The 2025 report of the *Lancet* Countdown to 2030 for women's, children's, and adolescents' health: tracking progress on health and nutrition

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Executive summary

In line with previous progress reports by Countdown to 2030 for Women's, Children's, and Adolescents' Health, this report analyses global and regional trends and inequalities in health determinants, survival, nutritional status, intervention coverage, and quality of care in reproductive, maternal, newborn, child and adolescent health (RMNCAH) and nutrition, as well as country health systems, policies, financing, and prioritisation. The focus is on low-income and middle-income countries (LMICs) where 99% of maternal deaths and 98% of child and adolescent deaths (individuals aged 0–19 years) occur, with special attention to sub-Saharan Africa and South Asia.

Recognising the urgency of reaching the Sustainable Development Goal (SDG) for health, SDG 3, and health-related targets by 2030, the report assesses whether the momentum needed to reach these goals has been sustained, accelerated, stagnated, or regressed in comparison with the Millennium Development Goal (MDG) period (2000–15). Although most health and health-related indicators continue to show progress, there has been a notable slowdown in the rate of improvement after 2015, falling well short of the pace needed to achieve the 2030 SDG targets. This deceleration in pace contrasts sharply with the aspired grand convergence in health, characterised by drastic reductions in mortality and RMNCAH inequalities, which was expected to occur during the SDG period based on the assumption that the spectacular progress achieved during the MDG period would continue unabated. Multiple threats, external and internal to the RMNCAH health community, must be addressed to safeguard the gains in RMNCAH and nutrition and to accelerate progress. Furthermore, a large gap between sub-Saharan Africa, especially West and Central Africa, and other parts of the world persists for many indicators, necessitating further prioritisation of this region.

Deteriorating context for women's, children's, and adolescent's health

The global health and development agenda, including RMNCAH and nutrition, is facing major obstacles. Economic trends are of great concern, including slowing economic growth, stagnating poverty reduction, and a major debt crisis. In 2021, 25 (58%) of 43 countries with data in sub-Saharan Africa spent more on public external debt servicing than health. Additionally, the pace of improvements in education and gender equity has slowed since 2015.

More countries are affected by armed conflicts and high numbers of battle-related deaths. In 2022, an estimated 327 million women and 507 million children lived near conflict zones, representing a 29% increase for women and a 24% increase for children since 2015. The number of women and children younger than 18 years uprooted by conflict increased from 46·3 million in 2015 to 80·7 million in 2023. Food insecurity has risen during the SDG period, fuelled by the COVID-19 pandemic, economic volatility, and armed conflict. Climate change, with its associated consequences of extreme weather events, infrastructure destruction, food insecurity, emerging diseases, and altered disease transmission patterns, poses a severe threat to women's, children's, and adolescents' health.

These crises and challenges are exacerbated by, and often contribute to, vast inequalities between and within countries. Women, children, and adolescents living in the least favourable social and economic environments, where multiple dimensions of inequality intersect, are the most vulnerable to the consequences of these challenges.

Progress in mortality and nutritional status but insufficient pace

The analyses of this report consider maternal mortality and deaths of individuals aged between 28 weeks of gestation and 20 years, recognising the importance of the first two decades of life. Although mortality for all age groups in this range generally continued to decline during the first half of the SDG period, the average annual rates of reduction in stillbirth, maternal, newborn, child, and adolescent mortality in low-income countries (LICs) and lower-middle-income countries during

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2016–22 were generally in the range of 2% to 3%. This rate is much lower than the pace of decline during 2000–15 and far below the pace needed to achieve the SDGs. The SDG mortality targets are particularly remote for countries in sub-Saharan Africa. Exceptions are upper-middle-income countries, which have already achieved the SDG targets as a group, and the region of South Asia, where mortality continued to decline rapidly, particularly for under-5 mortality.

Mortality due to leading infectious causes of child deaths, such as acute respiratory disease and diarrhoea, continued to decline globally, except for malaria. Neonatal deaths, a subgroup of all deaths younger than 20 years, increased in all regions, as neonatal mortality rates declined slower than rates at older ages, with preterm birth as the leading cause of these neonatal deaths.

Undernutrition in children, adolescents, and women has declined during the SDG period in most regions and country income groups at a similar pace as during the MDG period in LICs and sub-Saharan Africa, and accelerated in pace in lower-middle-income countries and South Asia. Most countries, however, are not on pace to achieve the SDG targets and particularly slow progress on reducing low birthweight prevalence is striking. At the same time, obesity rates in older children and adolescents (ie, individuals aged 5–19 years) and women increased rapidly in all regions and country income groups, a concerning trend with potential long-term and costly health implications.

Improving coverage, reducing inequalities, and major quality of care gaps

Ensuring high coverage of essential interventions is crucial to achieve the SDGs. However, coverage for 20 indicators along the RMNCAH and nutrition continuum of care is uneven. For most indicators, coverage was higher in 2016–23 than during the MDG period (2000–15), but is still inadequate. Skilled birth attendance reached the highest coverage, with a median of 95·6% (IQR 76·5–99·5) for 113 LMICs.

Comparing the MDG and SDG periods, there was a general slowdown in the increase of the RMNCAH composite coverage index (CCI), with progress reducing from 1·2 percentage points per year to 0·6 percentage points per year, based on 70 countries with sufficient survey data before and since 2016. The slowdown was most pronounced in Eastern and Southern Africa. West and Central Africa, the region with the lowest coverage in 2000–15, was the only region with an acceleration, from an annual increase of 0·6 percentage points per year during the MDG period to 1·6 percentage points per year from 2016.

Coverage inequalities between the poorest and richest households narrowed during the SDG period, with a CCI reduction of 2·0 percentage points per year, almost two-times faster than during the MDG period. However, subnational inequalities remained large in many countries, implying that many countries can make substantial progress by increasing focus on the regions that are lagging behind.

Monitoring progress in quality of care is challenging, given data limitations. Progress has been made in the content and timeliness of antenatal care in many countries and in the continuity of maternal and newborn care. Only small increases were observed in caesarean section prevalence in the poorest women: survey data showed that the median prevalence in 19 LICs increased from 1·4% in 2010 to 2·1% in 2019, indicative of a large unmet need for emergency care. This slow progress is occurring at the same time as escalating caesarean section rates in the wealthiest women in many countries.

Slow health systems progress

Country policy frameworks reflect prioritisation of RMNCAH and nutrition as well as commitment to protect the human right to health. Adoption of human-rights-based policies is far from universal across LMICs. Many countries are also falling behind in implementing broader protective legislation with major implications for RMNCAH and nutrition, such as child marriage laws, protection of sexual and reproductive health and rights, and commercial regulations, particularly around breastmilk substitutes and unhealthy foods.

Indicators of health financing, workforce, and information systems indicate slow progress in health system strengthening. Current health expenditure per capita has increased overall since 2015, but at a slow pace, and no increase was observed in LICs. Health workforce densities per 10 000 population increased slightly, but were still low; LICs and lower-middle-income countries have a seventh and a third, respectively, of the density of core health professionals (ie, doctors, nurses, and midwives) of upper-middle-income countries. Major obstacles to improving health workforce statistics include high rates of emigration to high-income countries, attrition of health workers to other sectors, and fiscal constraints to support training, remuneration, and career progression.

There have been improvements in the use of routine health facility data and data generated through rapid health facility assessments. However, donor-funded household surveys remained the mainstay for key RMNCAH and nutrition statistics, providing high-quality information about population health, whereas civil registration and vital statistics systems remained inadequate in most countries.

LMICs are undergoing demographic and epidemiological transitions at varying paces, with implications for their health systems. For example, as child mortality becomes predominated by small and sick newborn mortality, countries need to invest in neonatal intensive care units while maintaining strong primary health-care facilities that provide essential packages of services to all women, children, and adolescents. Countries in sub-Saharan Africa, where fertility remains

high and more than half of the population is younger than 20 years, have the added pressure of needing to shore up their health systems to meet increasing demands. Further improvements in survival and health will require further system strengthening, especially access to secondary levels of care, which is challenging in the context of macroeconomic developments affecting country health budgets, but could benefit from innovations in the provision of services.

Decrease in global prioritisation and financing of RMNCAH and nutrition

Aid for RMNCAH increased slowly after 2015 but decreased in 2020–21, most likely because of a shift in funding towards pandemic response. Over the MDG and SDG periods, traditional large donors remained mostly stable until 2021. The targeting of aid to countries with greater health needs remained at a similar level to that of 2015. Donor aid flow should be considered against crippling debt servicing liabilities that many countries are facing, severely affecting their ability to adequately finance health services for RMNCAH and nutrition.

A range of factors, both external and internal to the RMNCAH health community, have reduced global prioritisation of RMNCAH in the SDG era. Although most analyses suggest that COVID-19 crowded out funding for RMNCAH, evidence and perceptions on the effects of advocacy and funding for universal health coverage on RMNCAH and nutrition are mixed. The broader landscape of fiscal constraints, climate change, the wars in Ukraine and Gaza, and waning commitment to multilateralism has also dampened RMNCAH visibility. Underfunded coordination platforms combined with the absence of a compelling unified framing has contributed to fragmentation of the RMNCAH community and, consequently, less collaboration on supporting the full continuum of care.

Conclusions and future directions

To address slowdown in RMNCAH and nutrition progress in the first half of the SDG era, as well as variations in progress across regions and country-income groups, we hope that this report's analyses will fuel dialogue and action needed to ensure acceleration of progress in women's, children's, and adolescents' health. Our recommendations fall into five themes (panel).

The challenge ahead is for the RMNCAH community to develop a persuasive framing in a changed context that would inspire unified action across all partners ranging from grassroots organisations to international actors.

Panel: **Key recommendations**

Explicit focus on sub-Saharan Africa

Economic challenges, armed conflict, and food insecurity are disproportionately concentrated in sub-Saharan Africa, a region already burdened by weak health systems and high levels of poverty. West and Central Africa, in particular, lags in nearly all indicators of reproductive, maternal, newborn, child, and adolescent health (RMNCAH) and nutrition. Increased prioritisation of sub-Saharan Africa, where fertility is high and more than 50% of the population is younger than 20 years, is essential. A major initiative led by regional institutions and countries with strong global support is needed.

Strengthening health systems for RMNCAH and nutrition

Priority strategies should focus on improving workforce density and distribution, including approaches to address health worker emigration and attrition, protecting country health budgets from fiscal constraints, innovations in commodities and service delivery strategies, and quality of care improvements. Implementation of these strategies will require increases in financing, including greater domestic financing for RMNCAH and nutrition as well as commitment from external donors to support countries in greatest need.

Safeguarding progress against crises

The most pressing need is for action that safeguards health, education, and social protection services for women, children, and adolescents in countries affected by economic downturns and debt servicing agreements and disasters related to conflict, environmental change, and epidemics.

Monitoring and accountability

The analyses of this report exposed major data gaps, including for maternal mortality, causes of death for all age groups, morbidity in children, adolescents, and women, quality of care, and health system and policy indicators. Overcoming these gaps requires sustained global and country-level investments in health information systems as well as methodological innovations, such as remote data collection approaches, some of which were galvanised by the COVID-19 pandemic. To guide policy making, within-country health information should be disaggregated by gender, place of residence, socioeconomic position, ethnicity, and other relevant equity dimensions. Data-driven accountability for all stakeholders, an imperfect but seminal pillar of the MDG era, must be reinvigorated.

Revitalising RMNCAH and nutrition

Enhanced global coordination and compelling ideas about why women, children, and adolescents should remain at the core of health and development agendas are needed to drive collective action and sustain progress. These efforts should include building a narrative around emerging global priorities, such as universal health coverage and the non-communicable disease agenda, showing that reaching women, children, and adolescents with high-quality services is central to both achieving universal health coverage and preventing non-communicable diseases. Similarly imperative are arguments about how RMNCAH and nutrition should be at the centre of dialogues on other priorities, such as climate change, given that women, children, and adolescents are highly impacted, with long-term and potentially intergenerational effects.

Introduction

Countdown to 2030 is a collaboration of academics from global, regional, and national institutions, UN agencies, the World Bank, and civil society organisations. Since its inception in 2005, Countdown to 2030 has focused on tracking service coverage, inequalities, and health systems for reproductive, maternal, newborn, child, and adolescent health (RMNCAH) and nutrition (appendix p 1).[1,2] This report of the Countdown to 2030 for women's, children's, and adolescents' health provides an empirical assessment of progress in RMNCAH in the first half of the Sustainable Development Goal (SDG) period (2016–23).

As the world transitioned from the Millennium Development Goals (MDGs) to the SDGs in 2015, there

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See **Online** for appendix

For more on **Countdown** see https://www.countdown2030.org/

For more on the **2030 Agenda for Sustainable Development** see https://sdgs.un.org/2030agenda

was widespread optimism regarding the potential acceleration of progress towards ambitious targets for mortality reduction and health improvements by 2030. Along with substantial achievements in poverty reduction, major improvements in health and social services resulted in large reductions in maternal and child mortality. Infectious disease morbidity and mortality declined rapidly, driven by a scale-up of existing and new preventive and curative interventions, and child nutrition had improved substantially by 2015.[3–5] Several countries made spectacular progress in RMNCAH and nutrition during the MDG period (2000–15), surpassing expectations based solely on markers of these countries' economic development.[6–9] A "grand convergence" in health, where preventable mortality is largely eliminated and RMNCAH inequalities are drastically reduced, was considered feasible.[10]

However, 8 years later in 2023, reports on progress towards the 2030 targets present a sobering reality. The UN reports on progress towards the comprehensive 2030 Agenda for Sustainable Development reflect the current reality and call for a rescue plan for people and the planet.[11] Several reports from UN health agencies have also flagged the faltering progress towards the 48 child-related SDG indicators for 2030[12] and the 17 targets of the Global Strategy for Women's, Children's, and Adolescents' Health.[13] The global health and development agenda faces numerous challenges, often collectively labelled as a polycrisis, which include intensifying impacts from climate change, increased armed conflict, economic uncertainty and growing public debt, lingering consequences of the COVID-19 pandemic, and concerns about future pandemics. Changing political climates in many contexts also threaten a human rights agenda, potentially undermining commitments to universal health coverage and gender equality. These crises and challenges are aggravated by and often contribute to persistent large inequalities between and within countries. Others have argued that the SDGs and its over 200 targets, as well as the universal health coverage agenda, are too broad, and have thus undermined the required prioritisation of women's, children's, and adolescents' health.[14,15]

Recognising the imperative of reaching the 2030 health and health-related targets within the SDGs, this report uses all available data to evaluate whether the momentum needed to achieve them has been sustained, accelerated, stagnated, or regressed in comparison with the MDG period.

