MMR reduction in the majority of African countries. By the end of 2013, Cape Verde, Equatorial Guinea, Eritrea, and Rwanda had achieved MDG 5 to reduce MMR by 75% from 1990 levels by 2015. Angola, Egypt, Ethiopia, and Mozambique were not far behind with at least a 60% decline in MMR between 1990 and 2013. Thirty-five African countries have managed to reduce MMR by over 40%. This illustrates the immense progress that has occurred in African over the last few decades.¹⁴

Policies that focus on preventing the main causes of maternal deaths are essential to improving maternal health. As weak health systems struggle to cope with increased demand, maternal service needs can easily be neglected. Although the direct and indirect causes of maternal deaths are medical in nature, the causes are often deeply embedded in broader webs of social and economic forces. These factors include low literacy among women and girls, poor access to educational opportunities, early and/or forced marriage, poor

decision-making power among women, unequal power relations between women and men in marital relationships, vulnerability to sexual- and gender-based violence, limited power to regulate fertility, and negative cultural and superstitious beliefs associated with nutrition, pregnancy, and childbirth.

2.2 Skilled Birth Attendance

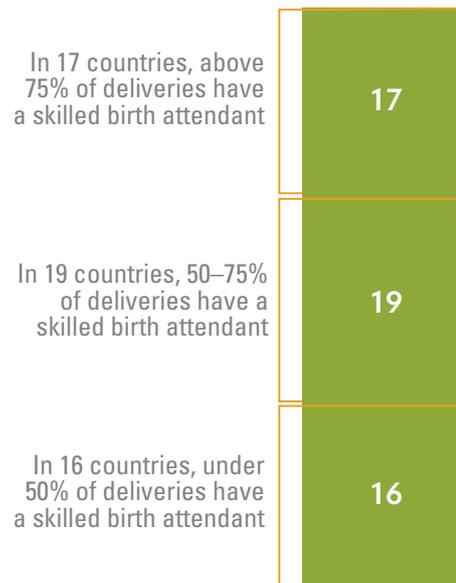
Low utilization of skilled birth attendants contributes to Africa's high MMR and can lead to permanent and long-term complications, such as obstetric fistulas, pelvic and perineal injuries, and urinary incontinence. The lack of skilled birth attendants contributes to more than 2 million maternal, stillbirth, and newborn deaths each year worldwide.¹⁵ It is estimated that at least 80% of births need to be attended by an adequately equipped and skilled birth attendant to reach the MDG 5 target.² Although the number of deliveries by skilled personnel has been rising in recent years, the increase has not been significant enough to achieve global targets in many

Figure 2.3. Maternal mortality per 100,000 live births, 2013



SOURCE: WHO GH Observatory

Figure 2.4. Status of skilled birth attendance in Africa, 2013



SOURCE: Healthy Newborn Network, available at: <http://www.healthynewborn-network.org/page/newborn-numbers>

African countries. Fifteen African countries reported achieving this objective of having 80% of births assisted by a skilled attendant by 2013.⁵ In 16 countries, less than half of all births were reported to be attended by a skilled attendant between the years of 2009 and 2013.⁵ Figure 2.4 above shows the status of skilled delivery in Africa in 2013. There has been a steady increase in the number of deliveries by skilled birth attendants in Africa, but this has not been rising significantly over the years.⁵

2.3 Antenatal Care

In addition to the presence of skilled personnel, antenatal care (ANC) is another key strategy for reducing preventable maternal deaths. Focused ANC can assist in determining gestational age, identifying high-risk pregnancies, detecting and monitoring pregnancy-related hypertension, assessing fetal well-being, promoting a mother's awareness, and increasing the acceptability of skilled birth attendance. ANC also plays a key role in the elimination of MTCT as HIV contributes to both child and maternal deaths. Four comprehensive ANC visits are recommended for ANC to be cost-effective.¹⁶ In Africa excluding North Africa, just 50% of pregnant women reported attending all four recommended visits in 2012, meaning that half of pregnant women are not getting the full benefits of ANC.¹⁷ This gap calls for strategies to increase ANC attendance to reduce complications with childbirth and preventable maternal deaths.

The use of strategies that integrate and combine sexual and reproductive health, HIV, and family planning (FP) services can be most effective in improving access to ANC services. In addition, ANC services should be free of charge, high-quality, and implemented with full community involvement.¹⁸ Male involvement is also critical to increasing access to ANC and especially in enhancing birth preparedness and planning.

2.4 Postnatal Care

Postnatal care (PNC) is an important aspect in the reduction of maternal mortality. The puerperium period (six weeks after birth) is vital to the survival of the mother and the baby. Half of all postnatal maternal deaths occur during the first week after childbirth, mainly during the first 24 hours.¹⁹ Hemorrhage and infections, major causes of maternal deaths, significantly occur in the postnatal period. This period also presents an opportunity to promote health-seeking behavior, healthy newborn feeding and caring strategies, birth spacing and FP interventions.

The postnatal period is critical not only to mothers, but to neonatal health as well. More than 850,000 babies in Africa excluding North Africa do not live past their first week.¹⁹ Early neonatal deaths are more prevalent in low-birth-weight and preterm babies. Routine postnatal care should be an essential component of MNCH programs. This should include early identification of danger signs and referral or management of emergencies for both mothers and babies. Table 2.1 opposite summarizes the postnatal care interventions.

Table 2.1. Routine postnatal care for mothers and babies¹⁹

Essential routine PNC for all mothers

- Assess and check for bleeding, check temperature
- Support breastfeeding, checking the breasts to prevent mastitis
- Manage anemia, promote nutrition and insecticide treated bed nets, give vitamin A supplementation
- Complete tetanus toxoid immunization, if required
- Provide counselling and a range of options for family planning
- Refer for complications such as bleeding, infections, or postnatal depression
- Counsel on danger signs and home care

Essential routine PNC for all newborns

- Assess for danger signs, measure and record weight, and check temperature and feeding
- Support optimal feeding practices, particularly exclusive breastfeeding
- Promote hygiene and good skin, eye, and cord care
- If prophylactic eye care is local policy and has not been given, it is still effective until 12 hours after birth
- Promote clean, dry cord care
- Identify superficial skin infections and treat or refer if the baby also has danger signs
- Ensure warmth by delaying the baby's first bath to after the first 24 hours, practicing skin-to-skin care, and putting a hat on the baby
- Encourage and facilitate birth registration
- Refer for routine immunizations
- Counsel on danger signs and home care

Extra care for low birthweight (LBW) or small babies and other vulnerable babies, such as those born to HIV-infected mothers (two or three extra visits)

The majority of newborn deaths occur in LBW babies, many of whom are preterm. Intensive care is not needed to save the majority of these babies. Around one third could be saved with simple care, including:

- Identify the small baby
- Assess for danger signs and manage or refer as appropriate
- Provide extra support for breastfeeding as needed, including expressing milk and cup feeding
- Pay extra attention to warmth promotion including skin-to-skin care or Kangaroo Mother Care
- Ensure early identification and rapid referral of babies who are unable to feed



3. Sexual and Reproductive Health and Rights

Sexual and Reproductive Health and Rights (SRHR) are critical for attaining maternal and child health goals in Africa. SRHR encompasses the basic rights that men and women have to access appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chances of having a healthy infant.

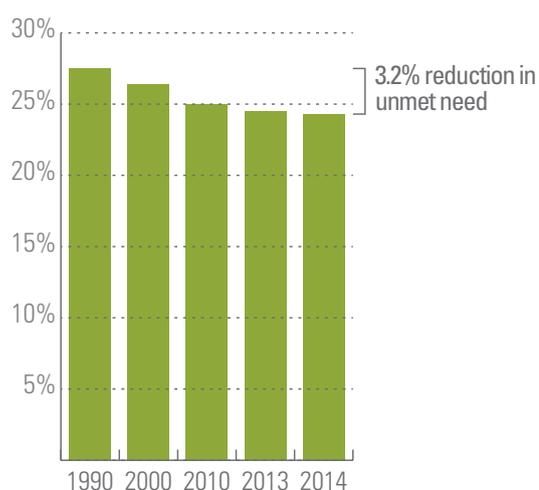
3.1 Family Planning

Family planning (FP) is a powerful tool for reducing maternal deaths, improving child health, and empowering adolescent and youth SRHR. Promotion of FP in countries with high birth rates has the potential to reduce poverty and hunger and avert 32% of all maternal deaths and nearly 10% of childhood deaths.²⁰ FP can be critical for improving PMTCT, reducing unsafe abortions and improving child health outcomes through birth spacing. FP has the potential to enhance sustainable changes by supporting the health of women, and thus spurring economic growth and reducing poverty.

However, strongly male-dominated societies can hinder access to FP. Women in these societies are not able to fully exercise their rights of receiving FP services, nor access health facilities when needed. It is therefore crucial to have gender-sensitive interventions for increasing access to FP.

African nations have made strides in adopting national FP policies, and most now have them in place. However, FP programs face global funding constraints. Africa continues to have the highest unmet need for FP services.