Approach

This report is organised into six sections. Section 1 delineates the changes in context affecting the health of women, children, and adolescents—including population dynamics, socioeconomic change, power asymmetries (eg, gender inequalities), armed conflict, food insecurity, climate change, and pandemics. Section 2 presents a synthesis of trends in maternal mortality, neonatal, child, and adolescent mortality, and nutritional status. Section 3 explores trends in health intervention coverage, quality of care, and related inequalities. Section 4 provides a brief assessment of country-level health systems and supportive policies to strengthen RMNCAH. Section 5 examines global financing and trends in global prioritisation of RMNCAH. The final section of this report synthesises the findings and considers key implications for global, regional, and national strategies.

This report focuses on 134 low-income and middle-income countries (LMICs), where 99% of maternal deaths and 98% of child and adolescent (ie, individuals aged 0–19 years) deaths occur.[16,17] According to the 2022 World Bank classification of economies, there were 26 low-income countries (LICs), 54 lower-middle-income countries, and 54 upper-middle-income countries (appendix pp 2–5).[18] For analyses involving country groupings, we used the UNICEF classification of seven regions: West and Central Africa, Eastern and Southern Africa, Middle East and North Africa, Eastern Europe and Central Asia, East Asia and Pacific, South Asia, and Latin America and the Caribbean (appendix p 5). Special attention is paid to sub-Saharan Africa and South Asia, which collectively accounted for 88% of global maternal deaths in 2020 and 81% of child and adolescent deaths in 2021. Because the highest fertility rates, poorest health indicators, weakest health systems, and most challenging socioeconomic conditions are concentrated in the 48 countries in sub-Saharan Africa, this report at times refers to and distinguishes between the two UNICEF subregions within sub-Saharan Africa: Eastern and Southern Africa (24 countries) and West and Central Africa (24 countries). Seychelles was excluded as a high-income country. Globally, sub-Saharan Africa accounts for 15% of the global population (2022),[19] 31% of the world's births (2022), 56% of child and adolescent deaths (2021),[20] and 72% of maternal deaths (2020),[21] meaning that child, adolescent, and maternal deaths are disproportionately concentrated in this region (figure 1). 22 (46%) of the 48 countries in sub-Saharan Africa are LICs, 22 (46%) are lower-middle-income countries, and two (4%) are upper-middle-income countries (appendix p 6).

The progress assessment presented in this report is primarily based on analysis and synthesis of data from national household surveys and global databases maintained by UN agencies and research institutions, complemented by relevant published research. The report focuses on comparisons between the trends from 2000 to 2015 (ie, the MDG era) and those observed from 2016 to the present day (ie, the first half of the SDG period). The eventual time period used (for the first half of the SDG period) was dictated by data availability, which varies between indicators in this report. All regional and country income group estimates are population-weighted unless stated otherwise.

Section 1: a changing context for women's, children's, and adolescents' health

The health of women, children, and adolescents in LMICs is influenced by complex, interconnected determinants. Population dynamics, economic factors, education, power asymmetries (eg, gender inequity), armed conflicts, food security and food environments, climate change, geopolitical shifts, national politics, and technological advancements interact in intricate ways, shaping health systems and posing various health risks for women, children, and adolescents. Each determinant can influence morbidity and mortality risks, often through multiple pathways and interactions.

In this section, we discuss the importance of contextualising women's, children's, and adolescents' health within the framework of these interconnected drivers. Drawing on global, regional, and country-level monitoring and research, the current situation and key trends in major determinants of RMNCAH and nutrition are synthesised for the period from the inception of the SDGs in 2016 and, where feasible, compared with the trends of 2000–15. For each determinant, mortality and morbidity risks are considered, followed, where available, by an assessment of exposure trends, drawing on various international databases and research.

Population dynamics

High fertility, through its association with maternal age, parity, and birth intervals, is an individual-level risk factor for poor maternal and child health outcomes.[23] Countries with high fertility and young populations require greater investments in RMNCAH than those with lower fertility and fewer young people.

Total fertility rates have declined faster since 2016 than 2000–15 in all country income groups and in countries in sub-Saharan Africa (appendix p 7). However, large regional fertility differences persist. In 2022, LICs and countries in sub-Saharan Africa had at least three-times higher crude birth rates and total fertility than upper-middle-income countries.[22] Adolescent fertility has also declined since 2016, but was still 94 per 1000 women aged 15–19 years in 2023 in sub-Saharan Africa.

Figure 2 shows the proportion of the population younger than 20 years by region in 2000, 2015, and 2021. In the two subregions of sub-Saharan Africa, over half of the population was younger than 20 years by 2021, with slow reduction over time implying a need for much greater investments in RMNCAH and nutrition than in other regions.

Urbanisation has continued at a steady pace since 2015, mirroring the trends observed during the MDG period. From 2015–20, the average annual rate of increase of the urbanisation rate was 1·2–1·4% in LMICs, sub-Saharan Africa, and South Asia (appendix p 7). Major contributors to urbanisation in these countries and regions are growth of the predominantly young urban population, incorporation of peripheral areas to urban centres, and rural to urban migration.[24,25] In 2020, urbanisation rates varied widely across the income groups: 33·2% in LICs, 41·6% in lower-middle-income countries, and 68·2% in upper-middle-income countries.[19] 2020 urbanisation rates were 41·4% in sub-Saharan Africa and 36·6% in South Asia.

Urban settings typically offer health and socioeconomic advantages compared with rural settings, contributing to improved child survival, child growth, and coverage of health interventions.[26] However, recent evidence indicates diminishing benefits of urban living in most regions. Neonatal and child mortality declines are stagnating in urban areas and rural–urban gaps are narrowing, especially in sub-Saharan Africa.[27] This trend is largely attributed to a substantial proportion of urban dwellers residing in informal settlements and slums,

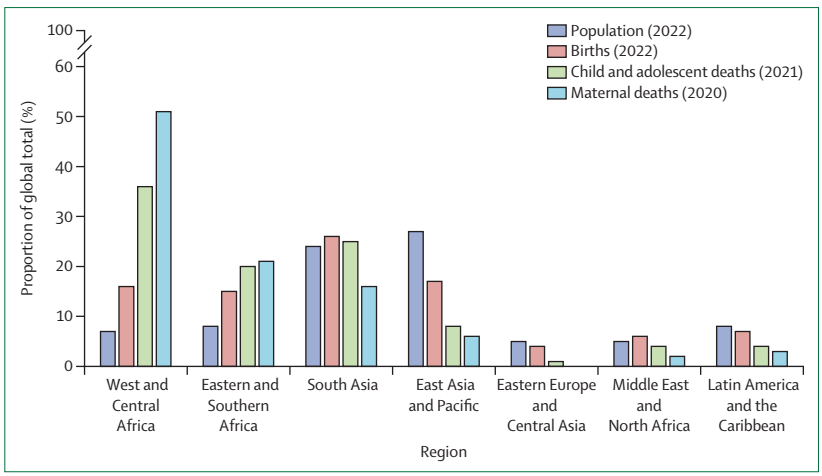

Figure 1: **Distribution of global population, births, child and adolescent deaths, and maternal deaths, by region in 2020–22**

Data on population and births sourced from UN Department of Economic and Social Affairs, Population Division.[22] Data on child and adolescent (ie, individuals aged 0–19 years) deaths sourced from UN Interagency Group on Child Mortality Estimates.[17] Data on maternal deaths sourced from WHO.[16]

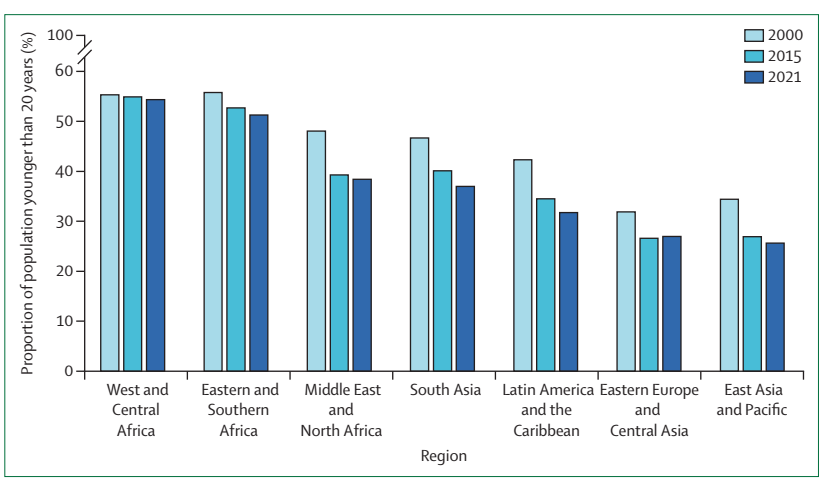

Figure 2: **Proportion of population younger than 20 years**

Data sourced from UN Department of Economic and Social Affairs, Population Division.[22]

resulting in increased morbidity and mortality risks through overcrowding; inadequate access to basic services, such as safe water, sanitation, and electricity; and decreased coverage of quality maternal, newborn, and child health services.[28–30]

In summary, sub-Saharan Africa's demographic profile contrasts sharply with other regions of the world. The demographic reality must remain central to universal health coverage strategies. Even if fertility declines in sub-Saharan Africa accelerate, a substantial proportion of the health budget must be directed towards RMNCAH and nutrition in the forthcoming decades to address increased service needs. In addition, as rapid urbanisation continues in sub-Saharan Africa and South Asia, there is a pressing need for a much greater focus on the urban poor in local and global health initiatives.

Economic threats

Economic growth was a pivotal driver of country-level progress in maternal and child survival in the MDG era, intertwined with improvements across a broad array of health system, social, and environmental determinants.[31] At the household level, poverty is one of the most important determinants of mortality and coverage of health interventions in children.[32,33] At the macro level today, declines and slowdowns in economic growth are contributing to growing fiscal pressures and threatening government spending in LMICs, including health spending. These economic trends have been precipitated by, among other factors, the COVID-19 pandemic and escalating government debts, and are further complicated by stagnating levels of external aid.[34]

Economic growth in LICs slowed from 2·3% per year in 2000–15 to 0·6% per year in 2016–22. Similarly, growth in middle-income countries slowed by about a third after 2015, to 2·6% per year in lower-middle-income countries and 3·2% per year in upper-middle-income countries.[35] Globally, the proportion of people living in extreme poverty has remained at around 9%, with little change since 2018 (appendix pp 8, 9).[36]

Although central government health spending increased by more than a fifth from 2020 to 2021, the added funds were primarily directed towards national COVID-19 responses.[37] External aid for RMNCH was slightly higher in 2020–21 than in the preceding years (as discussed later). The extent to which domestic financing of RMNCAH programmes was affected by the pandemic is less clear.

Burgeoning public and publicly guaranteed external debts have become a crucial issue for national budgets.[34] For instance, in LICs, servicing the public external debt cost 1·5% of gross national income in 2015 but soared to 3·1% in 2022 (appendix p 10). Evidence of a link between increased debt burden and decreased government health spending is still scarce,[38,39] but there is little doubt that reductions in public budgets will eventually have a negative impact on health and other sectors. The number of countries allocating more funds to external debt servicing than health increased from 33 in 2010 to 54 in 2019.[40] One projection showed that 59 (47%) of 125 LMICs were expected to cut their health budgets by 2024.[41]

Sub-Saharan Africa is economically the most vulnerable region. Extreme poverty affected 36·7% of the region's overall population in 2019 (the year of the latest regional estimate by the World Bank[36]), making extreme poverty far more common here than in any other region of the world. Economic growth slowed from 2·1% per year in 2000–15 to a negative growth rate of –0·4% per year in 2016–22. Rising public external debt is threatening health and social expenses. 25 (58%) of 43 countries with data in sub-Saharan Africa spent more on public external debt servicing than health in 2021, an increase from 12 (28%) countries in 2010.[42,43] Health budgets are at risk in many countries, as evidenced by a 17% health budget cut in Ghana for 2023–26.[44]

Economic threats are a major concern for RMNCAH and nutrition, especially the debt crisis. A fiscal conundrum coincides with a precarious moment for governments. On the one hand, all countries are expected to accept additional responsibilities in global health security and climate change mitigation. Yet at the same time, debt servicing commonly involves austerity measures, often prescribed by the International Monetary Fund, which affect general public expenditure, but are deemed inadequate to safeguard health care, education, and social protection.[45,46] As a result, governments are facing growing threats to fiscal space for health budgets.

Education progress

Education has a major effect on the survival and health of women, children, and adolescents, both directly and in association with other determinants, such as economic status.[47–52] There are strong correlations between parental education and child survival.[53]

Primary and upper secondary school completion rates increased between 2010 and 2015 and have continued to increase since 2015, albeit at a slower rate, according to survey-based and census-based global estimates (appendix pp 11,12).[54] By 2022, however, LICs still only had 59% completion rates for primary school and 19% for upper secondary school. The COVID-19 pandemic appeared to have little effect on these global estimates, even though surveys have shown adverse effects on education in several LMICs, which disproportionately affect poorer children[55] and have long-term adverse learning consequences.[56]

In sub-Saharan Africa, schooling rates were much lower than all other regions and increases were slow. Upper secondary education completion rates were 28% in 2022, with minor differences between girls (26%) and boys (29%). Regional progress was slow at an average annual rate of change of 1·5% per year from 2016–22, comparable to that of the final 5 years of the MDG period (1·3%).

Gender parity in completion of primary education was achieved across the three country income groups by 2015. The gender gap in completion of secondary education has declined steady, with female-to-male ratios increasing from 69 in 2010, to 78 in 2015, and 90 in 2022. Lower-middle-income countries achieved near parity in secondary education completion (female-to-male ratio 99) by 2022, whereas upper-middle-income countries exhibited a lag in boys (female-to-male ratio 118). The progress in South Asia—the region with the greatest educational gender gaps in 2010—was remarkable: the female-to-male ratio for secondary education increased from 79 in 2010, to 87 in 2015, and 95 in 2022.

The continued improvements in educational levels and gender parity since 2015 are encouraging, but the pace of increase is slow in sub-Saharan Africa. Data availability on the quality of education is less complete than for completion rates. However, other assessments have shown major deficiencies in education quality, further aggravated by COVID-19-related learning losses.[55]

Gender inequalities

Gender equality and women's empowerment are integral components of the SDGs. Girls and women encounter numerous social, economic, and cultural barriers that affect their health and wellbeing and have intergenerational effects. Population-level indicators, such as female education, political participation by women, and female labour participation, are positively associated with child survival.[57–59] Similarly, at the individual level, increased women's autonomy and social independence are strong predictors of child survival, growth, and health intervention coverage.[57,60–63]

Global gender indexes and indicators—eg, intimate partner violence, female genital mutilation (FGM), child marriage, income inequalities or gender pay gaps,[64] and mobile phone ownership[65,66]—offer insights into progress towards gender equality. These analytical approaches are useful for tracking general trends, but have limitations in terms of identifying the structural drivers of inequities, including gender power relations and intersectionality between gender, race and ethnicity, and socioeconomic status.[67]

Various global indexes that track country-level progress[68–72] provide evidence of major gender gaps and slow progress since 2015, with large differences between countries and LMICs disproportionately affected. A survey-based empowerment measure based on three female empowerment domains (ie, attitude to domestic violence, social independence, and decision making)[63] showed that progress in recent years has slowed in comparison with 2000–15 (appendix pp 12,13). There is increasing evidence that the human rights and gender equity agenda, including sexual and reproductive health and rights, is stalling or reversing due to political and social polarisation in a growing number of countries.[73]

Violence against women is a major human rights violation and takes many forms, ranging from rape, trafficking, honour killings, FGM, forced or early marriage, and physical, sexual, or emotional intimate partner abuse.[74] Global estimates of the prevalence of physical and sexual intimate partner violence in the last 12 months in women aged 15–49 years suggest a modest decline, from 16% in 2000 to 13% in 2018. Intimate partner violence was more common in sub-Saharan Africa (20%) and South Asia (19%) than in most other regions of the world.[75] Despite major concerns about the impact of the COVID-19 pandemic on intimate partner violence, a systematic review and meta-analysis did not find a substantive change in prevalence compared with pre-pandemic global prevalence estimates.[76]

FGM is a harmful non-medically indicated procedure with multiple physical and mental health consequences.[77] The SDGs call for an end to the practice by 2030. No recent comparable estimates of FGM incidence and prevalence trends were available.[78] Based on national household surveys during 2011–21 in 14 countries in sub-Saharan Africa, pooled prevalence in girls aged 0–14 years in 14 countries was 22·9%, ranging from 1·2% in Benin to 68·5% in Mali.[79] There is some evidence that FGM is declining in young girls and women (aged 15–49 years).[80] However, the reasons for this decline are unclear given the heterogeneity of the practice between and within countries and the complex interaction of educational changes, FGM policies, and other factors. The 2030 elimination target is still far off for many countries.

Legislation that confers equal rights around marriage is crucial for women's health and financial security, with spillover effects to their children. A 2024 global survey of 190 responding countries showed that 85 (45%) countries' marriage legislation constrained women's marital rights and that 139 (73%) countries did not have adequate legislation addressing child marriage, which encompasses minimum legal age limits and other issues around exceptions, penalties, and allowances for voiding child marriages.[64,81] Protective legislation can lower the prevalence of both child marriage and adolescent fertility.[82] Child marriage and early childbearing are closely associated, placing mothers and children at increased risk for many negative obstetric outcomes.[83,84]

Although child marriage is continuing to decline, progress remains slow and insufficient to reach the elimination target of the SDGs. The percentage of women aged 20–24 years who were married before age 18 years fell from 23% in 2012 to 19% in 2022 in LMICs, driven by a notable decline in South Asia. Sub-Saharan Africa now has the highest prevalence, with one in three girls marrying before their 18th birthday.[85,86] Major variations exist between and within countries in the region, with most countries with relatively high prevalence in West and Central Africa. Marriage in girls younger than 15 years has also declined, but was still at least 10% in 12 (32%) of

37 countries in sub-Saharan Africa that conducted national surveys in 2015 or later.

In summary, large gender inequalities are persisting and progress towards equity appears to have slowed down since 2015 according to several measures.

Armed conflict

Armed conflicts between and within states inflict profound suffering on women, children, and adolescents, affecting mortality, morbidity, and mental health. The impacts come from direct exposure to violence and indirect consequences associated with forced displacement and disruptions in essential services, such as food supply, health care, education, social protection, and water and sanitation infrastructure.[87,88] Countries experiencing conflict have poorer nutritional status indicators, lower coverage of essential health services, and greater health inequalities compared with non-conflict countries.[89–91] Analyses of excess mortality associated with living near conflict settings have shown increases in maternal, infant, and child mortality.[87,92]

For more on **Uppsala Conflict Data Program** see https://ucdp.uu.se/

Global conflict trends are extremely disconcerting. Data from the Uppsala Conflict Data Program compare annual averages for 2000–15 and 2016–22 and reveal substantial increases in the number of conflict-related events (from 113 to 170), the number of countries with conflict events (from 42 to 52), and the number of battle-related deaths (from about 59 000 to 117 000; appendix p 13).[93,94]

As the frequency and duration of armed conflicts have increased, so have the number of women and children living dangerously close to conflict-affected areas (ie, within 50 km). In 2015, an estimated 253 million women (14% of women globally) and 410 million children younger than 18 years (17% of children globally) lived close to conflict-afflicted areas. These figures were considerably higher in 2022, with 327 million women (17%) and 507 million children (20%) directly exposed to conflict globally (appendix pp 13,14).

The number of people forcibly displaced due to conflict—including refugees, internally displaced persons, and asylum seekers—nearly doubled from 60 million in 2015 to 110 million in mid-2023, representing 1·3% of the world's population.[95,96] Figure 3 presents a global map with the number of individuals displaced by country of origin in 2023, as well as the localisation of events that were associated with at least 25 battle-related deaths in a year during 2016–22 (appendix p14).

Nearly three-quarters of the people uprooted by conflict are women and children younger than 18 years. Based on a review of global data on the overall number of people displaced and available data on age–sex distribution for a subset of displaced individuals (appendix p 14), it is estimated that in 2022, 29% of the forcibly displaced individuals were women (aged 18 years and older) and 45% were children (aged 0–17 years). The number of women and children uprooted by conflict increased from 45 million in 2015–22 to 76·3 million, including 46·6 million children (1·9% of all children worldwide), in 2022 (figure 4).

Displacement often forces people into crowded and unsanitary living conditions, exacerbating risks of infectious diseases, acute and chronic malnutrition, mental health issues, and sexual violence.[87] Lack of access to health care due to scarce or no availability of quality services, discrimination, and insecurity further increases risks to women's, children's, and adolescents' health and wellbeing. Typically, these risks can only be reduced by a strong humanitarian response to provide essential women, children, and adolescent health services.[97,98]

Armed conflict is a major issue in sub-Saharan Africa. In 2022, 22 (45%) of 49 countries in sub-Saharan Africa experienced an armed conflict, up from ten (20%)

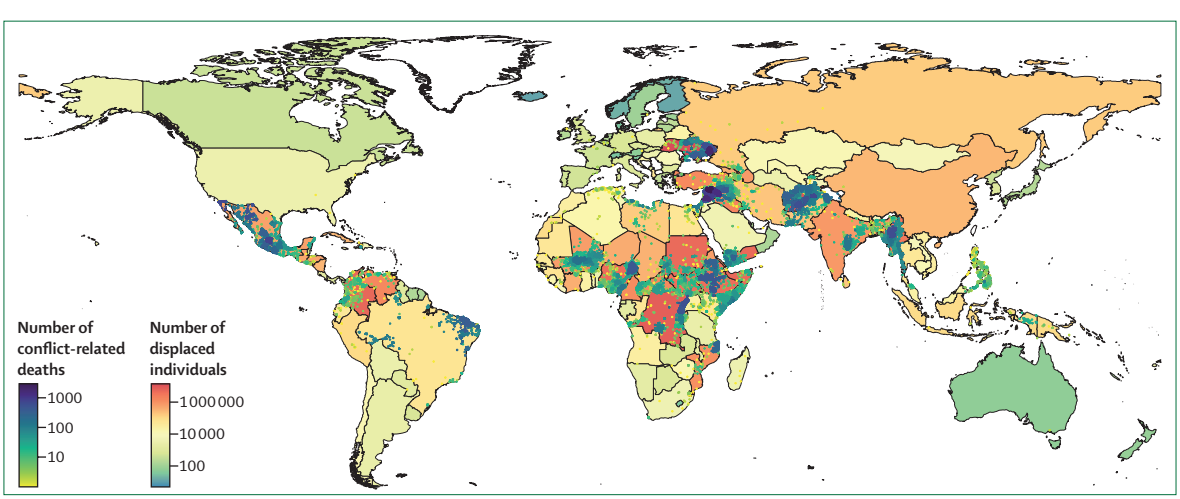

Figure 3: **Number of individuals displaced by country of origin in the most recent year (country shading), and the localisation of events (dots) that were associated with at least 25 battle-related deaths in a year during 2016–22**
Data sourced from Uppsala Conflict Data Program,[93] UN High Commissioner for Refugees,[95] and International Displacement Monitoring Centre.[96]

countries in 2015. In 2022, seven countries had severe conflicts, defined as at least 1000 battle-related deaths, including Democratic Republic of the Congo, Mali, Burkina Faso, and Nigeria in West and Central Africa, and Ethiopia, Somalia, and Sudan in the horn of Africa. By the end of 2022, sub-Saharan Africa accounted for 29% of global refugees and 45% of the world's internally displaced persons. The reported deaths due to violence are only indicative of the overall toll on women, children, and adolescents, as the indirect consequences of armed conflict, such as physical disability and mental health issues, are harder to quantify and typically not measured.[99]

The Middle East and North Africa region experienced its peak battle-related mortality in 2012–18 due to the Syrian civil war. The numbers of deaths surged again from October, 2023, after the eruption of the Gaza conflict. As of early 2024, more than 30 000 deaths have been reported by the Gaza Ministry of Health.[100,101] The majority of those deaths were civilians, mostly due to violence, and well over half were women, children, and adolescents.

In summary, global trends reveal escalating conflict-related events, with a substantial rise in battle-related deaths. Armed conflicts have dire and disproportionate effects on women, children, and adolescents, manifesting in increased mortality, morbidity, and mental health issues.[102,103]

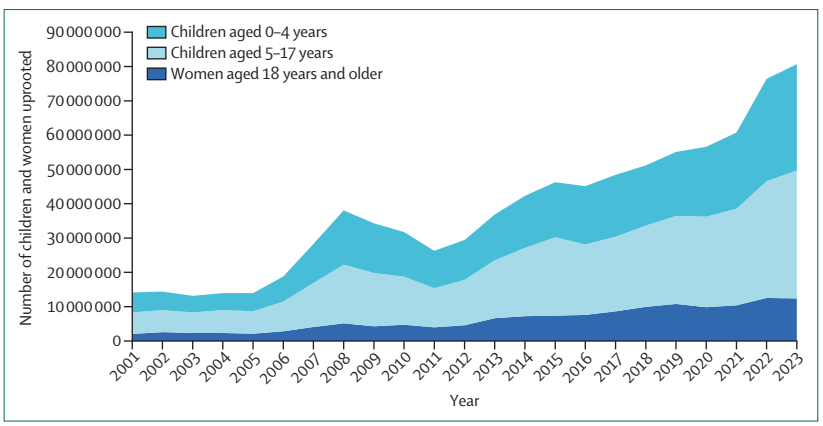

Figure 4: **Estimated number of children and women displaced due to conflict in 2001–23**
Data sourced from UN High Commissioner for Refugees[95] and International Displacement Monitoring Centre.[96]

Food insecurity and unhealthy food environments

Nutrition is a key driver of child survival, women's and adolescent's health, resistance to infections, and growth and development. Nutrition is particularly crucial during the first 1000 days of an individual's life: from conception to their second birthday.[104,105] Household food insecurity is a major determinant of undernutrition.

According to UN estimates,[106] severe food insecurity gradually increased in LICs from 21·3% of the population affected in 2014–16 to 25·7% in 2021–23, with the largest increase from 2019 to 2020 (appendix p 15). A similar upward trend was observed in lower-middle-income countries: increasing from 12·0% in 2014–16 to 17·6% in 2021–23.

Sub-Saharan Africa was the most affected region, with severe food insecurity increasing from 19·0% of the regional population in 2014 to 23·8% in 2022.[107] In South Asia, the second most affected region, severe food insecurity increased from 13·1% in 2014–16 to 19·4% in 2021–23.

Rising levels of food insecurity has been attributed to multiple overlapping shocks, including the COVID-19 pandemic, economic volatility, climate-related disasters and, most importantly, armed conflict.[108–12] In 2023, of the seven countries with more than 10% of the population facing the most severe phases of acute food insecurity—Palestine (Gaza Strip), South Sudan, Haiti, Afghanistan, Central African Republic, Somalia, and Sudan—all were fragile or conflict countries.[113] The pandemic adversely affected food security due to disruptions in food markets and household income, with vulnerable households most affected.[114–16] Globally, from 2015 to 2020, food prices were lower than in the preceding 5 years but surged in 2021 and 2022.[117] There was a gradual decline in 2023, but food prices were still 20% higher than during the 2014–2016 period.

Food environments are undergoing rapid transitions, with rural households across Africa and Asia becoming increasingly reliant on markets, rather than household-level food production.[106] Growing dependency on markets can substantially alter dietary intake and lead to increased consumption of energy-dense, ultra-processed foods that are relatively more affordable than nutritious foods.[118,119] The consumption of ultra-processed foods—which contain added sugars, oils and fats, salt, and other additives—is associated with obesity and diet-related non-communicable diseases in adults as well as inadequate micronutrient intake in children.[120] In 2022, the cost of a healthy diet was out of reach for 72% of people in LICs, 53% of people in lower-middle-income countries, and 22% of people in upper-middle-income countries.[106] The lack of affordability of a diverse diet combined with predatory commercial marketing practices puts women, children, and adolescents at an increased risk of multiple forms of malnutrition and diet-related illnesses.