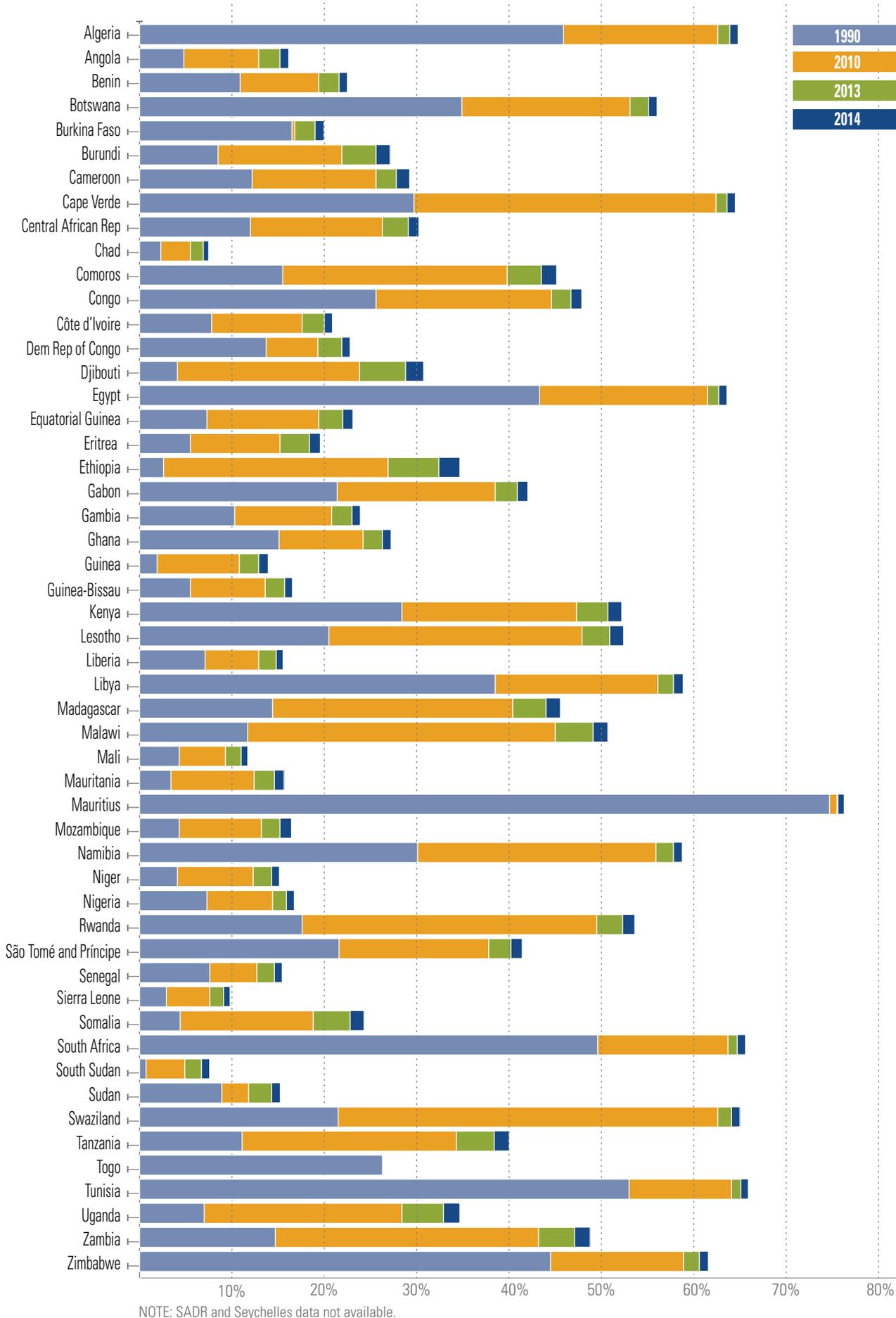
Figure 3.1. Estimated average unmet need* for family planning in sub-Saharan Africa (UN Model-based estimates)



*Unmet need is defined as the percentage of married or in-union women aged 15 to 49 who want to stop or delay childbearing but are not using a method of contraception

SOURCE: UN Model-Based estimates and projections of family planning indicators 2015. Available at: http://www.un.org/en/development/desa/population/theme/family-planning/cp_model.shtml

Figure 3.2. Estimated contraceptive prevalence rates (UN model-based estimates)



NOTE: SADR and Seychelles data not available.

SOURCE: UN Model-based estimates, available at: http://www.un.org/en/development/desa/population/theme/family-planning/cp_model.shtml

Furthermore, although many African governments have made progress, much more needs to be done, such as allocating budgets to support high-impact FP interventions, broadening the available FP options, and targeting vulnerable populations such as adolescents and youth.

The contraceptive prevalence rate (CPR) is a key indicator determining coverage of FP among adolescents and youth. Model-based estimates show an increase of CPR in Africa excluding North Africa from the average rate of 17.3% in 1990 to 34.8% in 2014, still behind the desired target of at least 65%.⁵ Figure 3.2 shows the CPR in 1990, 2010, 2013, and 2014.⁵

In the same period, the average unmet need for FP in Africa excluding North Africa saw very little reduction and progress towards the target of less than 4% unmet need. In 1990, the unmet need for FP in the region was estimated at 27.5% and by 2014 it reduced to 24.3%. Figure 3.1 on page 15 shows the average unmet need for FP in Africa excluding North Africa in 1990, 2000, 2010, 2013, and 2014.⁵

3.2 HIV and Prevention of Mother-to-Child-Transmission

HIV remains an important public health issue across Africa, and is an indirect contributor to maternal deaths. Globally, the number of new HIV infections per 100 adults (aged 15 to 49) declined by 44% between 2001 and 2012.¹⁷ Southern Africa and Central Africa, the two regions with the highest incidence, saw sharp declines of 48% and 54%, respectively.¹⁷ Despite these achievements, there were more than 2.3 million new cases and 1.6 million deaths from AIDS-related causes in 2012.¹⁷ Furthermore, an estimated 70% of new infections in 2012 occurred in Africa excluding North Africa.¹⁷

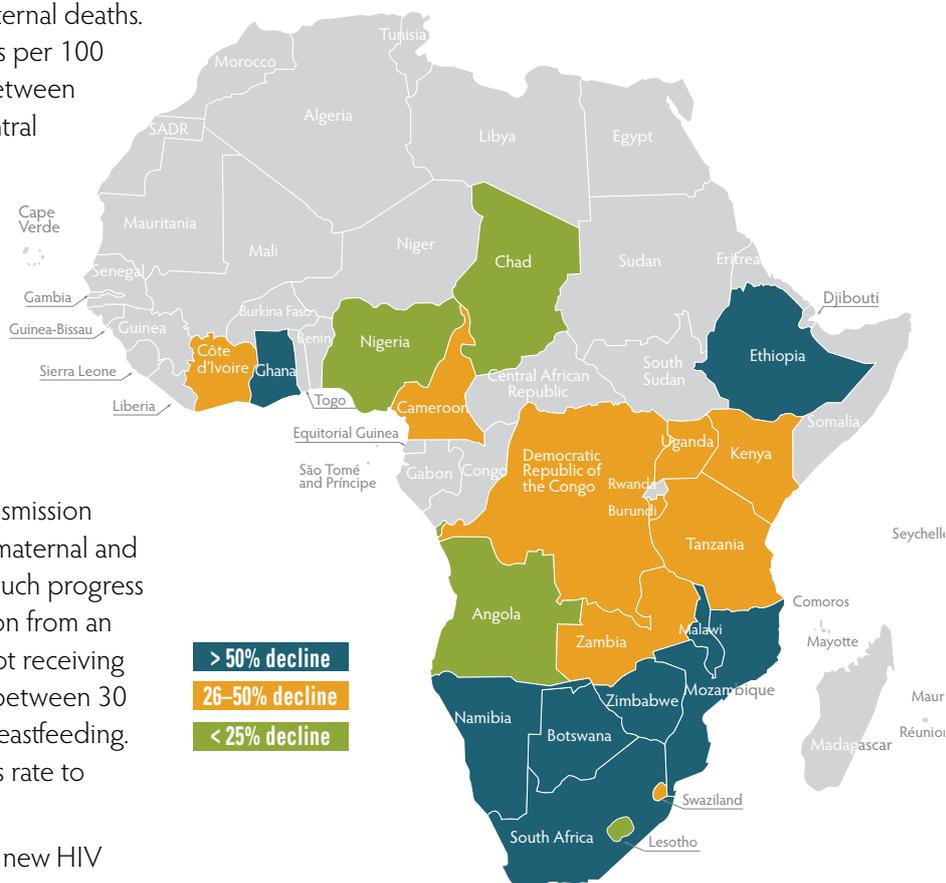
HIV in pregnancy and mother-to-child transmission (MTCT) have been major contributors to maternal and child deaths in Africa in recent years, but much progress has been made. The rate of HIV transmission from an HIV-positive mother to her child if she is not receiving any antiretroviral (ARV) medicines ranges between 30 and 45% depending on the duration of breastfeeding. Use of effective interventions can bring this rate to below 5%.²¹

“The Global Plan toward the elimination of new HIV infections among children by 2015 and keeping their mothers alive,” which was launched at the 2011 UN General Assembly High Level Meeting on AIDS,

provides the foundation for country-driven national plans focused on PMTCT in 22 countries with the highest burden of HIV among pregnant women. Since its launch, much progress has been made to accelerate the reduction of MTCT. In 2013, 68% of pregnant women living with HIV in the Global Plan priority countries had access to ARVs to reduce the risk of transmission to their children. Furthermore, between 2009 and 2013, the priority countries saw a 43% decline in the number of new HIV infections among children.²¹ Figure 3.3 shows the percentage decline in new HIV infections among children living in 21 of the priority countries between 2009 and 2013.

Considerable efforts to address MTCT, including HIV testing and counselling, and high coverage of effective PMTCT regimens are still needed to achieve the goals set forth on the Global Plan. The scale-up of PMTCT interventions across many African countries has contributed to a reduction of the risk of HIV transmission during the pregnancy and delivery periods; however the risk of HIV transmission is increasingly more concentrated during the breastfeeding period.²¹

Figure 3.3. Percentage decline in new HIV infections among children, 2009–2013



SOURCE: UNAIDS. 2014 Progress Report on the global plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive. 2014. http://www.unaids.org/sites/default/files/media_asset/JC2385_Progress-ReportGlobalPlan_en_0.pdf

3.3 Adolescent and Reproductive Health

Adolescents represent a vulnerable population that plays a crucial role in improving reproductive, maternal, and child health. Each year an estimated 16 million women aged 15 to 19 years give birth and another one million become mothers before the age of 15.²² Adolescents are often thought to be at greater risk of death during pregnancy or childbirth than women in older age groups. It is therefore critical to address adolescents in MNCH programs.

Patterns observed across Africa excluding North Africa indicate increased risk and vulnerability among the 15-19 age group compared to women aged 20-24.²² Community-based studies in developing countries have suggested an increased risk of maternal mortality among adolescents, however estimates of the size of increased risk vary greatly across countries.²²

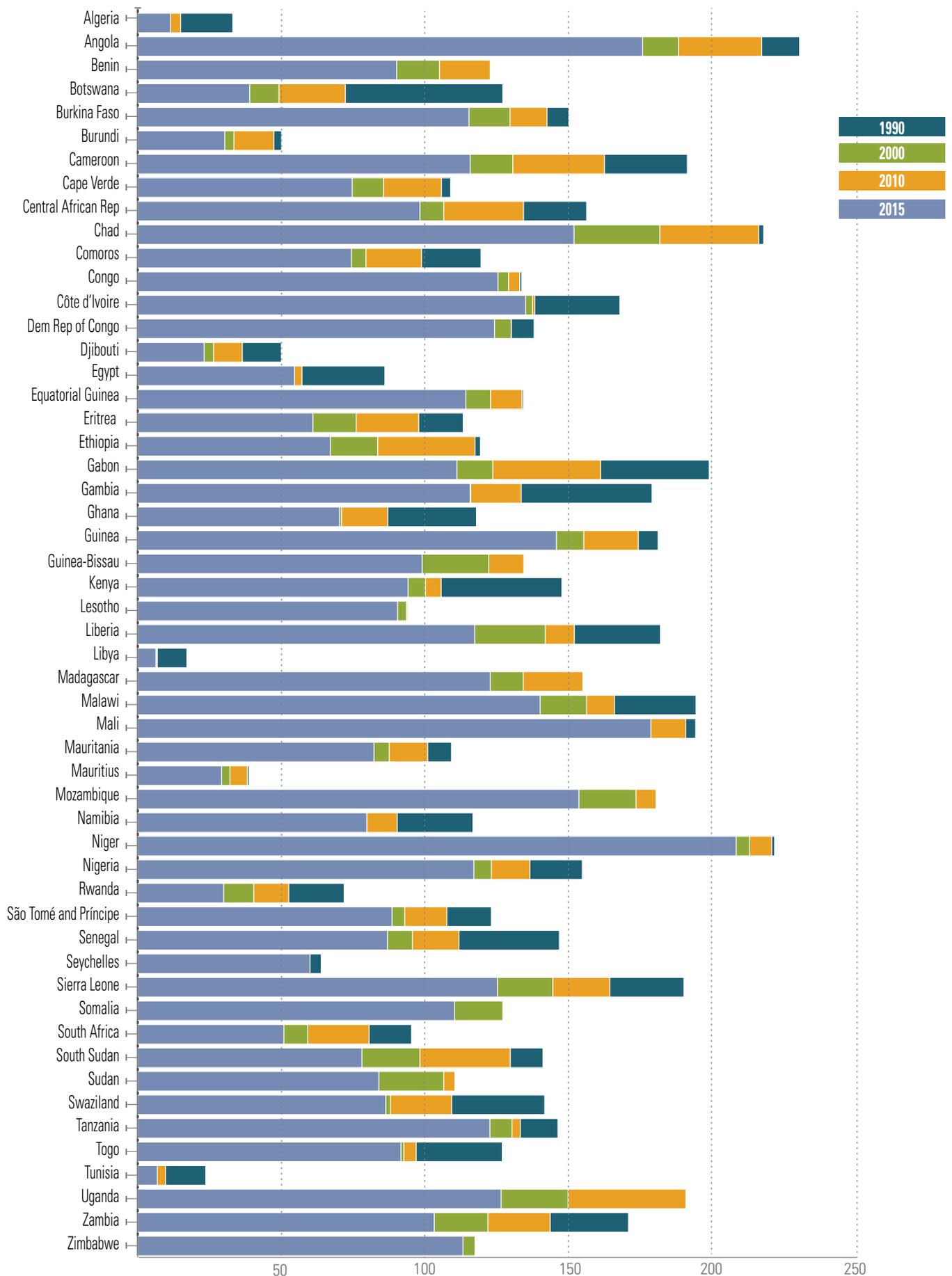
HIV prevalence among adolescent girls aged 15-19 is unacceptably high; young girls and women account for four out of every ten new HIV infections in Africa excluding North Africa.²³ Because they are less likely to have access to legal and safe abortion, adolescents are estimated to account for 14% of all unsafe abortions worldwide.²⁴ Adolescents are also more likely to be excluded from health services, stigmatized, and unable to access the care they need.

Between 2008 and 2012, the estimated average adolescent birth rate in Africa excluding North Africa was 123.9 births per 1,000 women.⁵ In the same time period, major variations existed in the average adolescent fertility rate across African countries, with the highest having a rate of 229 (Central African Republic) and the lowest being 4 births per 1,000 women (Libya).⁵ Figure 3.4 opposite shows the adolescent fertility rate in 1990, 2000, 2010, and 2015.

Across Africa, many adolescent girls are now being immunized against the human papilloma virus (HPV), a major cause of cervical cancer. Although demonstrations by the Gavi Alliance and other national introduction programs support African countries to reduce rates of cervical cancer, national governments must maintain this support to achieve sustainable progress. Many governments have recognized that special attention must be paid to adolescents and their particular sexual and reproductive health needs. However, much more needs to be done to empower Africa's adolescents to make informed choices on their own and access the services they need.

Figure 3.4. Estimated adolescent fertility rates (births per 1,000 women ages 15–19)

Data is representative of the 5-year period prior to the year listed.



NOTE: SADR data not available.

SOURCE: World Population Prospects: The 2015 Revision, available at: <http://esa.un.org/unpd/wpp/DVD/>



4. High-Impact Interventions in MNCH

In order to sustain the achievements made thus far and accelerate the reduction of preventable maternal and child deaths in Africa, it is vital to implement certain high-impact interventions. This section includes some proposed interventions and the specific causes of maternal and child mortality that they would target.

Quality MNCH services should be safe, effective, patient-centered, timely, efficient, and equitable. They should strive toward improving quality and universal access in both rural and urban areas. Service improvement across the entire chain of patient interactions, from initial registration to consultation and subsequent treatment and management, should be constantly upheld. Increasing patient satisfaction would drive up demand and thus increase utilization of health services, consequently reducing morbidity and mortality.

Table 4.1 below shows a summary of the interventions, their main components, and the cause of maternal or child death they target.

4.1 Expanding Midwifery Services

Expanding the number of midwives serving a community is one of the most important interventions to increase the number of skilled deliveries and reduce maternal mortality.²⁵ While skilled birth attendants include other health cadres, well-trained midwives could help avert roughly two-thirds of all maternal and newborn deaths.²⁵ In tandem, medical doctors or clinical officers who can perform surgical interventions would complete the package for emergency obstetric and neonatal care.

Different models are applicable to training midwives. These fall broadly under in-service training or pre-service training. A hybrid of the two would be ideal.