Climate change

The nexus between health and climate change is being increasingly acknowledged, as underscored in a declaration on climate and health signed by over 120 countries at the 28th UN Climate Change Conference in November, 2023, in the United Arab Emirates.[121] Evidence on climate-related risks and exposure trends implies that the heaviest burdens will be borne by today's young people and future generations. Even with bold action, current commitments imply that the health risks, both direct and indirect, of climate change will escalate

For more on the **UN Climate Change Conference** see https://unfccc.int/cop28

For more on **Children in All Policies 2030** see https://cap-2030.org/

rapidly in the future.[122] Women and young children are particularly vulnerable to the impacts of climate-related environmental change, including extreme heat, air pollution, and increased vector populations, due to various biological and behavioural factors.[123–29]

Climate change is exacerbating the frequency and intensity of extreme weather and weather-related events, such as heatwaves, floods, severe storms, and wildfires, all of which pose life-threatening hazards, particularly to young children who depend on others to protect them.[126,130] The changing climate is also indirectly threatening children's lives. More frequent and more severe droughts are jeopardising food security, water security, and sanitation.[126,130] Altered weather conditions are also changing the environmental suitability for many infectious pathogens to which children are most vulnerable. These changes include expanding the transmission potential for malaria and dengue, as well as gastrointestinal pathogens.[130]

The impacts of climate change increase the risk of forced displacement or migration, which, unless adequately managed, can have profound impacts on the physical and mental wellbeing of children and adolescents.[131,132]

Climate hazards can also affect health through their macroeconomic repercussions, threatening governments and international resources for essential health services for women, children, and adolescents.[130] The multidimensional health impacts of climate change often compound each other and interact across environmental, socioeconomic, and epidemiological contexts, thereby undermining the foundations of children's health and wellbeing. With the most vulnerable communities worst affected, climate change is likely to exacerbate existing inequalities.

Although climate change affects the health of children, adolescents, and women everywhere, sub-Saharan Africa has been identified as one of the most vulnerable regions due to its climate sensitivity and limited ability to adapt to climate shocks. Most economies and households in sub-Saharan Africa rely heavily on rain-fed agricultural production, and both droughts and health-threatening temperatures are more common than in other regions.[122,133,134] The expanding transmission season and geographical range for disease vectors has increased the incidence of vector-borne diseases. Investments to increase countries' resilience against the consequences of climate change in sub-Saharan Africa have been small compared with most other regions of the world.

In summary, climate change poses grave direct and indirect threats to women and children's health, with rising risks of extreme weather events that can destroy infrastructure, disrupt services, cause food insecurity, and alter disease transmission patterns. To date, the impacts of climate change on child survival and health are still limited, but the consequences of further acceleration of climate change are ominous. Children should be central in all climate policies,[135] in line with a call to action from UN agencies and partners under the Children in All Policies 2030 framework.[136]

Pandemics and other emergency health crises

The COVID-19 pandemic had a major impact on the health and wellbeing of women, children, and adolescents. Even though the worst-case scenarios regarding maternal and child mortality did not materialise,[137] there were multiple adverse effects.[138,139] The global economic downturn, disruptions in essential RMNCAH and nutrition services, increases in food insecurity, and prolonged school closures were among the many pandemic-related developments that affected RMNCAH and nutrition as described in the previous sections.

Despite formidable challenges, coverage of most RMNCAH services in most countries quickly rebounded.[140] However, immunisation coverage has remained an area of concern, with substantial disruptions observed and scarce evidence of a catch-up.[141,142]

Some more optimistic aspects should be stressed. The pandemic catalysed positive changes, such as the adoption of digital health solutions and other service delivery innovations, both of which should help improve the effectiveness and efficiency of health services for women, children, and adolescents. Additionally, COVID-19 highlighted the importance of global collaboration in addressing health security issues and building resilient health systems, which should result in increased investment in pandemic preparedness and response efforts, including the safeguarding of essential RMNCAH and nutrition services during health emergencies.

Conclusion

The progress towards the 2030 targets for global health and development is facing important challenges. Economic growth is faltering, particularly in LICs, and debt servicing has become a major issue for more countries, outstripping health budgets. Education is progressing, but much slower than during the MDG period. Gender inequalities remain large, and progress is fragmented and uneven. There are more armed conflicts, more women, children, and adolescents living in the proximity of conflicts, and more displaced women, children, and adolescents than ever before. The prevalence of food insecurity is increasing in several regions. Evidence is mounting of how climate change poses a grave threat to women's, children's, and adolescents' health, with rapidly rising risks of extreme weather events, food insecurity, and altered disease transmission patterns. The COVID-19 pandemic disrupted many positive developments and many of its adverse effects are still lingering.

Few of these barriers to progress are new. Many countries were able to make major progress during the MDG period despite multiple challenges, such as the global AIDS epidemic (especially in sub-Saharan Africa),

economic crises (eg, the global financial crisis in 2008 and 2009), armed conflicts (eg, Syria, Democratic Republic of the Congo), and deep-seated inequalities in access and opportunity. Progress was made by prioritising RMNCAH and nutrition, leading to major increases in funding for these topics.

Sub-Saharan Africa, where over half of the population is younger than 20 years, has the greatest challenges on almost all fronts. Economic threats, armed conflict, food insecurity, high levels of poverty, and low levels of socioeconomic development are disproportionately concentrated in sub-Saharan Africa, especially in West and Central Africa, a region already burdened by weak health systems.

Section 2: mortality, cause of death, and nutritional status

Mortality

The 2023 UN Interagency Group for Child Mortality Estimation report on child mortality was unequivocal.[20] Although global progress in reducing child and adolescent mortality has continued, the pace slowed down in most regions during the first 7 years of the SDG period. The annual rate of reduction in mortality in children younger than 5 years (hereafter referred to as under-5 mortality) and neonatal mortality rates from 2015–22 was only about half that achieved from 2000–15. The report found that 59 (30%) of 200 countries and territories were not on-track to reach the SDG target for under-5 mortality (ie, 25 per 1000 livebirths or less) and 64 (32%) were not on-track to meet that of neonatal mortality rate (ie, 12 per 1000 livebirths). For under-5 mortality, this list of countries includes all but four island states of the 48 countries in sub-Saharan Africa. Stillbirth rates show a similar trend: a decline since 2000 but a slowdown since 2015, leaving 56 (29%) of 195 countries and territories with available data off-track to meet the Every Newborn Action Plan target of 12 deaths per 1000 total births by 2030.[143]

UN estimates of the maternal mortality ratio (ie, the number of maternal deaths during a given time period per 100 000 livebirths; MMR) indicated little progress in 2015–20, in contrast with an annual rate of reduction of 2·7% per year during the MDG period. Regional declines either stagnated or slowed down substantially. The global MMR was 223 per 100 000 livebirths—far from the global target of 70 by 2030.[16]

This report analyses the latest UN mortality estimates[20] to assess mortality in an integrated manner from 28 weeks of gestation to 20 years of age, herein referred to as mortality rates before age 20 years. This approach recognises the importance of the first two decades of life for the formation of human capital—which originates before conception and is formed through intergenerational factors and interactive biological–environmental–behavioural processes.[144–146] Within this age range, specific age groups were also analysed.

The analyses compare 2016–22, the first half of the SDG period, to 2000–2015, the full MDG period, with a focus on three country income groups and three high-mortality regions (ie, Eastern and Southern Africa, West and Central Africa, and South Asia).

Child and adolescent mortality levels in 2022

Mortality rates before age 20 years in 2022 remained high and inequitable by country income group and region. The 2022 mortality rate was 107·0 per 1000 total births (90% uncertainty interval [UI] 101·0–120·6) in LICs, 70·3 per 1000 total births (66·1–77·4) in lower-middle-income countries, and 25·1 per 1000 total births (24·1–26·9) in upper-middle-income countries. The rate was therefore over four-times higher in LICs and almost three-times higher in lower-middle-income countries, compared with upper-middle-income countries (appendix pp 17, 18).

Mortality rate younger than 20 years was highest in West and Central Africa (134·6 per 1000 total births [UI 121·6–156·9]), followed by Eastern and Southern African (86·9 deaths per 1000 total births [82·5–98·3]), and South Asia (59·9 deaths per 1000 total births [56·0–64·8]). 6 597 341 (82·4%) of 8 008 200 deaths before 20 years of age occured in these three regions. Mortality rates in all the other regions were below 40 per 1000 total births (appendix p 19).

The distribution of deaths younger than 20 years varied by region (figure 5, appendix pp 20–22). The most notable difference in age distributions of death is the high percentage of deaths occurring at ages 1–59 months in West and Central Africa (43·4%), followed by Eastern and Southern Africa (32·0%). A second observation concerns mortality in the perinatal and late neonatal periods: stillbirths and neonatal deaths account for 64·2% of all deaths younger than 20 years in the South Asia region and 58·9% in the Middle East and North Africa region.

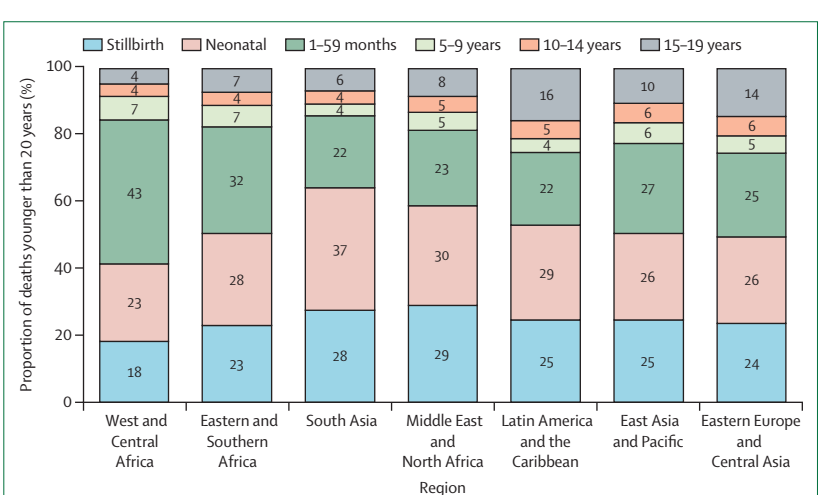

Figure 5: **Distribution of deaths younger than 20 years by region**
Data based on UN Interagency Group for Child Mortality Estimation 2022 estimates.[20] Regions ordered according to mortality level from highest to lowest.

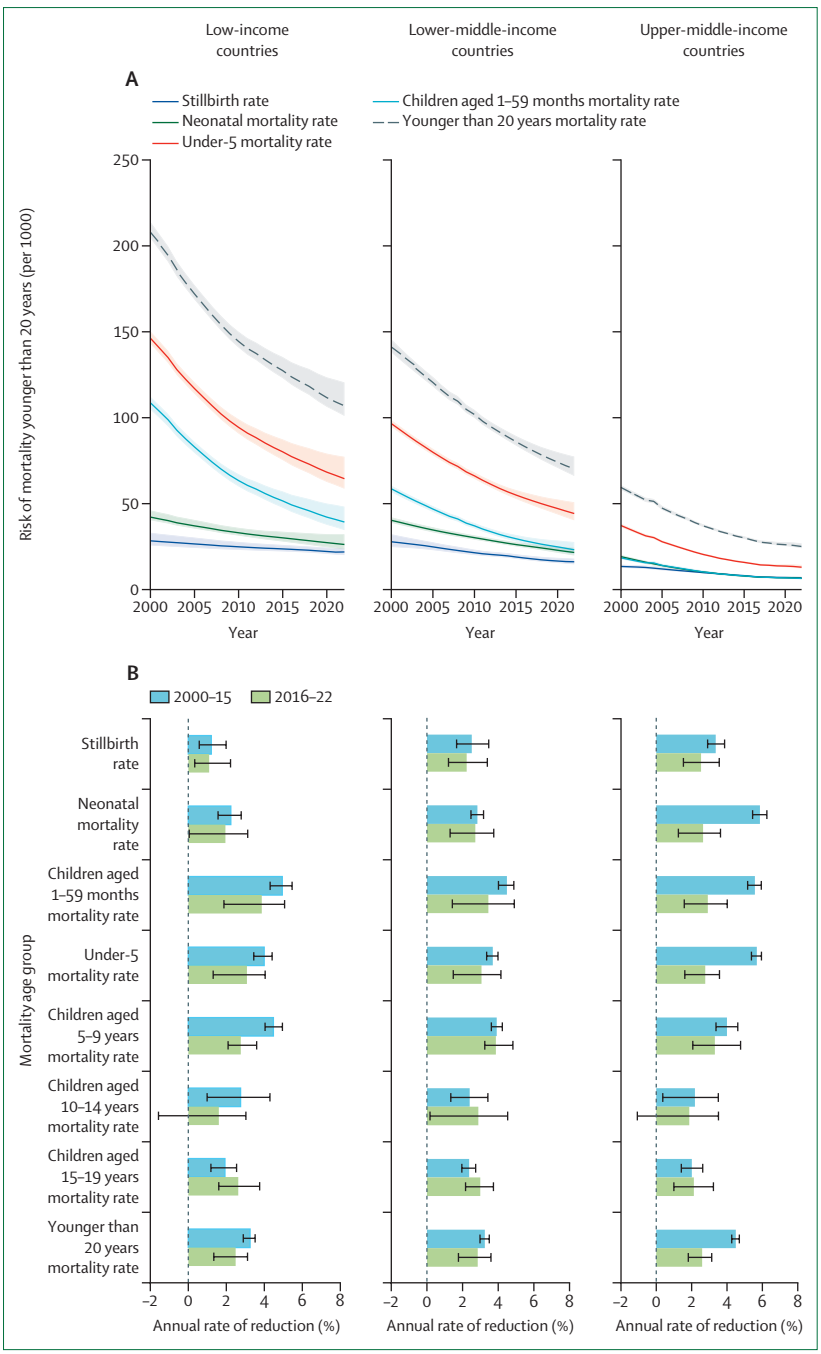

Figure 6: **Trends (A) and annual rate of reduction (B) in mortality before age 20 years in low-income countries, lower-middle-income countries, and upper-middle-income countries in 2000–22**
Data are presented with 90% uncertainty intervals in shading (A) and on data bars (B). Mortality before age 20 years refers to mortality between 28 weeks of gestation and 20 years of age. Data based on UN Interagency Group for Child Mortality Estimation 2022 estimates.[20]

Child and adolescent mortality trends

Mortality before age 20 years continued to decline from 2000 to 2022. The pace of decline, as measured through the annual rate of reduction in mortality, varied between country income groups and regions.