Table 4.1. High-impact interventions in maternal, newborn, and child health (continued next page)

Intervention	Main components	Cause of maternal, neonatal or child death targeted
4.1 Increase skilled deliveries	<ul style="list-style-type: none"> ■ Pre-service and in-service training ■ Deployment and retention ■ Task sharing ■ Abolish use fees for maternity services 	<ul style="list-style-type: none"> ■ Hemorrhage ■ Pregnancy-related hypertension ■ Maternal and neonatal sepsis ■ Unsafe abortion ■ Obstructed labor ■ Neonatal deaths and stillbirths
4.2 Reduce the impact of unsafe abortion	<ul style="list-style-type: none"> ■ Training of health providers ■ Ensure access to safe abortions and post-abortion services to the full extent of national laws and policies ■ Provision of medical equipment ■ Ensure availability of essential medicines 	<ul style="list-style-type: none"> ■ Unsafe abortion

Intervention	Main components	Cause of maternal, neonatal or child death targeted
4.3 Prevention and treatment of postpartum hemorrhage	<ul style="list-style-type: none"> ■ Training of health providers ■ Medical equipment ■ Ensure availability of essential medicines (misoprostol, oxytocin) 	<ul style="list-style-type: none"> ■ Hemorrhage
4.4 Intrapartum obstetric interventions	<ul style="list-style-type: none"> ■ Partograph/labor monitoring ■ Ensure availability of magnesium sulphate/nifedipine ■ Infection prevention and ensure availability of antibiotics ■ Blood transfusion 	<ul style="list-style-type: none"> ■ Obstructed labor, birth asphyxia ■ Pregnancy-related hypertension ■ Sepsis ■ Hemorrhage
4.5 Intrapartum neonatal interventions	<ul style="list-style-type: none"> ■ Corticosteroids for premature labor ■ Kangaroo Mother Care ■ Neonatal resuscitation ■ Antibiotics for neonatal sepsis 	<ul style="list-style-type: none"> ■ Birth asphyxia / prematurity ■ Low birth weight / prematurity ■ Birth asphyxia ■ Sepsis
4.6 Postpartum interventions	<ul style="list-style-type: none"> ■ Postpartum care ■ Community pneumonia case management ■ Exclusive breastfeeding ■ Cord care ■ Community mobilization and response 	<ul style="list-style-type: none"> ■ Pneumonia ■ Low birth weight / prematurity ■ Newborn sepsis
4.7 Strengthening the referral system	<ul style="list-style-type: none"> ■ Ambulance system ■ Maternal waiting homes ■ Referral feedback ■ Third-level specialists 	Multiple
4.8 Maternal death surveillance and response	<ul style="list-style-type: none"> ■ Institutionalize maternal death surveillance and response (MDSR) as part of the Disease Surveillance System (DSS) ■ Put in place a conducive legal framework for MDSR ■ Political will and leadership ■ Focus on the "R" of the system ■ Analysis of weaknesses in service delivery 	Multiple causes of maternal and newborn deaths
4.9 Immunization	<ul style="list-style-type: none"> ■ Increase domestic resources for immunization programs ■ Timely adoption of novel vaccines 	<ul style="list-style-type: none"> ■ Pneumonia, measles, diarrhea, cervical cancer
4.10 Nutrition	<ul style="list-style-type: none"> ■ Food fortification ■ Biofortification ■ Supplements for vulnerable populations 	<ul style="list-style-type: none"> ■ Infectious diseases, decreased immunity
4.11 Community- and household-level interventions	<ul style="list-style-type: none"> ■ Use of community health workers ■ Community behavior and transport schemes ■ Clean delivery kits ■ Case management of diarrhea 	Multiple

In-service training would cover the short-term requirements, and pre-service training the longer-term needs. It would be useful to explore the concept of community midwives, who would provide ANC in the communities and conduct referrals to health facilities. The training of midwives must be supported by adequate policy changes and system strengthening in the countries.

Furthermore, policies are required to ensure the retention of midwives and their redeployment when needed. There should be increased focus on supportive supervision, training, and mentoring of midwives and other health workers to maintain the provision of quality services. Rural areas often have a dearth of skilled health workers, thus policies to encourage redistribution of midwives between rural and urban areas are necessary. Retention policies for health workers could combine financial and nonfinancial incentives according to the specific context.

Costs for training midwives vary considerably across countries. It is evident, however, that investing in midwifery training results in superior returns on investment. It is estimated that investment in midwifery education, with community deployment, could yield a 16-fold return on investment in terms of lives saved and costs of cesarean sections avoided.²⁵

The increase in the number of midwives and other skilled birth attendants should be complimented by activities to reduce home deliveries. Task shifting and sharing can be a useful adjunct to improving health outcomes. Other additional measures to consider include community mobilization, voucher schemes, and social insurance.

4.2 Reducing the Impact of Unsafe Abortion

Unsafe abortion accounts for nearly 13% of all maternal deaths.²⁶ An estimated 21 million women worldwide underwent an unsafe abortion in 2008, and nearly all of them took place in low-income countries.²⁶ The Africa region experienced the second highest estimated rate of unsafe abortion in the world, at 28 per 1,000 women aged 15 to 44 years in 2008.²⁶ In the same year, unsafe abortion caused more than an estimated 47,000 deaths worldwide and left thousands of other women with long-term injuries.²⁶ Long-term injuries resulting from post-abortion complications can be severe, including sepsis, pelvic infections, hemorrhage, and abdominal injury.²⁷ The management of the sequelae resulting from post-abortion complications further reduces the availability of health resources and can be costly.

While estimates of the cost of unsafe abortion vary according to the readiness or strength of existing health systems, morbidity arising from unsafe abortion in Africa is estimated to cost health services at least \$114 per case.²⁸ Each year in developing countries, an estimated 5 million women are hospitalized as a result of unsafe abortion, leaving some 3 million other women in need of care due to unsafe abortion complications without such services.²⁶ The cost of management of abortion has been found to be lower in a legal setting that allowed elective abortion than where it is legally restricted. The mean cost of abortion care is \$45 per case in a scenario where abortion is restricted and complications are mainly treated at the tertiary level; however, this is reduced to \$25 when services are available at all service levels and mid-level providers treat approximately 60% of patients.²⁶

Within the confines of national legislature, reducing the impact of unsafe abortion is a key intervention to reducing maternal mortality and should be seen as a major public health concern. This requires attention paid to communication of policies and to societal and health worker biases. Member states should strive to ensure that access to safe abortion is available to the full extent of national laws and policies, in order to reduce the negative impact of unsafe practices.

4.3 Prevention and Treatment of Postpartum Hemorrhage

Postpartum hemorrhage is the leading cause of maternal death worldwide.¹⁵ Hemorrhage can be caused by uterine atony, retained products of conception, and cervical, uterine, and perineal tears. Skilled health workers are ideally suited for the treatment of postpartum hemorrhage, thus a suitable intervention is expanding the number of midwives, medical doctors, and clinical officers with the skills to treat the underlying causes of hemorrhage.

The use of misoprostol to prevent and treat postpartum hemorrhage, where other uterotonics are unavailable, is a proven effective intervention. Misoprostol is a stable compound, does not need refrigeration, and is easily distributed at the community level. Misoprostol has been shown to reduce acute postpartum hemorrhage and reduce catastrophic blood loss of more than 1,000 ml.^{29,30}

The cost of a tablet (200 micrograms) of misoprostol averages about \$0.22, thus a prevention course (600 micrograms) costs about \$0.66.^{30,31} There is currently scant data to ascertain the total costs of wide-scale program implementation, including monitoring side effects and linking up with secondary care.

4.4 Intrapartum Interventions: Obstetric Care

The following are a selection of low-cost and high-impact intrapartum interventions (obstetric care):

- **Use of a partograph to monitor progress of labor:** This is a very cost-effective method to help health workers identify complications during childbirth and make decisions regarding the appropriate intervention. However, use of a partograph requires diligent monitoring and skilled health workers to carry out resulting interventions, including augmentation of labor, assisted delivery, or cesarean section.
- **Use of magnesium sulphate/nifedipine to treat pre-eclampsia/eclampsia:** Pregnancy-related hypertensive disorders cause about 16% of all maternal deaths in Africa excluding North Africa.³ The use of magnesium sulphate or nifedipine is a highly effective intervention, however skilled health workers are required to administer the drugs. There should also be increased focus on how to manage pregnancy-induced hypertension in the antenatal period.
- **Infection prevention:** Regular adherence to infection prevention practices is crucial to safe obstetric outcomes. Use of clean delivery kits, regular hand washing, and regular cleaning and sterilization of obstetric equipment is critical.
- **Antibiotics for treatment of puerperal sepsis:** Infections account for over 10% of all maternal deaths in Africa excluding North Africa.³ Active monitoring and early treatment of infections is very effective. This intervention requires the availability of essential antibiotics as well as skilled health workers.

It is difficult to estimate the costs of such interventions. The cost is also variable depending on the strength of the health system. An estimate of expanded costs to allow these intrapartum obstetric interventions to reach 90% coverage in Africa would be about \$ 0.21 to 0.42 billion per year. This investment would avert about 8 to 20% of maternal deaths.³²

4.5 Intrapartum Neonatal Care

High-impact intrapartum neonatal care interventions include the following:

- **Corticosteroids for preterm labor:** This is a very cost-effective intervention that helps mature the lungs of preterm babies, improving their rate of survival.
- **Kangaroo Mother Care:** This intervention involves the skin-to-skin placement of the newborn with the

mother, providing constant warmth from body heat.

This intervention is very effective for low-birth-weight babies. Vastly improved neonatal survival outcomes are possible.

- **Neonatal resuscitation:** To prevent early neonatal deaths from birth asphyxia, neonates should have clear airways and be ventilated with an ambubag if they fail to breathe on their own. This intervention requires skilled health workers or training of support staff to be able to perform ventilation of neonates.
- **Antibiotics for neonatal sepsis:** Early detection and treatment of sepsis would greatly reduce neonatal mortality rates. This intervention requires the availability of essential antibiotics as well as skilled health workers.

Estimates of expanded costs to allow these services to reach 90% coverage in Africa would be about \$0.14 to 0.28 billion, averting 12 to 18% of deaths.³²

4.6 Postpartum and Neonatal Interventions

High-impact postpartum and neonatal interventions include the following:

- **Community-based pneumonia case management:** Early empirical treatment of pneumonia in babies is shown to improve child survival. This intervention can be implemented by well-trained and equipped community health workers.
- **Community mobilization and awareness:** Greater involvement of the community in maternal and child health interventions can lead to better outcomes. The community can assist in monitoring women, promotion of safe practices of delivery, promotion of family planning, and providing support to low-birth-weight babies.

4.7 Strengthening the Referral System

While most women can safely deliver at primary health care facilities, strengthening the referral system to secondary and tertiary levels of care is critical to ending preventable maternal and child deaths.

While the referral system utilizes transport and logistics interventions, such as a functioning ambulance system or emergency transport arrangements, other considerations should be available to effectively strengthen referrals. This includes use of two-way communication systems, referral and outcome feedback, investigation of bottlenecks and delays, and availability of well-trained individuals at higher-level health institutions. Use of

interventions such as maternity waiting homes can strengthen the referral system. Use of mobile technology, telemedicine, video conferencing, and e-diagnosis can also be very useful.

4.8 Maternal Death Surveillance and Response

There is sparse reliable data about maternal deaths in Africa. Most data is derived from extrapolations from demographic surveys, thereby yielding potential inaccuracy in the estimates.

The majority of African countries rely on a paper-based health information system (HIS), which only generates crude numbers of maternal deaths, but lacks detail on causes of death or avoidable factors, and only covers deaths occurring in public facilities.³³ A 2013 report of maternal death audits in Africa found that while all countries had maternal death audit tools, each had its own format and content, with no uniformity across the countries. There was no community representation in the review committees, which meet irregularly, in any of the countries. Crucially, no country had an effective response system for following up the maternal death audit process.³³

Maternal death surveillance and response should be considered as part of the wider disease surveillance system. Ensuring that national and subnational levels have a functioning maternal death surveillance and response system would be very useful in elucidating the systematic causes of maternal deaths at local and national levels.

Maternal death audits need to utilize other measures, including verbal autopsies and “near-miss” assessments to ascertain family, household, and community factors that contribute to deaths or near deaths. There should be greater scrutiny of underlying social factors and gender inequality that contribute to maternal deaths, and focus should be placed beyond the clinical contributors. Thus, systems should be in place to ensure that maternal and child deaths are notifiable, appropriately recorded, and used for the planning of health systems. It would be useful to include legislation that prevents the maternal audit reports from being used for legal processes or proceedings, so that the information is freely collected and utilized by the health system. Measures should be put in place to ensure anonymity of the audit reports as much as possible. The information would be extremely useful in planning responsive health systems that are able to further tackle maternal mortality, and develop locally appropriate interventions.

4.9 Immunization

Vaccines are one of the most effective tools to reduce the burden of infectious diseases, and can provide lifelong protection against several illnesses. Immunization has relatively high coverage compared with other interventions in Africa. Opportunities exist for expanding the repertoire of vaccines to include the 11 World Health Organization (WHO)-recommended antigens into all national routine immunization programs. This would include agents that are effective against *Haemophilus*



influenzae, *Streptococcus pneumoniae*, HPV, meningitis A, and rotavirus. The Global Vaccine Action Plan (GVAP) (2011-2020) signed by all African countries remains a key commitment for scaling up immunization. Partnering with organizations such as the Gavi Alliance would expand opportunities to scale up vaccine coverage, antigens, and availability. The costs of expanded programs of immunization can range from \$18 per child to more than \$30 with the addition of new vaccines.³⁴

4.10 Nutrition

Nutrition is a critical intervention in improving maternal and child health. Improvements in nutrition can have wide-ranging positive effects. Proper nutrition supports the optimal growth and development of children, and renders them less liable to repeated bouts of infectious diseases. A 2014 study conducted in four African countries found that child undernutrition generates health costs between 1 and 11% of the total public budget allocated to health.⁹ These costs are due to episodes directly associated with the incremental quantity and intensity of illnesses that affect underweight children and the protocols necessary for their treatment.

To improve nutrition, fortification of food with micronutrients such as iron and folic acid; biofortification of staple crops to make them more nutritious; and provision of feeding programs and food supplements to vulnerable groups such as ill children, displaced individuals, and pregnant women are all critical interventions to reduce the impact of malnutrition.

4.11 Community- and Household-Level Interventions

Community interventions can be accessed locally at a home, village, school, or local clinic. Any person within the community or family, including health personnel or lay individuals, can deliver the interventions. They range from using community health workers and volunteers to encourage health-seeking behaviour, to use of community-based organizations, grandmothers, faith-based leaders, chiefs, and other gatekeepers. The mobilization and use of the community can ensure that mothers and children are given the required support, and that services are sensitive to the rights, cultures, and needs of pregnant women and other community members. Community involvement is also a key strategy in addressing patriarchal norms and practices, and tolerance for sexual- and gender-based violence that contributes to maternal deaths.

Household interventions, including care for cord and skin, can reduce the prevalence of neonatal sepsis and exclusive breastfeeding can lead to a reduction in diarrhea and other childhood diseases. Interventions such as preparation of clean delivery kits, emergency transport arrangements, and recognition of danger signs can all be instituted at the household level in order to increase the readiness and utilization of safe delivery in institutions.

The costs of community-level and household interventions are difficult to ascertain, however. There is very good evidence that community-level interventions are particularly effective in improving perinatal care practices, and could thus bring about reductions in maternal mortality.³⁵



5. Cross-Cutting Issues Affecting Maternal and Child Health in Africa

Many other factors outside the health sphere affect MNCH. This section details how gender and power relations, education, economic status, and food and nutrition security influence maternal and child health in Africa.

5.1 Gender and Power Relations

Gender inequality and power relations directly affect women's access and utilization of services. Gender discrimination within families, communities, and societies, compounded by lack of decision-making power and access to information, can severely affect maternal health. Women are not freely able to access maternal health services due to socio-cultural constraints, lack of finances, and limited involvement of male partners. Due to differences in power relations, women and children endure violence and are often powerless to report violations to authorities or are restricted from seeking medical attention. The prevalence of harmful traditional practices such as female genital mutilation not only perpetuates gender imbalances but more importantly causes long-term disabilities that can pose serious complications during pregnancy and childbirth.

Though well-documented, there are very few quantifiable measures of gender relations and its effect on maternal and child health. Tracking sexual and gender-based violence provides a good opportunity to ascertain its effect on the health of women and children. Factors related to gender inequality, including personal autonomy and access to resources, are even harder to measure but directly affect maternal and child health. Most African countries have laws that deal with sexual- and gender-based violence. However, it is difficult to discern to what extent they are respected and implemented.

5.2 Water and Improved Sanitation and Hygiene

Water and improved sanitation and hygiene (WASH) has strong interlinkages with maternal and child health. Improvements in WASH can lead to vast improvements in the wellbeing of women and children. Integrating

WASH services and practices into health services delivery in health facilities and improving access to WASH within communities can decrease both morbidity and mortality of women and children.

Expanding access to safe drinking water and improved sanitation practice has immediate correlations to reducing diarrheal diseases in children, which are a major cause of child mortality. Frequent bouts of diarrhea weaken children, making them more vulnerable to the effects of malnutrition and other serious diseases such as malaria and pneumonia. Additionally, children living in unhygienic environments, and especially where open defecation is common, are even more vulnerable to stunting.³⁶ The most effective way to prevent diarrhea is through better access to clean water and sanitation services and through improved hygiene practices, especially hand washing with soap. It is therefore crucial to improve WASH as a means of improving child health.

Having adequate water supplies and sanitation facilities in health centers is a basic prerequisite to delivering quality health services and preventing hospital-acquired infections. This is also critical in maternal health and obstetric units where a strong association between health worker hand washing and neonatal survival, postpartum infections, and poor sanitation has been documented.

WASH interventions also contribute to improved gender equality and human rights. Girls are disproportionately affected as they often miss school while trying to secure water for household use. Inadequate sanitation and hygiene facilities in schools make it difficult for girls to manage their menstruation and expose them to sexual assault and gender-based violence where toilets are unavailable or unsafe.

5.3 Education

Education is widely recognized as a major intervention in improving health and reducing poverty. Maternal health outcomes have been shown to be better among women with high educational attainment. This could be explained by their having a better understanding of health issues affecting pregnancy, more awareness of the need for skilled delivery, delay in onset of first sexual activity and pregnancy, more access to FP services, and improved socio-economic status. Apart from formal education, countries should strive to improve awareness of reproductive health issues and the importance of seeking health services from skilled health workers. Post-primary education of girls and boys is important for attaining positive outcomes in maternal and child health.

5.4 Agriculture, Food, and Nutrition Security

Agriculture can have several roles in health. A focus on agriculture and food and nutrition security could improve the nutritional status of women and children. Nearly 50% of all global deaths of children under the age of five are linked to undernutrition.¹ Good agricultural and cultural practices ensuring food and nutrition security would have an important effect on reducing child and maternal mortality.

In addition, agriculture can contribute to improving sustainable livelihoods and reducing poverty. Increased disposable income would enable families to have better health-seeking options. Agricultural activities can be a conduit in which to deliver health services. Integrating agricultural and health interventions can lead to increased utilization of health facilities, increases in skilled delivery, and eventually reduction in maternal mortality. Features that can be integrated include awareness and knowledge promotion, FP services, ANC services, and community outreach. Often seen as separate entities, integrating agricultural and maternal health services could lead to improved outcomes.