The global slowdown of the mortality decline from 2015, compared with the MDG period, is evident in all regions and all three country income groups, though only statistically significant for upper-middle-income countries. The deceleration of progress occurred in virtually all age groups (figure 6). In 2022, lower-middle-income countries had mortality rates that were equivalent to those of upper-middle-income countries more than two decades earlier. This gap is one decade between lower-middle-income countries and LICs.

The slower mortality decline during the first half of the SDG period did not affect all regions equally. Figure 7 shows the annual rate of reduction in mortality rates before age 20 years from 2000–15 and 2016–22 for West and Central Africa, Eastern and Southern Africa, and South Asia (see appendix pp 22–26 for other regions). The slowdown in overall mortality rates before age 20 years was statistically significant in Eastern and Southern Africa, where the annual rate of reduction dropped from 4·1% (UI 3·6–4·3) in 2000–15 to 2·7% (1·6–3·3%) in 2016–22. The deceleration was driven by a substantial slowing in the pace of decline in mortality in children aged 1–59 months (annual rate of reduction dropped from 6·3% [5·6–6·9] to 4·4% [2·4–5·5]) and children aged 5–9 years (5·4% [5·0 –5·9] to 3·2% [2·7–4·0]). In West and Central Africa, no significant change in the annual rate of reduction for mortality rates before age 20 years or for age-specific groups was discernible. In South Asia, a small acceleration was apparent, driven by modest accelerations in virtually all age groups.

If the current trends persist, LICs and lower-middle-income countries will not achieve the 2030 targets for neonatal and under-5 mortality. Neither West and Central Africa nor Eastern and Southern Africa are on track to achieve the SDG targets for under-5 or neonatal mortality rates at the current pace of decline. South Asia, however, is projected to reach an under-5 mortality rate of 24·6 by 2030, thus achieving the SDG target as a region, but would fall short of reaching the SDG target for neonatal mortality.

Within country inequalities in neonatal and child mortality

Inequalities in neonatal mortality rates and under-5 mortality rates by wealth quintiles and place of residence were analysed for LICs and lower-middle-income countries with available national surveys for the periods 2000–15 and 2016–22. Given sample size limitations, empirical rates for which the coefficient of variation was greater than 30% were excluded. A total of 45 countries were analysed for under-5 mortality rates and 41 countries for neonatal mortality rates (appendix pp 29–35).

Figure 8 presents the trends for the poorest and the richest quintiles, and for urban and rural areas, fitted from a mixed-effects linear regression with change point in 2015 to assess any change in trends. Overall, the gaps

in neonatal and under-5 mortality rates in rich versus poor countries, which narrowed by more than a third during the MDG period, reduced by a similar magnitude during the SDG period, with a much higher mortality decline acceleration in the poorest countries than the richest countries. Modelled mortality data by wealth quintiles from UN Interagency Group for Child Mortality Estimation database was also accessed and analysed and showed similar patterns (appendix p 26). The urban–rural gaps also reduced, especially for neonatal mortality.

Maternal mortality

In 2020, there were an estimated 286 000 (99·5% of all maternal deaths) maternal deaths in LMICs, a drop from 445 000 in 2000, and 313 000 in 2015.[16] Also in 2020, the MMR in LICs was 429 (UI 379–505) per 100 000 livebirths and that of lower-middle-income countries was 255 (223–313) per 100 000 livebirths. Both income groups are therefore far from the global SDG target of 70 per 100 000 livebirths, and the pace of decline slowed after 2015 for both groups (appendix p 27).

Regionwide, neither Eastern and Southern Africa nor West and Central Africa showed signs of deceleration, although the MMR has declined at a much slower pace in West and Central Africa since 2000. During the MDG period, the MMR in Eastern and Southern Africa declined at an annual rate of reduction of 4%, but only at a 1·1% annual rate of reduction in West and Central Africa. The MMR has continued to decline substantially in South Asia, with an annual rate of reduction of 4·4% between 2015 and 2020, only a slight reduction from an annual rate of reduction of 5·9% between 2000 and 2015.

The continued high mortality in the sub-Saharan Africa regions along with a relatively slow pace of decline has resulted in further concentration of maternal deaths in this region, which by 2020 accounted for 72% of all global maternal deaths (51% in West and Central Africa and 21% in East and Southern Africa; appendix p 28).

The paucity of empirical data has resulted in large UIs for maternal mortality and, to a lesser extent, mortality younger than 20 years hampers the assessment of trends, especially for the SDG period. How data scarcity affects mortality trend analyses is discussed elsewhere (appendix pp 16, 17).

Cause of death in children and adolescents

Examination of cause-specific mortality rates in the MDG and SDG periods for all LMICs and regions sheds insight into the main causes of death driving progress in mortality reduction and the challenges to reaching the SDG targets. The analyses were based on global estimates for causes of death for children and adolescents younger than 20 years in 134 LMICs from 2000–21 (appendix p 36).[148] The focus was on comparing the average annual rates of reduction in cause-specific mortality rates for the leading causes by age for the MDG and SDG periods.

Figure 9 presents the average annual rate of reductions for all countries for neonates, children aged 1–59 months, children aged 5–9 years, and children aged 10–14 years, all for male and female individuals combined; and the

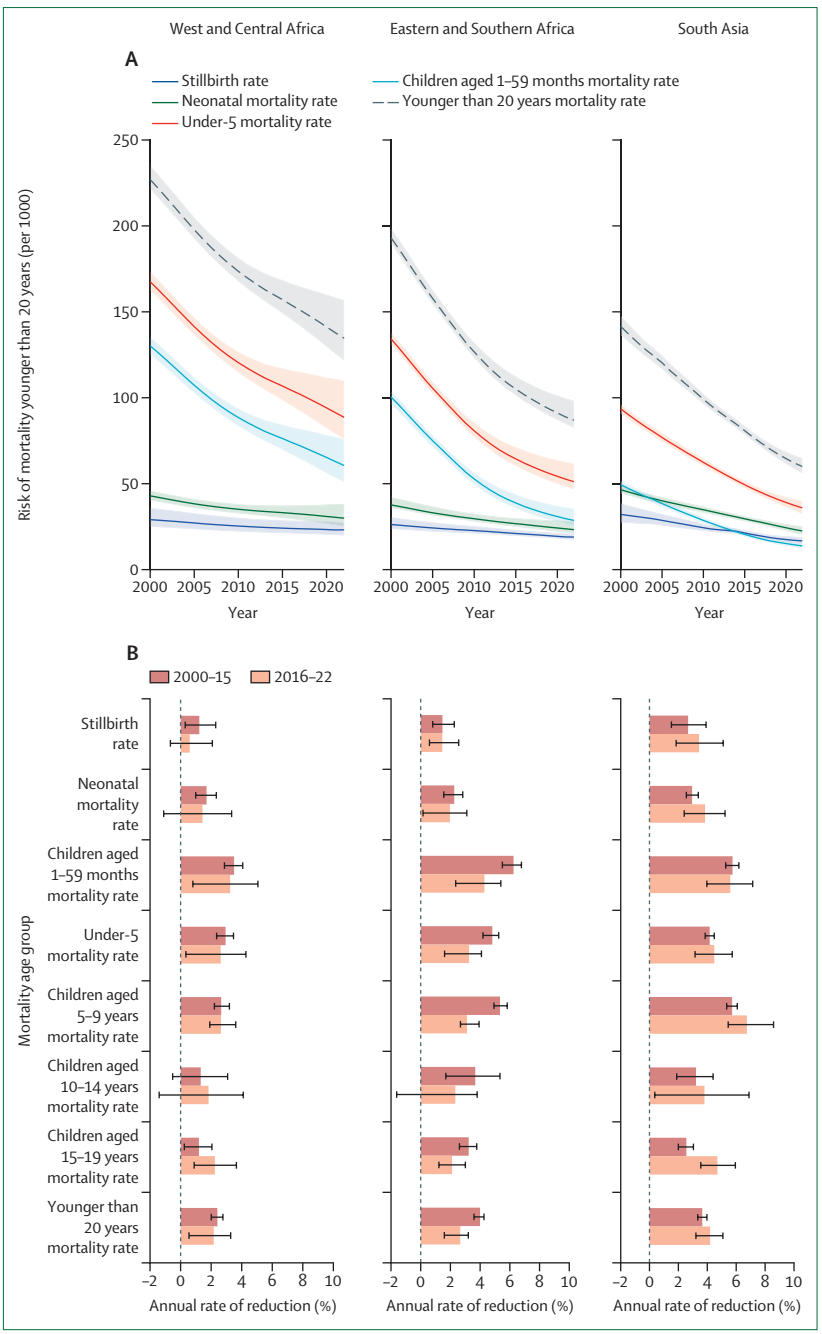

Figure 7: **Trends (A) and annual rate of reduction (B) in mortality before age 20 years in West and Central Africa, East and Southern Africa, and South Asia in 2000–22**

Data are presented with 90% uncertainty intervals in shading (A) and on data bars (B). Mortality before age 20 years refers to mortality between 28 weeks of gestation and 20 years of age. Data based on UN Interagency Group for Child Mortality Estimation 2022 estimates.[20]

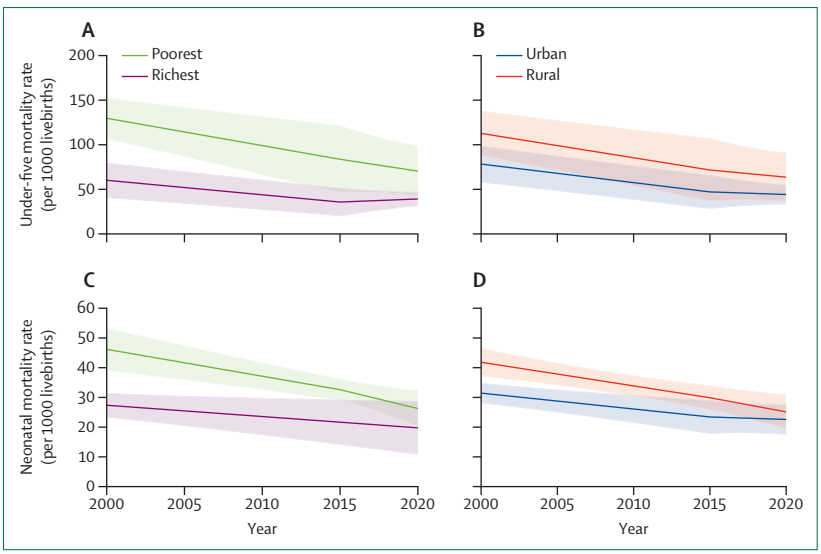

Figure 8: **Trends in neonatal and under-five mortality by wealth quintiles and place of residence in 2000–20**
(A) Under-five mortality rates in the poorest and richest wealth quintiles. (B) Under-five mortality rates in urban and rural areas. (C) Neonatal mortality rates in the poorest and richest wealth quintiles. (D) Neonatal mortality rates in urban and rural areas. Data are presented with 95% CIs in shading. Data sourced from household surveys and mortality database, Countdown and International Center for Equity in Health, Federal University of Pelotas, Brazil.[147]

average annual rate of reductions for individuals aged 15–19 years, disaggregated for male and female individuals. The top six causes of death in each age group are ranked by mortality rate. For neonatal deaths, five of the top six causes had a lower average annual rate of reduction since 2015 than the MDG period (ie, 2000–15). The top two causes of death—prematurity and birth asphyxia or trauma—had large, although not statistically significant, declarations of the pace of decline after 2015.

For deaths in children aged 1–59 months, cause-specific mortality declines continued at a slower pace for lower respiratory infections, but not for diarrhoea, which continued to decline at an annual rate of reduction of more than 5% per year during the SDG period. Most notable was that malaria, the second most common cause in this age group, had a major decline in average annual rate of reduction, with a negative value in the SDG period that reflects increasing malaria mortality since 2015.

The average annual rate of reduction of mortality in older children (aged 5–9 years and 10–14 years) and adolescents (aged 15–19 years) has been slower than for younger children (neonates and children aged 1–59 months), but the pace of reduction has been sustained since 2015. For most of the top six causes of death in older children and adolescents, there has been little or no slowing of the average annual rate of reductions and, in some cases, an increase in the pace of mortality decline in the SDG period compared with the MDG period.

In the three focus regions for this report—ie, Eastern and Southern Africa, West and Central Africa, and South Asia—there were substantial declines in the rates of neonatal deaths from the leading five causes in the MDG period and this momentum continued after 2015 (figure 10). For children aged 1–59 months, the top causes of death varied by region, as did the rates of reduction in the two time periods. In the MDG era, Eastern and Southern Africa and West and Central Africa had large mortality reductions driven by declines in the leading causes of death—lower respiratory infections, diarrhoea, malaria, and measles. Since 2015, mortality reductions have continued to be driven by declines in deaths from each of these infectious diseases in Eastern and Southern Africa, although the pace of decline slowed down. For West and Central Africa, the pace of reduction slowed only for deaths caused by malaria and measles. In South Asia, there was also substantial reduction in the top five causes of death for children aged 1–59 months in the MDG period. The rate of decline in South Asia has been maintained in the SDG period (appendix 44).

In Eastern and Southern Africa, the average annual rate of reduction slowed for deaths due to diarrhoea for children aged 5–9 years and substantially increased for deaths from HIV/AIDS in children aged 10–14 years. One of the top causes of death in female individuals aged 15–19 years in LMICs is self-harm: the average annual rate of reduction for this cause increased after 2015 in West and Central Africa, South Asia, and Latin America and the Caribbean, and stayed the same in the other regions. For the three focus regions, the average annual rate of reduction for interpersonal violence, another top cause of death in most regions in adolescents aged 15–19 years of both sexes, increased in the SDG period in South Asia for both male and female individuals. Lastly, road traffic injuries were one of the top six causes of death for both male and female adolescents aged 15–19 years in all three regions (appendix pp 45,46).

Cause of death estimates rely on advanced statistical modelling and have large UIs. This low certainty is due to a paucity of high-quality empirical data on causes of death, especially in LICs and lower-middle-income countries.[149,150] Population-level cause of death data are less common than all-cause mortality data. In addition, the quality of cause of death data is highly variable because the global standard, the International Classification of Diseases, is often not fully implemented and because much data is obtained through verbal autopsy, which is a crude method to ascertain the probable cause of death.

Nutritional status

Children younger than 5 years

The prevalence of growth stunting continued to decline at a similar pace during the SDG period as the MDG period in LICs, with an average annual rate of reduction of 1·6% in both periods.[151] The rate of stunting prevalence decline accelerated in lower-middle-income countries, from an annual rate of reduction of 1·8% in the

MDG period to 2·3% after 2015 (figure 11), but the prevalence was higher than 25% in 2022. In upper-middle-income countries, a sharp decline during the MDG period stalled at about 8–9% in the SDG period.

The prevalence of growth stunting remained highest in sub-Saharan Africa and in South Asia (31% in 2022), followed by the Middle East and North Africa (15% in 2022, appendix p 47). The annual rate of reduction in South Asia accelerated during the SDG period (2·8%) compared with the MDG period (1·7%). Progress remained slow in sub-Saharan Africa during both the MDG (1·5% for 2000–15) and SDG periods (1·3% for 2016–22).

Further analyses with data from 54 countries that conducted household surveys before and after 2015 permit an assessment of inequality trends in stunting within countries (appendix pp 48–51). Between the earlier and most recent surveys, the median stunting prevalence dropped from 32·8% to 28·5% in children living in rural areas, compared with a decline from 21·0% to 17·8% in children living in urban areas. Stunting prevalence in children in the poorest wealth quintile reduced from 35·9% to 32·5%, whereas prevalence fell from 15·5% to 13·4% in children in the richest wealth quintile.

Wasting is defined as children whose weight for height Z score is below 2 standard deviations of the standard growth chart based on the WHO Child Growth Standard, and is a sign of acute malnutrition. In children younger than 5 years, wasting was estimated to be as high as 6·8% in 2022, which is a modest decline from 8·6% in 2000 and 7·2% in 2015, but is still well above a 5% global target for 2025.[152] South Asia has the highest prevalence of wasting—14·8% in 2022, corresponding to 31·6 million children—followed by sub-Saharan Africa with 6·0% in 2022 (appendix p 52). Concurrent wasting and stunting are particularly detrimental to children's health, development, and survival chances, and a concurrency prevalence of over 5% has been observed in India and several countries in sub-Saharan Africa.[104,153]

An examination of the change in wasting prevalence between the MDG and SDG periods for 54 countries with surveys before and after 2015 found that 26 (48%) countries were at or above the World Health Assembly 2025 wasting target of less than 5% by 2025; of these countries, nearly all were in South Asia or sub-Saharan Africa (appendix p 53). Furthermore, although most countries reduced their wasting prevalence from the MDG period into the SDG period, wasting prevalence increased in 15 (28%) of the 54 countries during both the MDG and SDG periods. These trend data should be interpreted with caution (appendix p 53).

Global estimates of the prevalence of overweight in children younger than 5 years indicated little change between 2000 (5·3%), 2015 (5·5%), and 2022 (5·6%; appendix p 51), with little change across all regions since 2015.[154]

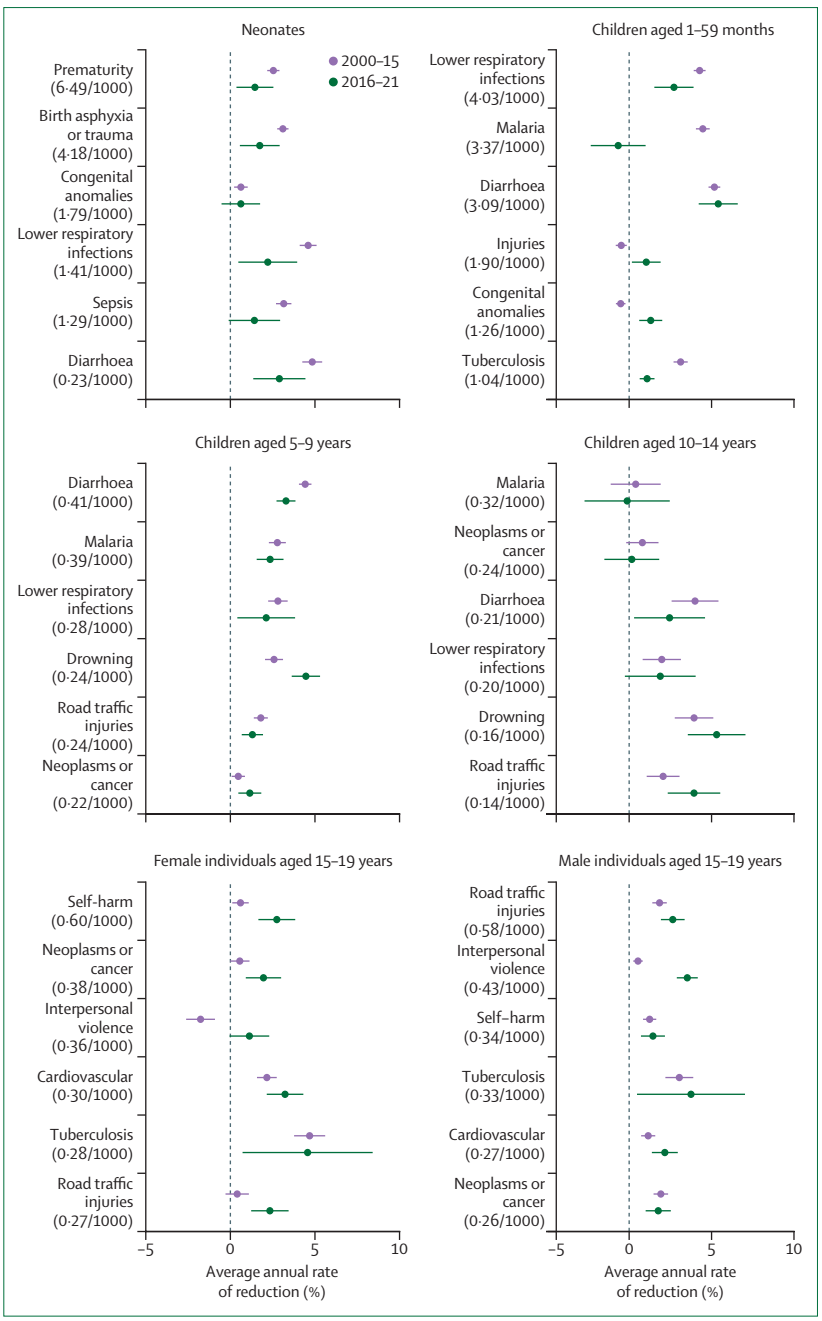

Figure 9: **Average annual rates of reduction in the top six causes of death by age group in LMICs in 2000–15 and 2016–21**

Data are presented as cause of death and estimated 2021 cause-specific mortality rates per 1000 livebirths in parenthesis.[148] The top six causes of death in each age group are ranked by mortality rate. LMICs=low-income and middle-income countries.

Children aged 5–19 years and women aged 20–29 years

Nutrition is crucial for adolescent growth and development and has important long-term and intergenerational implications. The recent *Lancet* Series on adolescent nutrition highlighted extensive evidence on drivers of adolescent food choices, including food environment, and their implications on the persistence

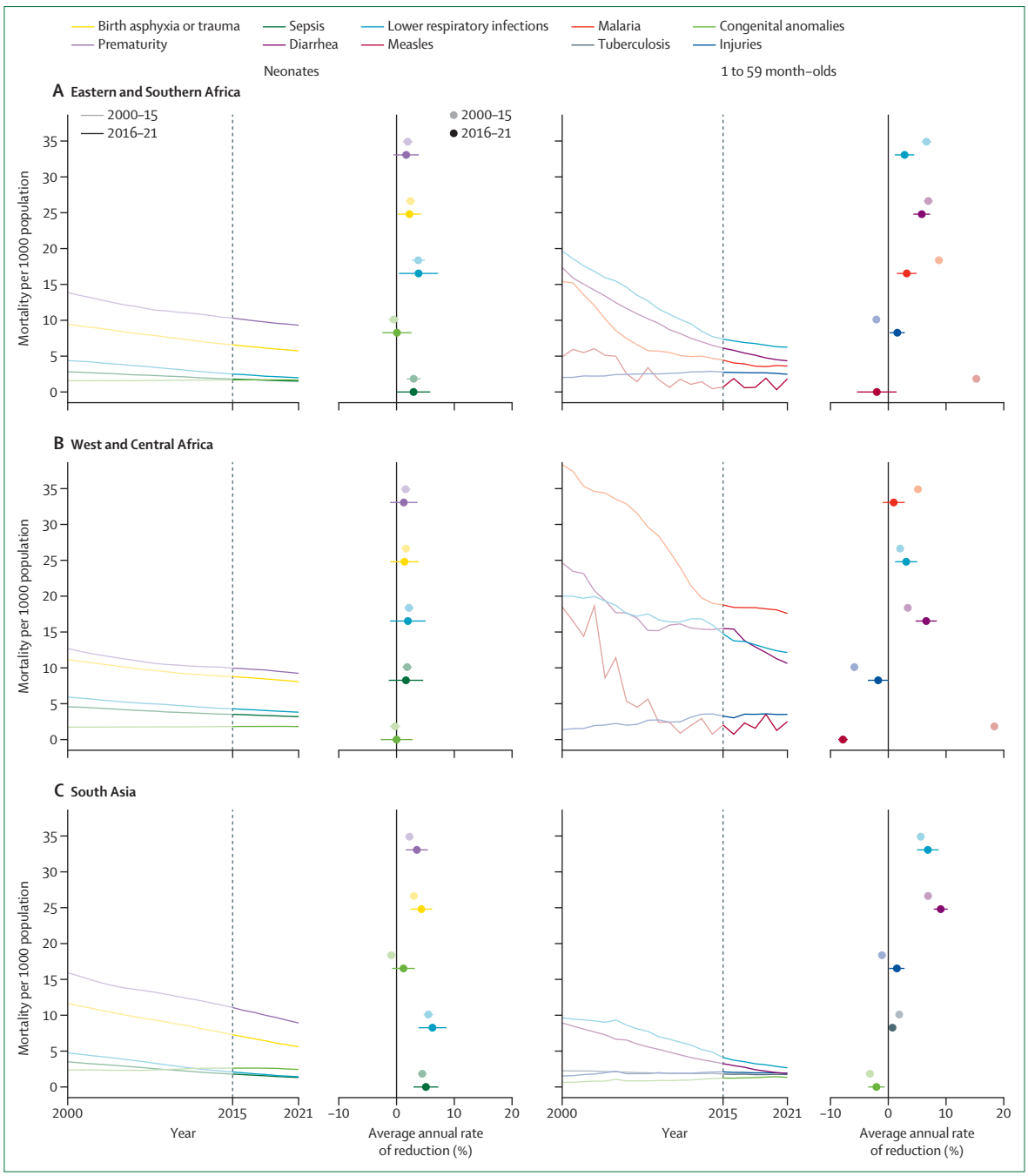

Figure 10: **Cause-specific mortality rates and average annual rates of reduction for the top five causes of death for neonates and children aged 1–59 months in 2000–15 and 2016–21 in Eastern and Southern Africa (A), West and Central Africa (B), and South Asia (C)**
Data are presented as cause of death and estimated 2021 cause-specific mortality rates per 1000 livebirths in parenthesis.[148]

of food insecurity, micronutrient deficiency, and increases in obesity and overweight.[155–157] The NCD Risk Factor Collaboration produced estimates of underweight and obesity prevalence in school-aged children and adolescents (ie, individuals aged 5–19 years) and women aged 20 years and older.[158] A major nutrition transition since 2000 has been observed, with a rise in the prevalence of obesity and a decline in the prevalence of underweight or thinness. Figure 12 summarises the changes in these two populations by region, comparing estimates for 2000, 2015, and 2022; country income group data are available in the appendix (pp 54). Although

rates have drastically reduced in the past two decades, South Asia has the highest prevalence of thinness in children and adolescents (19% in 2022) and of underweight in adult women (13% in 2022). The two subregions in sub-Saharan Africa observed slow declines in the prevalence rates of underweight and thinness in the range of 9–12% for both children and adolescents and adult women.

Obesity prevalence increased in all regions, and at a faster rate in low prevalence regions than in high prevalence regions. In 2022, the highest obesity prevalence rates were observed in adult women in the Middle East and North Africa (42%), followed by Latin America and the Caribbean (35%). These two regions also had major increases in obesity in children aged 5–19 years, reaching a prevalence of 16% in 2022. In South Asia and the two subregions in sub-Saharan Africa, obesity increased rapidly, to more than 10% of adult women, and to 3–4% of school-aged children and adolescents by 2022. The average annual rates of increase in obesity in these three regions were higher after 2015 than in 2000–15, whereas for underweight, the opposite was generally the case for both women and children aged 5–19 years. Rapid increases in overweight and obesity are driving increases in the double burden of malnutrition, where undernutrition and micronutrient deficiencies, including anaemia, coexist with overweight and obesity, across LMICs, particularly in women in sub-Saharan Africa.[158,159]

Data from 27 countries with national household surveys in 2000–15 and 2016–23 were used to assess changes in inequalities in undernutrition in women of reproductive ages (aged 15–49 years) within countries (appendix p 55). Although the prevalence of underweight declined in all wealth quintiles, the gaps between the poorest and richest wealth quintiles and between no education and secondary or more education remained large (figure 13; appendix pp 56, 57). The reverse inequality trend was observed for obesity, with major increases in all wealth quintiles.