5.5 Income Levels and Economic Activities

There is a correlation between maternal health outcomes and income levels. Higher income earners often have better maternal health outcomes, are able to access health services, and have children with healthier outcomes. User fees, out-of-pocket health expenses, and geographical barriers negatively affect maternal and child health. A focus on revitalizing local economies and reducing poverty will lead to dramatic reductions in maternal mortality. In the meantime, it is vital for social safety nets to be available to society's most vulnerable.



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6. Lessons Learned

Many lessons have come from the implementation of MNCH policies and programs aimed at attaining MDG 4 and 5 targets. These lessons are synthesized by considering the trajectory of maternal health interventions in Africa, and in the context of key commitments and programs, such as the SRHR Continental Policy Framework, Maputo Plan of Action, and CARMMA, among others.

Some of the lessons learned include:

- a. **Political will is extremely important:** Without strong political will, leadership, and support, little improvements in MNCH can occur. African leaders have been instrumental in providing high-level support and prioritizing MNCH, which has resulted in transformational gains in a number of African countries. MNCH is unfinished business, requiring renewed vigor and determination in the post-2015 development agenda. MNCH should continue being a central focus in Africa in recognition of the benefits in spurring inclusive socio-economic development.
- b. **Renewed focus on human resources for health:** The availability of skilled and well-equipped health personnel to deal with child and maternal health is one of the most important interventions in the reduction of preventable deaths. Investments in human resources for health need to be adequately planned, budgeted, and executed. These efforts should be coupled with plans to retain staff and equitably distribute them between rural and urban areas along with the strengthening of the systematic components of service delivery.

- c. **Strengthening of health systems:** Stronger health systems are able to meet the demands of ambitious targets. Stronger health systems are also able to respond to emergent needs, and sustain routine health care. Health systems that have appropriate numbers of human resources, adequate health financing, a consistent supply of medical equipment and pharmaceuticals, constant improvement of service delivery, and empowered management and leadership have been able to make massive strides towards the MDGs. Strengthening health systems must be seen as integral to any health intervention post-2015.
- d. **Partnerships can work:** Partnerships between governments, nongovernmental organizations (NGOs), and the private sector have led to increased funding and focus on a number of diseases and causes of mortality. There is, however, a need to ensure adequate representation of those most affected, including greater involvement of communities and key populations in decision-making. More synergistic partnerships with other development sectors, particularly education and agriculture, will make partnerships more effective.
- e. **Integrated services are more effective:** Integrated approaches to service delivery have been effective in improving access to services. Integrated approaches to maternal and neonatal care, sexual and reproductive health, HIV, malaria, and TB have been largely effective, and have improved outcomes. The success of integration of PMTCT services with MNCH is a prime example of the usefulness of integrating services. Integrated services can greatly improve health outcomes but are unlikely to fully achieve desired impacts unless there is strong political will and government officials and key stakeholders support the approach. Integration of services also needs to ensure that existing services are not overburdened and staff is sufficiently trained to support service integration.
- f. **Availing more financial resources for health is important:** Low financial investment will continue to hamper adequate improvements in health. There should be commitment to “ring fencing” health budgets and increasing allocation of national budgets to health. Reduction of out-of-pocket health expenditure for patients and the waiving of user fees for pregnant women and children is important. Full implementation of commitments, such as the Abuja Call of allocating 15% of national budgets to health, should be advocated. Other innovative models for increasing domestic financing of the health system should be explored.
- g. **Better quality data is required:** There are very few standardized data collection tools, and the quality of data remains variable. It is vital that data systems are improved because quality data will enable better goal-setting of policy and interventions. Improvements in health information systems and civil and vital registration are necessary. Also crucial is the strengthening of maternal death surveillance and response systems.
- h. **Low-cost, high-impact interventions can lead to dramatic changes:** Low-cost, high-impact interventions have the potential to lead to marked improvements in maternal and child health. Low-cost interventions such as misoprostol for prevention of postpartum hemorrhage, community treatment of pneumonia, and immunization have all shown incredible potential. However, such interventions also need to be supported by improvements in secondary health care and comprehensive emergency obstetric and neonatal care.
- i. **Core focus on women and children will have impacts on poverty:** Maintaining a focus on women and children, including the socioeconomic and cultural factors affecting them, can immensely affect health outcomes and poverty reduction. Improving gender and power relations in societies can significantly improve access and utilization of health care services. Improving the livelihood and economic potential of women, not only has positive impact on children, but also on household incomes and health-seeking behaviours.
- j. **Linkages with other development sectors:** Health cannot be considered in isolation as it is greatly affected by other sectors, which must be considered when planning health interventions. Multisectoral collaboration in planning, resource allocation, and implementation of interventions is very important in reducing preventable maternal and child deaths. For example, close multisectoral collaboration between health, education, agriculture, and other development sectors presents significant opportunities to improve MNCH on the continent.



7. Challenges in Implementing MNCH Programs

A number of challenges have hindered the reduction of maternal and child mortality on the continent, significantly affecting attainment of the health MDGs. These challenges include:

- a. **Inadequate financial resources for health:** Budgetary allocations to health were often far below the 15% commitment as pledged in the Abuja Declaration. This was coupled by inadequate external funding from development partners, and amplified by shortages in human resources to implement the programs.
- b. **Unpredictable external resources:** Resources from development partners were often unpredictable and not aligned to the national plans and priorities. There was an initial focus on vertical programming, as opposed to sector-wide support.
- c. **Weak health systems:** Health systems in most countries were generally too weak to attain ambitious MDG targets. Of particular importance were inadequacies in human resources for health, health financing, leadership and management, and medical supplies and equipment.
- d. **Weak capacity to deliver quality services:** There was often reduced capacity of the health care workers and institutions to provide quality services to reduce mortality and morbidity.
- e. **Persistent inequalities:** Most health systems were not responsive to inequalities in service delivery driven by gender, education, socioeconomic status, and geographic location. Vulnerable groups were not able to access critical MNCH interventions.
- f. **National economic and development policies did not prominently highlight health:** National economic and development policies are the blueprint by which governments plan to alleviate poverty and raise the standards of living. Most plans did not highlight health as a key driver of economic growth, and thus its consideration in reducing poverty and improving livelihoods.
- g. **Weak multisectoral response:** There was inadequate involvement of other sectors critical to attainment of the health goals, particularly responses around education, gender, and agriculture. A more coherent multisectoral response would have resulted in more synergistic gains in related sectors.
- h. **Inadequate information, monitoring, and evaluation systems:** Data-collection systems were not robust enough to collect sufficient data and information to support informed decision-making. Improved data collection, analysis, and use would have led to greater urgency and action.



8. Recommendations for Maternal, Newborn, and Child Health

MNCH is irrefutably important for sustainable development in Africa, and essential to continue positioning high on the continental development agenda. Ending preventable maternal and child deaths by 2030 is a viable goal that should be pursued. This should be advocated as the tagline and motto to position MNCH firmly in the post-2015 development agenda.

It is recommended that the MNCH Status Report continues being included as a standalone item at the Heads of States Summit. The report should continue highlighting the successes, challenges, and lessons learned in improving MNCH in Africa. Doing so will also assist in maintaining the high-level political will that has been critical in the improvement of MNCH on the continent. It is recommended that the AUC continue with its mandate of producing the MNCH Status Report beyond 2015.

It is recommended that the CARMMA post-2015 agenda focuses on a new theme, "Zero by Thirty," which encapsulates the aspirations of achieving the elimination of preventable maternal and child deaths by 2030. The campaign will advocate and lobby for the adoption of

low-cost, high-impact interventions by member states in a bid to eliminate maternal and child deaths. A strong accountability mechanism will be put in place to monitor progress in reducing preventable maternal and child deaths. The campaign will be in tandem with agenda 2063, the CAP, and consistent to the extent possible with the post-2015 Sustainable Development Agenda.

In order to sustain the achievements thus far and to further refocus on accelerated reduction of maternal and child deaths with a view of ending these preventable deaths by 2030, the following recommendations are proposed to be included in member states' national strategies.

Increase health financing

There should be an increase in health budgets to enable the improvement of MNCH services. This should include consideration of use of results-based financing where appropriate, social insurance schemes, and increased government spending on health care. User fees should be waived for pregnant women and children. Member states should:

- Honour Abuja Declaration commitments of increasing government funding for health to at least 15%
- Review various methods of increasing health finances, including through results-based financing and insurance
- The AUC should continue high-level advocacy and engagement around health financing

Emphasize neonatal health and intrapartum care

Nearly one-third of babies die due to intrapartum causes. Birth asphyxia can be reduced considerably by ensuring that skilled health workers are trained to deliver neonatal resuscitation. National child health programs must emphasize early neonatal care as part of their strategy to reduce child mortality.

- Member states should develop their MNCH programs to increase the skills of health workers to provide neonatal health
- The AUC and regional economic communities can provide monitoring and guidance tools

Improve the quality of health service delivery

There should be consistent attempts to improve the quality of health services that are delivered. Institutionalizing clinical audits, patient feedback, and supportive supervision would enhance the status of MNCH. Quality should be adhered to in all aspects of patient interaction, including patient registration, initial health worker contact, history-taking and diagnosis, laboratory diagnosis, and clinical intervention. Striving for improvement of service delivery along the continuum of care chain of health will increase demand and increase the utilization of health facilities, thus reducing morbidity and mortality.

- Member states should institute quality improvement metrics at national and subnational level
- The AUC and other partners can develop guidelines and tools on quality improvement in the health sector

Promote delivery by skilled attendants

Promoting the institutional delivery and delivery assisted by a skilled health worker is extremely important to reducing maternal and neonatal deaths. Delivery by skilled birth attendants should also be coupled with strengthening referral systems and availability of secondary level care and comprehensive emergency obstetric and neonatal care (CEmONC).

- Member states should focus on increasing the number and equitable distribution of midwives and health workers skilled in safe delivery
- Adequate budgeting for training, supportive supervision, and retention of health workers should be undertaken by member states

Expand immunization programs

Vaccinations against common childhood infectious diseases and against HPV still offer one of the most effective ways of improving the health of women and children. There should be continued emphasis on promoting the merits of immunization within an integrated primary health care delivery system to increase vaccination coverage.

- Member states should continually review the implementation of national and subnational immunization programs
- There should be consistent financing of immunization programs, including partnering with other stakeholders, private organizations, and commercial entities to increase availability and range of vaccines
- The AUC should continue highlighting the importance of immunization through advocacy campaigns

Integrated management of newborn and childhood illness

Consistent and diligent use of integrated management of childhood illnesses guidelines can avert a large number of deaths due to infectious disease. The guideline should be available at all levels of health facilities.

- Member states should prioritize the training and supportive supervision of health workers that are able to provide integrated childhood care. These should be equitably distributed.
- National and subnational health planning should include increasing integrated management guidelines

Community engagement

Communities play a crucial role in MNCH. Involving the community improves ownership and provides context-specific solutions to issues such as access to health services, community health work, and health education and promotion, among other benefits.

- Member states should integrate community engagement in national and subnational plans
- The AUC should spearhead community engagement through advocacy programs
- Member states should continue increasing partnerships with NGOs, community service organizations (CSO), and other organizations

Emphasize the importance of nutrition

Nutrition plays a significant role in MNCH. Strong support for such programming will lead large MNCH gains.

- Member states should pursue high-level national advocacy
- Member state should review and renew nutritional plans
- The AUC should continue strong advocacy efforts and continental strategies on nutrition

Renew focus on family planning

FP needs to be repositioned as a critical intervention. This should include ensuring FP commodity security, availability of several contraceptive choices, and improving knowledge and access to FP.

- Member states should review FP commodity security and availability of a wide range of FP methods
- The AUC should advocate for the prioritization and scale up of FP services
- Partnerships between NGOs, CSOs, and governments to strengthen FP services

Increase access to safe abortion services

Reducing deaths that occur due to unsafe abortion will significantly reduce the number of women and young girls who die unnecessarily. Deliberate efforts should be made to provide services to the full extent of existing national laws. There should also be continued improvements in post-abortion care with the view to increase the number of cases managed at the primary level to cap occurrence of advanced complications of unsafe abortion.

- Member states should ensure access to safe abortions to the full extent of national laws and policies
- The AUC and regional economic communities can play a significant advocacy role in increasing access to safe abortion

Improve and utilize evidence-based data

Data collection through health management information systems and other data collection modalities, including surveys, needs to be strengthened through increased government expenditure and integration of vertical information management systems. Collection of data disaggregated by gender, income, education, and geographical residence will be essential to highlight health inequities and to better plan health services. In this regard, efforts to scale up universal coverage of civil registration and vital statistics systems and the implementation of maternal death surveillance and response systems are critical. More importantly, information generated should be utilized for decision-making and resource allocation. Data and information should also be presented in forms that are easily understandable by communities and non-health workers to increase patient demand for accountability. Use of continental data platforms, such as the health statistics compiled by the AU (www.africanhealthstats.org), and MNCH scorecards to enhance accountability to MNCH commitments is a welcome initiative that should be fully supported and owned by member states.

- Member states should build resilient data collection, M&E systems and utilization of data for decision-making
- The AUC should expand and promote the use of the African Health Stats website
- NGOs and CSOs should use national and subnational data to increase accountability

Strengthen health systems for MNCH

Strengthening health systems will be essential for continued progress on MNCH. Member states should consider implementing innovative resource mobilization strategies to ensure adequate levels of financing for MNCH (e.g. nutrition supplementation and immunization activities), as well as “ring-fenced” budgets for high-impact interventions. As countries continue to experience rapid urbanization, issues of coverage and equity, in particular in rural and urban poor areas, will merit increased attention.

- Member states should undertake holistic strengthening of health systems
- Member states should increase health financing and budget contribution to health to strengthen health systems
- The AUC should provide continental policy and guidance on health system strengthening

Focus on HIV as a significant public health issue

Several issues have to be considered for PMTCT. Increased focus on reducing loss to follow-up, improving diagnostics in pediatric HIV, and lifelong ART for HIV-infected pregnant women is required. Member states should:

- Continually review HIV policies at national and subnational level
- Ensure the availability of drugs and supplies for HIV therapy
- Improve pediatric HIV diagnosis and treatment

Focus on adolescents as a key population

Adolescent services should be tailored to their particular needs and preferences and should be delivered in a non-judgmental manner. Adolescents should also have access to sexual and reproductive health information integrated into their formal education. Efforts should be made to ensure adolescents at higher risk, such as those presenting with sexually transmitted infections, have access to any required contraceptives and reproductive health information.

- Member states should maintain the adolescent national programs and ensure that youth-friendly services are available
- The AUC should provide advocacy and strategies for improving engagement and delivery of adolescent health services

Strengthen gender relations and balance

Gender has a marked influence on MNCH outcomes. To improve MNCH, laws should be enforced that protect women against violence and there should be increased male involvement in MNCH programs. There should also be a focus on promotion of women-led enterprises. Member states should:

- Ensure that laws that protect women from violence are enforced
- Increase and enact laws that promote involvement of women in politics and the economy
- The AUC should provide advocacy around gender relations and balance

Promote universal post-primary education

Education is a key crosscutting issue that can improve MNCH. Governments should implement policies and programs to ensure attainment of universal post-primary education for the girl child, including re-integration of girls who drop out of school due to marriage or pregnancy. Member states should:

- Enact laws that retain girls in education if they become pregnant or get married
- Adopt policies to attain universal post primary education



9. Post-2015 Agenda and Maternal, Newborn, and Child Health

The year 2015 marks the end of the MDGs that have galvanized the world to pursue the reduction of maternal and child deaths. While there have been some marked successes with MDGs 4 and 5, much remains to be done. The Post-2015 Sustainable Development Agenda provides an opportunity to complete unfinished business, redefine priorities and approaches based on emerging evidence, and improve the alignment of efforts among all partners working toward improving health and development outcomes. Therefore, in the post-2015 era, emphasis should be placed on the centrality of MNCH in reducing poverty, creating communities that are more equitable, and enhancing sustainable socioeconomic development.

The Post-2015 Sustainable Development Agenda should be framed within the long-term vision of the continent as espoused in the AU Agenda 2063 – to build an integrated, prosperous, and peaceful Africa, an Africa driven and managed by its own citizens, and representing a dynamic force in the international arena.³⁷ The Common African Position (CAP) on the post-2015 agenda, endorsed by Heads of State and Government rightly identifies women and children as key to meeting the development goals of the continent. The CAP aims to improve the health status of the most vulnerable, such as mothers, newborns, children, youth, the unemployed, the elderly, and disabled by reducing the incidence

of communicable diseases, noncommunicable diseases (e.g. mental health) and emerging diseases; ending the epidemics of HIV/AIDS, TB, and malaria; reducing malnutrition; and improving hygiene and sanitation.³⁸ The CAP includes commitment to ensuring universal and equitable access to quality health care, including universal access to comprehensive sexual reproductive health and reproductive rights (e.g. FP), improving health systems and health financing, medical infrastructure, the local manufacturing of health equipment, and setting up monitoring and evaluation and quality assurance systems.

Guided by the CAP, African states have engaged in shaping the first proposal of sustainable development goals through the Open Working Group. The proposal seeks to reduce maternal mortality; eliminate preventable newborn and child deaths; ensure access to sexual and reproductive health services, information, and commodities; and ensure the fulfilment of sexual and reproductive rights. It also seeks to address critical determinants of health, including education, women's empowerment and participation, violence against women, harmful traditional practices such as early marriage, nutrition, and WASH among others. While this proposal includes many of the priorities listed in Agenda 2063, Africa must remain vigilant and ensure that the indicators identified to measure these targets are applicable. Africa must also ensure that the discussions around implemen-

tation, financing, and accountability take into consideration the continent's unique context.

One critical opportunity for ensuring that member state priorities that relate to the health of women, children, and adolescents influence global strategies and investments is through the global strategy for Women's Children's and Adolescents' health - a roadmap for ending all preventable deaths of women, children, and adolescents by 2030 and improving their overall health and well-being. The AU should lead the ongoing review of this strategy to ensure that it involves the member states and reflects African MNCH and reproductive health priorities. The revised strategy will support the achievement of health-related Sustainable Development Goals (SDGs) for women, children, and adolescents, and anticipates a more integrated post-2015 development framework in which all countries are supported to attain and sustain their health goals, moving beyond reductions in mortality to a vision of good health for all.