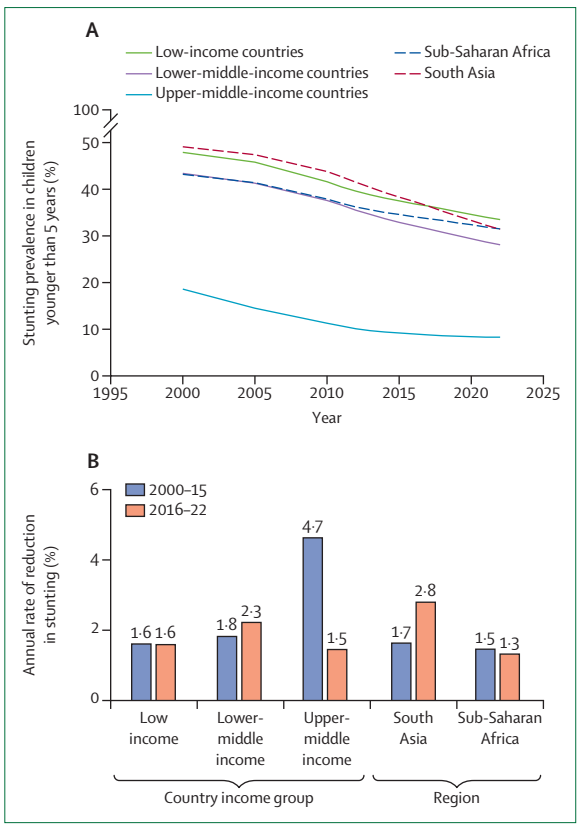

Figure 11: **Stunting prevalence in children younger than 5 years, by country income group and in selected regions in 2000–22**
Data are sourced from UNICEF malnutrition estimates.[151]

Small vulnerable newborns

Being born too soon or too small is an important risk factor for mortality in newborns and morbidity conditions in later life.[144,160] Recent UN estimates ranked prematurity in newborns as the leading cause of death for individuals younger than 20 years, contributing to 18·1% of deaths in children younger than 5 years.[148] In an effort to promote improved monitoring, low birthweight babies are characterised as "small vulnerable newborns", which are subcategorised into three mutually exclusive groups with varying risks of death based on their gestational age at birth and pre-term or term status: preterm and small for gestational age (preterm-SGA babies); preterm and non-SGA babies; and term and SGA babies.[161] Globally, there were 35·4 million small vulnerable newborns in 2020, representing 25·2% of livebirths, of whom 1·1% were preterm-SGA, 8·8% were preterm non-SGA, and 16·3% were term SGA. 55·5% of neonatal deaths in 2020 were estimated to be attributable to small vulnerable newborn condition, of which 74% were due to prematurity. South Asia and sub-Saharan Africa have the highest burden, with 63% of SGA babies born in South Asia.

Data for progress assessments remain scarce. Available data indicate that little progress has been made in reducing rates of low birthweight or preterm births in the two decades leading up to 2020 globally and across regions. The global rate of low birthweight in livebirths reduced from 16·6% in 2000 to 14·7% in 2020 (appendix pp 58,59).[162] The rate of preterm births, which could only be reliably estimated from 2010, remained stagnant at 9·9% of all births in 2020.[163]

South Asia and sub-Saharan Africa were the regions with the highest burden of small vulnerable newborns. The rates of low birthweight in South Asia and sub-Saharan Africa have not significantly progressed since the start of the MDG era: the rate in South Asia has fallen from 28·9% in 2000 to 24·4% in 2020; that of sub-Saharan Africa from 15·7% in 2000 to 13·9% in 2020. Rates for preterm births have remained constant between 2010 and 2020, at 13·2% in South Asia and

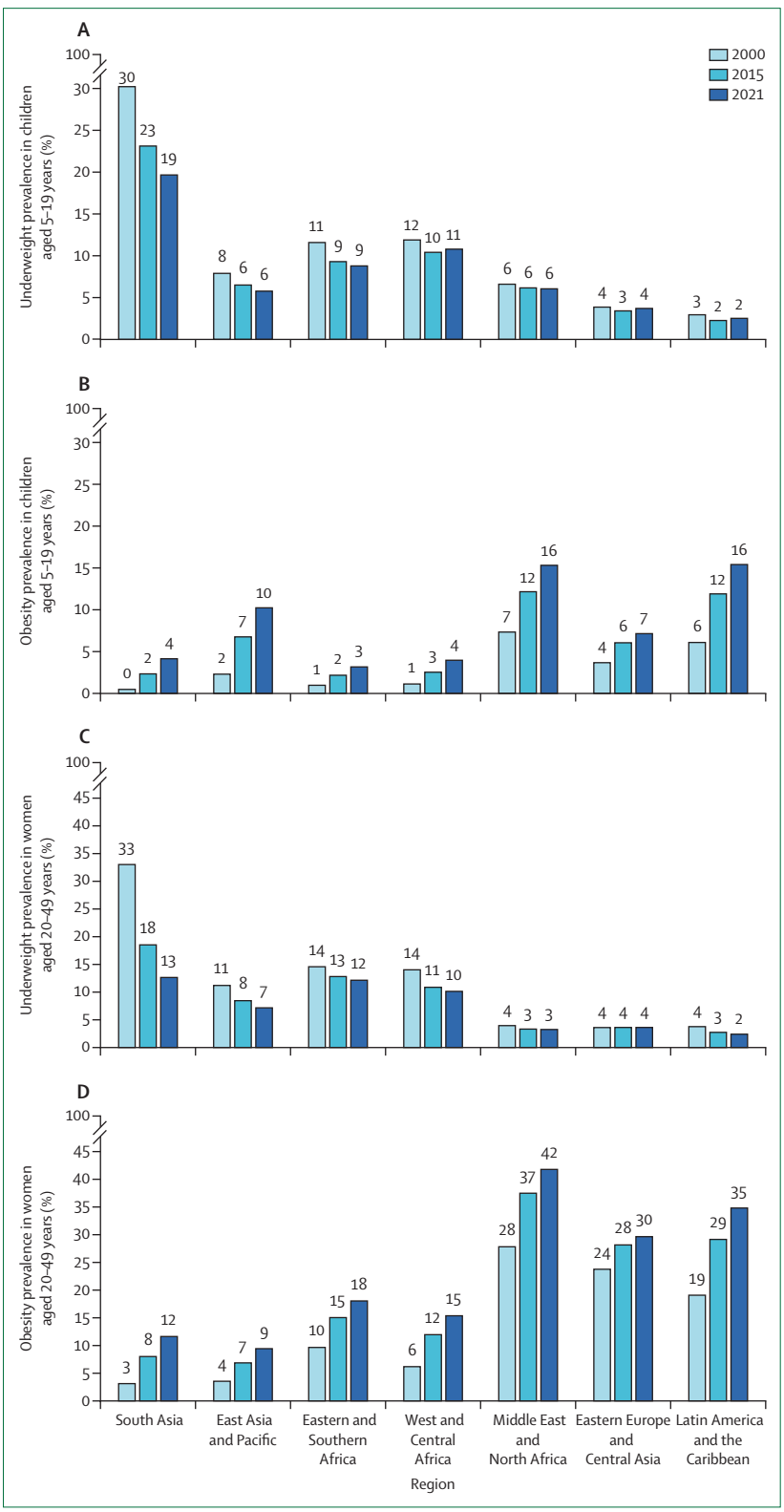

Figure 12: **Thinness or underweight and obesity prevalences in school-aged children and adolescents (5–19 years) and in women aged 20–49 years, by region in 2000, 2015, and 2022**

(A) Thinness prevalence in school-aged children and adolescents. (B) Obesity prevalence in school-aged children and adolescents. (C) Underweight prevalence in women aged 20–49 years. (D) Obesity prevalence in women aged 20–49 years. Thinness in children and adolescents was defined as a BMI less than 2 SD below the median of the WHO growth reference; obesity in children and adolescents was defined as a BMI higher than 2 SD above the median. Underweight in women aged 20–49 years was defined as a BMI less than 18·5 kg/m^2; obesity in women aged 20–49 years was defined as a BMI of 30 kg/m^2 or higher. Based on estimates of the NCD Risk Factor Collaboration.[158]

10·1% in sub-Saharan Africa. These estimates all have wide UIs. Data were not available to estimate trends in the rates of SGA babies.

Accelerated mortality reductions in babies, children, and adolescents will require addressing risk factors during the most vulnerable periods. These efforts will include reducing the rates of small vulnerable newborn births, by tackling low birthweight and preterm birth through improved prevention strategies and small and sick newborn care.

Conclusion

Current rates and trends in maternal mortality and child and adolescent mortality indicate insufficient progress and pace necessary to achieve the SDG targets of ending preventable maternal and child mortality by 2030. Although the stillbirth, child, and adolescent mortality rates continued to decline since 2015, progress in mortality reduction slowed down overall in LMICs. In the three regions with highest mortality, the reduction in the pace of mortality decline during the SDG period was most evident in Eastern and Southern Africa, where the annual rate of reduction in mortality rates before age 20 years reduced substantially from 4·1% in 2000–15 to 2·7% in 2016–22, driven mainly by the deceleration of mortality in children aged 1–59 months. The pace of decline was maintained in West and Central Africa, but it was already lower than the other two regions during both the MDG and SDG periods. South Asia had large annual rates of reduction in overall and age-specific mortality during the MDG period, which were mostly maintained during the SDG period. Poor–rich and urban–rural gaps in under-5 and neonatal mortality have narrowed during the MDG and SDG periods. However, this trend is partly related to stalled reductions in the rich and urban populations. Maternal mortality trend analyses are hampered by poor data availability, but UN estimates generally suggested deceleration of the decline during the SDG period. The paucity of disaggregated data on maternal mortality, especially distinguishing adolescents and older women who face higher risks of death, is detrimental to evidence generation and actions targeting specific vulnerable groups of women.

The increasing proportion of under-5 mortality deaths occurring in the neonatal period is primarily driven by

preterm birth complications. In 2020, 55·5% of neonatal deaths were attributed to the small vulnerable newborn condition, of which 74% were due to prematurity. Beyond the neonatal period, infectious diseases still predominated as leading causes of death in children aged between 1 month and 14 years in sub-Saharan Africa.

Stunting prevalence in children younger than 5 years remained high in LICs and lower-middle-income countries, although the pace of decline accelerated during the SDG period, especially in South Asia. Absolute poor–rich and urban–rural gaps in stunting prevalence remained large and have not changed between the MDG and SDG periods. The prevalence of wasting in children younger than 5 years globally has changed little since 2000 and remained at 6·8% in 2022, above the global 5% World Health Assembly target for 2025. A nutrition transition over the past two decades has been observed in older children, adolescents, and women, with levels of obesity rising and levels of underweight decreasing.

Section 3: coverage, equity, and service quality

Countdown has historically focused on tracking levels and trends in health intervention coverage (defined as the percentage of individuals within a population who require a specific intervention and have actually received it), with an emphasis on inequalities. Monitoring national coverage levels of essential interventions provides insight into how well countries are doing overall in achieving the SDG target of universal health coverage and providing life-saving care to women, children, and adolescents. Because national coverage estimates often mask stark subnational inequalities, examination of coverage levels across population groups within countries is essential to identify women, children, and adolescents who are being left behind. Targeted approaches and other strategies can then be developed to reach these underserved groups.[164] In addition to presenting patterns in intervention coverage and equity, this report also examines some measures of service quality.

Intervention coverage: the continuum of care

The current iteration of the Countdown continuum of care chart—a subset of the full Countdown indicator list displayed on the Countdown national, equity, and early childhood development profiles—includes 20 indicators that capture information about health system interventions delivered during pre-pregnancy, pregnancy, infancy, childhood, and adolescence. Given data limitations, there is currently only one intervention specific to adolescence, human papillomavirus (HPV) vaccination (appendix pp 60–63). Although breastfeeding is a behaviour that can be influenced by various interventions, such as counselling, two indicators on breastfeeding are included because of strong evidence of their importance in saving newborn and infant lives and because robust data on counselling services for the majority of LMICs are not available. Cross-cutting indicators on water and sanitation are also included, given the strong association between safe water, adequate sanitation services, and good hygiene practices, with positive health outcomes for women, children, and adolescents.

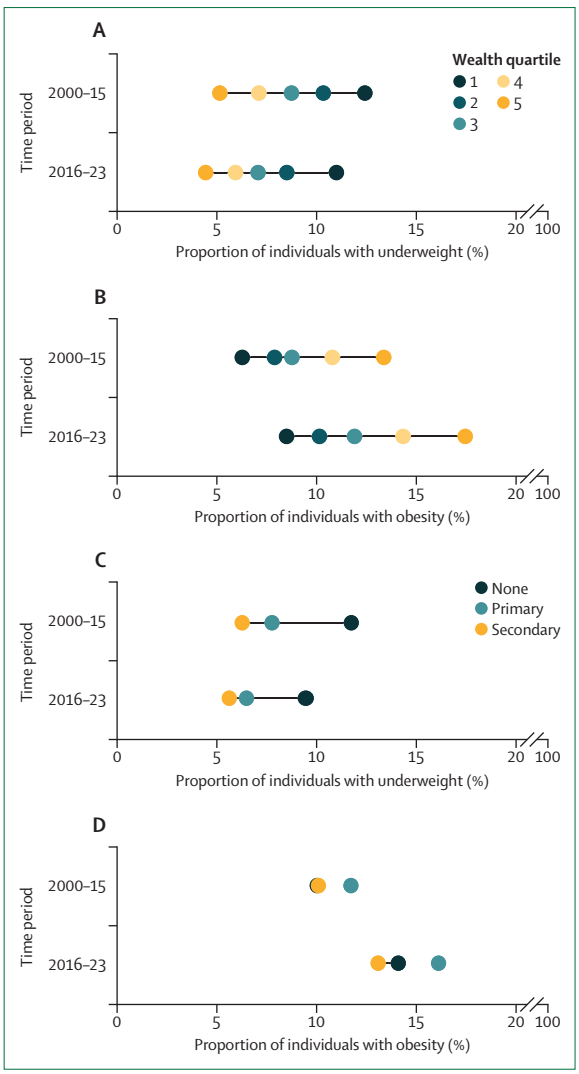

Figure 13: **Prevalence of underweight and obesity in women aged 15–49 years by wealth quintiles and maternal education in 2000–15 and 2016–23**
(A) Prevalence of underweight by wealth quartile. (B) Prevalence of obesity by wealth quartile. (C) Prevalence of underweight by maternal level of education. (D) Prevalence of obesity by maternal level of education. Underweight is defined as BMI lower than 18·5; obesity is defined as BMI of 30 or higher. Data from the International Center for Equity in Health, Federal University of Pelotas, Brazil.[147]

Figure 14 presents the median coverage for the 20 interventions across LMICs with available data from 2016 to 2023 for the national level and the poorest and wealthiest quintiles. Individual country data with respective metadata, including indicator definitions, are provided in the appendix (pp 60–65).