Other opportunities to harmonize the Post-2015 Sustainable Development Agenda and global strategies with AU instruments include the CARMMA campaign, which has been instrumental in securing political commitment in Africa. The CARMMA campaign should be framed around the renewed AU commitment to end preventable maternal deaths by 2030, and the post-2015 financing and implementation frameworks should include relevant measures to achieve this goal. A renewed continental campaign, "Zero by Thirty," would continue to place MNCH firmly on the agenda and maintain the high-level support witnessed through the CARMMA campaign.

To ensure enhanced accountability and implementation of the post-2015 development agenda, member states should:

- a. **Emphasize universal access to health with ending preventable maternal and child deaths and ensuring SRHR at its core.** There should be indicators that track the attainment of universal access to health and reducing health inequities. Tracking how the general health system is being strengthened, including improvements in the health workforce, sustainable contributions to financing the health system, and delivery of quality health services and secure commodities and medical supplies.
- b. **Focus on the most vulnerable populations, key populations, and rural populations to ensure that health service delivery is equitable.** There should be enhanced efforts to reduce inequalities in access and utilization of health services resulting from geographical, educational, gender, and income disparities.
- c. **Recognize the various interactions of health with other sectors, particularly education, agriculture, and poverty reduction.** Composite indicators that recognize this and show that health is not a standalone intervention will be necessary.
- d. **Recognize the important role that communities play in the delivery and maintenance of good health.** This should include galvanizing different stakeholders, including community service providers, grandmothers, community leaders, and other gatekeepers, as well as community health workers to further forge gains in MNCH. Engaging these stakeholders, and ensuring that they are part of the team driving the post-2015 agenda, is critical.
- e. **In line with the conviction that Africa should write its own story, the overarching goal of ending preventable maternal and child deaths by 2030 should be owned by all African countries and country-specific targets set.** The African Peer Review Mechanism will put in place an accountability mechanism for the MNCH commitments.

African countries should work to ensure that the Post-2015 Sustainable Development Agenda and the related updates of global strategies reflect their priorities in order to facilitate more effective and efficient implementation. At the national level, ownership of the post-2015 agenda would be an important first step in tailoring commitments into national priorities and programs. Refining subnational targets will ensure that implementers at lower levels and in the community take responsibility for achieving their respective targets. ■

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Appendix. Country MNCH Profiles 2014

Country	Proportion of stunting under 5 years	Contraceptive prevalence rate (2014 estimates)	Unmet need for family planning	Adolescent fertility rate (births per 1,000 women) (2010-2015 estimates)	Proportion of births attended by skilled health personnel (2009-2013)	Proportion of infants 12-23 months immunized against DPT3 (2014)	Percentage of the allocation on budget line for RMNH expended	No. of facilities per 500,000 providing emergency obstetric care	Proportion of districts that have established and functional MDSR system	Percent of HIV-infected pregnant women who have received ART to reduce risk of PMTCT (2014)
Algeria	11.7 (2013)	64.3	10.4 (2012)	11.4	96.9%	95%				32.2%
Angola	29.2 (2007)	16.0		175.9	47.3%	80%				45.4%
Benin	34.0 (2014)	22.3	32.6 (2012)	90.2	80.9%	70%		34% (2011)		52.8%
Botswana	31.4 (2008)	55.6		39	94.6%	95%		14 (2008)		91.8%
Burkina Faso	35.1 (2010)	19.8	35.7 (2014)	115.4	65.9%	91%		16% (2011)		75.5%
Burundi	57.5 (2011)	26.9	32.4 (2011)	30.3	60.3%	95%			75%	78.5%
Cameroon	32.6 (2011)	29.0	23.5 (2011)	115.8	63.6%	87%		60% (2010)		65.6%
Cape Verde	21.4 (1994)	64.0	16.7 (2005)	74.7	77.5%	95%				
Central African Rep	40.7 (2011)	30.0	27.0 (2011)	98.3	53.8%	47%				47.04%
Chad	38.7 (2010)	7.4	28.3 (2010)	152	22.7%	46%		20% (2011)		24.7%
Comoros	32.1 (2012)	44.8	31.6 (2012)	74.4	82.2%	80%			100%	
Congo	25 (2012)	47.5	18.2 (2012)	125.5	92.5%	90%		25% (2010)		17.0%
Côte d'Ivoire	29.6 (2012)	20.7	22.2 (2012)	135.1	59.4%	67%		7% (2010)		79.5%
Democratic Republic of the Congo	42.6 (2014)	22.6	27.7 (2014)	124.3	80.4%	80%				46.8%
Djibouti	33.5 (2012)	30.5		23.1	87.4%	78%		50% (2004)		20%
Egypt	22.3 (2014)	63.1	12.6 (2014)	54.6	78.9%	94%				7.6%
Equatorial Guinea	26.2 (2010)	22.9	33.8 (2011)	114.3	68.3%	24%				73.9%
Eritrea	50.3 (2010)	19.4	28.5 (2002)	61	34.1%	94%				52.2%
Ethiopia	40.4 (2014)	34.4	24.3 (2014)	67.1	10.0%	77%			25%	72.8%
Gabon	17.5 (2012)	41.7	26.5 (2012)	111.2	89.3%	70%				68.8%
Gambia	23.4 (2010)	23.7	21.5 (2010)	115.8	56.6%	96%		50% (2012)		53.2%
Ghana	18.8 (2014)	27.0	32.7 (2014)	70.3	68.4%	98%		37% (2011)		81.2%
Guinea	31.3 (2012)	13.8	21.9 (2005)	145.9	45.3%	51%			42%	
Guinea-Bissau	27.6 (2014)	16.4	6.0 (2010)	99.1	43.0%	80%				83.5%
Kenya	26 (2014)	51.8	18.6 (2014)	94.2	43.8%	80%			50%	67.2%
Lesotho	33.2 (2014)	52.0	18.4 (2014)	90.5	61.5%	96%		29% (2004)		71.9%
Liberia	32.1 (2013)	15.4	31.1 (2013)	117.4	46.3%	50%		27% (2011)		52.0%
Libya	21 (2007)	58.4	27.0 (2007)	6.3	99.8%	94%				
Madagascar	49.2 (2009)	45.2	19.0 (2009)	122.8	44.3%	73%		11% (2011)	10%	3.9%
Malawi	42.4 (2014)	50.3	19.4 (2014)	140.2	71.4%	91%		130	50%	63.7%
Mali	38.5 (2006)	11.6	26.0 (2013)	178.8	56.1%	77%				26.1%
Mauritania	22 (2012)	15.5	31.1 (2011)	82.3	65.1%	84%		31% (2005)		11.5%
Mauritius	13.6 (1995)	75.7	3.5 (2002)	29.2	98.4%	97%				
Mozambique	43.1 (2011)	16.3	28.5 (2011)	153.7	54.3%	78%				91.3%

Country	Proportion of stunting under 5 years	Contraceptive prevalence rate (2014 estimates)	Unmet need for family planning	Adolescent fertility rate (births per 1,000 women) (2010-2015 estimates)	Proportion of births attended by skilled health personnel (2009-2013)	Proportion of infants 12-23 months immunized against DPT3 (2014)	Percentage of the allocation on budget line for RMNH expended	No. of facilities per 500,000 providing emergency obstetric care	Proportion of districts that have established and functional MDSR system	Percent of HIV-infected pregnant women who have received ART to reduce risk of PMTCT (2014)
Namibia	23.1 (2013)	58.3	17.5 (2013)	79.8	81.4%	88%			50%	114.0%
Niger	43 (2012)	15.0	16.0 (2012)	208.5	29.3%	68%		29% (2010)		
Nigeria	32.9 (2014)	16.6	18.9 (2011)	117.1	38.1%	66%		20	21.6	29.2%
Rwanda	44.3 (2011)	53.2	20.8 (2011)	29.9	69.0%	99%			100%	108.0%
Sahrawi Arab Democratic Republic	25.2				63.6%	86%				65%
São Tomé and Príncipe	31.6 (2009)	41.1	37.6 (2009)	88.6	81.7%	95%				
Senegal	19.4 (2014)	15.3	29.3 (2013)	87	65.1%	89%				53.0%
Seychelles	7.9 (2012)			60		99%				
Sierra Leone	37.9 (2013)	9.7	25.0 (2013)	125.3	59.7%	83%		24% (2008)		
Somalia	25.3 (2009)	24.1		110.4	33.0%	42%		56% (2005)		2.5%
South Africa	23.9 (2008)	65.1	13.8 (2004)	50.9	91.2%	70%			100%	108.5%
South Sudan	31.1 (2010)	7.5	26.3 (2010)	78.1	19.4%	39%		24%		17.6%
Sudan	38.2 (2014)	15.1	28.9 (2010)	84	23.1%	94%		35% (2005)		4.5%
Swaziland	31 (2010)	64.5	13.0 (2010)	86.4	82.0%	98%			100%	99.2%
Tanzania	34.8 (2011)	39.7	25.3 (2010)	122.7	48.9%	97%	6%		100%	89.8%
Togo	27.5 (2014)	19.7	33.6 (2014)	91.7	59.4%	87%			50%	87.4%
Tunisia	10.1 (2012)	65.4	7.0 (2012)	6.8	98.6%	98%				75%
Uganda	33.7 (2011)	34.4	34.7 (2014)	126.6	57.4%	78%				92.1%
Zambia	40.0 (2014)	48.4	21.1 (2014)	103.3	46.5%	86%		60% (2009)	100%	85.8%
Zimbabwe	27.6 (2014)	61.1	10.4 (2014)	113.3	66.2%	91%				78.2%

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