Coverage for these interventions and behaviours is far from universal. The median national coverage is below

For more on **Countdown profiles** see https://data.unicef.org/countdown-2030/

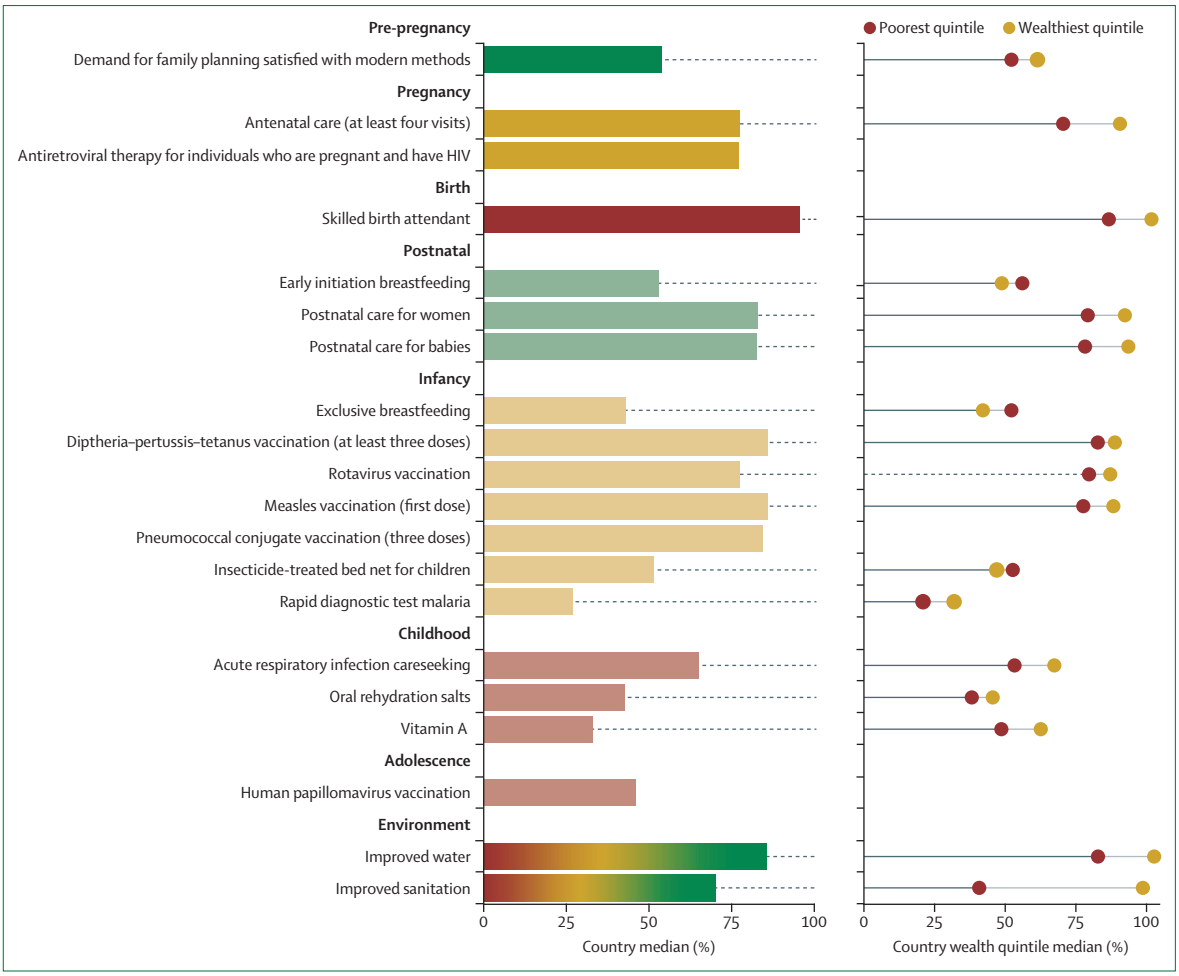

Figure 14: **Median national coverage for low-income and middle-income countries and median coverage for the poorest and wealthiest quintiles across select reproductive, maternal, newborn, child, and adolescent health indicators for low-income and middle-income countries with available data (2016–23)**
Data sources: immunisation rates from WHO and UNICEF;[165] population using basic drinking water services and sanitation services from WHO and UNICEF Joint Monitoring Programme for Water Supply and Sanitation;[165] antiretroviral treatment of pregnant individuals with HIV from estimates from UNAIDS;[165] all other indicators from UNICEF global databases (December 2023),[165] which are based on Demographic and Health Surveys, Multiple Indicator Cluster Surveys, and other national surveys. For the wealth quintile data, indicators are from the International Center for Equity in Health database,[147] based on Demographic and Health Surveys and Multiple Indicator Cluster Surveys.

50% for five of the 20 interventions: malaria diagnostics, two doses of vitamin A supplementation, exclusive breastfeeding, treatment of childhood diarrhoea with oral rehydration salts, and HPV vaccination. Coverage of another five interventions is at or below 75%: improved sanitation, care seeking for symptoms of acute respiratory infections, insecticide-treated net use for children younger than 5 years, early initiation of breastfeeding, and demand for family planning satisfied with modern methods. Six indicators have coverage levels exceeding 80%: three doses of diphtheria–tetanus–pertussis vaccine, first dose of measles vaccine, three doses of pneumococcal conjugate vaccine, skilled attendant at birth, postnatal care for mothers, and postnatal care for babies. Coverage for the 20 interventions varies greatly across countries, ranging from less than 5% to almost 100%, serving as a reminder that progress is uneven, but also showing that high coverage levels are achievable in LMIC contexts.

Figure 14 also shows a typical pattern of higher median coverage in the wealthiest quintile compared with the poorest quintile for all 20 interventions, with the gap exceeding 10 percentage points for nine indicators: antenatal care (four or more visits), skilled attendant at birth, postnatal care for women, postnatal care for babies, measles vaccination (first dose), malaria diagnostics, care seeking for symptoms of acute respiratory infections, improved water, and improved sanitation. Three interventions—insecticide-treated bednets, early initiation of breastfeeding, and exclusive breastfeeding—present higher median coverage in the poorest quintile than the wealthiest quintile. Although the difference is small (around 7 percentage points), the higher median coverage of insecticide-treated bednets in the poorest

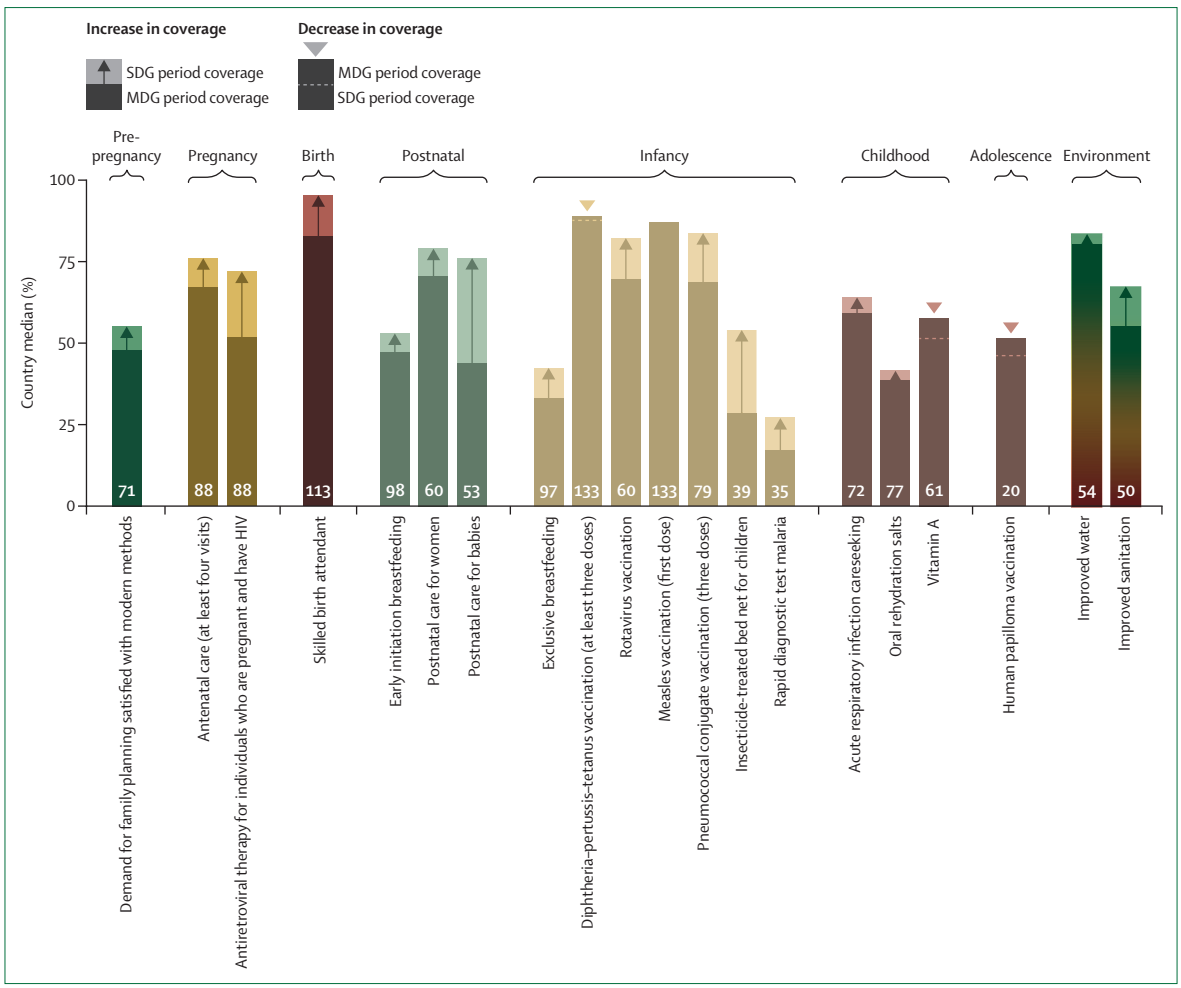

Figure 15: **Time trends in coverage of select interventions across the continuum of care for low-income and middle-income countries with matched data in the MDG period (2000–2015) and SDG period (2016–2023)**

The numbers under the bars show the number of countries with data for each indicator. Data sources: immunisation rates from WHO and UNICEF;[165] population using basic drinking water services and sanitation services from WHO and UNICEF Joint Monitoring Programme for Water Supply and Sanitation;[165] antiretroviral treatment of pregnant individuals with HIV from estimates from UNAIDS;[165] all other indicators from UNICEF global databases (December 2023),[165] which are based on Demographic and Health Surveys, Multiple Indicator Cluster Surveys, and other national surveys. For the wealth quintile data, indicators are from the International Center for Equity in Health database,[147] based on Demographic and Health Surveys and Multiple Indicator Cluster Surveys. MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

quintile is likely to be an indication that efforts to scale up their usage over the past two decades, through mass distribution campaigns and subsidies or making them free, have been effective at reaching the poorest children.[166,167] The richest households might also live in low-risk areas with less need for bednet use. Similarly, the observed higher level of breastfeeding practices in mother–baby dyads in the poorest quintile is consistent with the literature showing that breastfeeding practices reflect sociocultural norms.[4,5]

These exceptions suggest that pro-rich coverage inequalities are not inevitable and can be addressed through policy and programmatic efforts targeted at the population subgroup that are the most disadvantaged and in-need. The exceptions also suggest that other drivers, such as workplace conditions and community-level factors, including deeply embedded belief systems, should be factored into strategies to improve intervention coverage rates.

Understanding country progress towards universal health coverage requires studying trends as well as current intervention coverage levels. Comparing results in countries with at least one survey in both the MDG and the SDG periods showed that gains in coverage were achieved across all but four of the 20 interventions: three doses of diphtheria–tetanus–pertussis vaccination, measles vaccination first dose, HPV vaccination, and vitamin A coverage (figure 15). The gains vary by intervention, ranging from an increase of about 3 percentage points (improved water and oral rehydration salts) to 32 percentage points (postnatal care for babies). The variation in the magnitude of coverage gains by

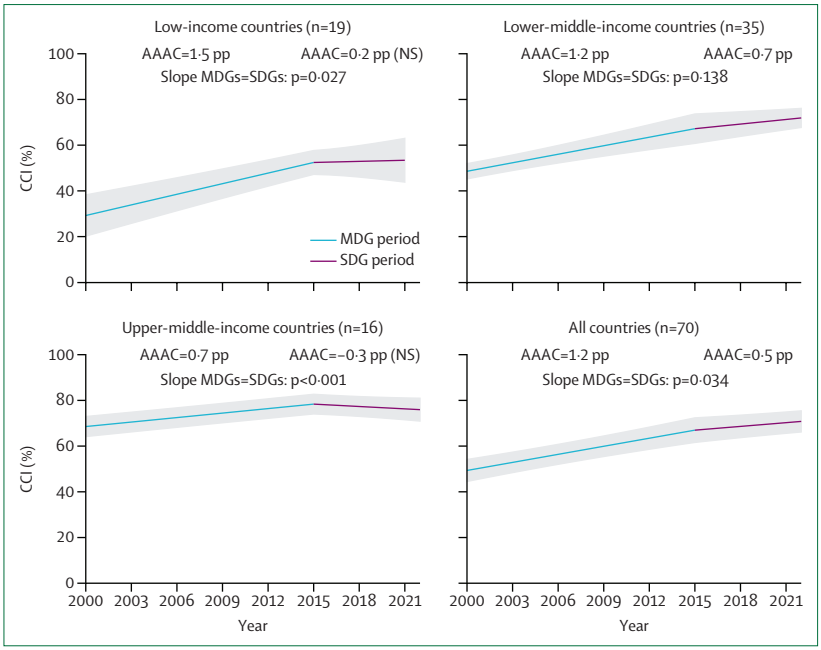

Figure 16: **CCI trends for low-income countries (A), lower-middle-income countries (B), upper-middle-income countries (C), and all countries (D) in 2000–20**

Data are presented with shaded areas that represents 95% CIs for the regression line. The MDG period is 2000–15; the SDG period is 2015–20. AAAC estimates that are not different from 0 are labelled NS. The lines stop at the year for the latest survey in each region. AAAC=average annual absolute change. CCI=composite coverage index. MDG=Millenium Development Goal. NS=not significant. pp=percentage points. SDG=Sustainable Development Goal.

intervention shows that remarkable progress is possible. Skilled birth attendance, for example, is approaching universal coverage. Multiple studies, such as Exemplars in Global Health and Countdown country case studies, have contributed to understanding the drivers of such positive outliers.[168] The slow rate of progress for many of these interventions also suggests that without continued prioritisation, achievement of the SDG targets related to women's, children's, and adolescents' health will become unachievable.

Global trends in RMNCH coverage and equity

The composite coverage index (CCI) summarises RMNCH coverage by averaging eight indicators that represent four stages of the RMNCH continuum of care: family planning, maternal and newborn care, immunisation, and care seeking for sick children. Each stage is given the same weighting.[169–171] The CCI has been widely used to explore trends and equity in coverage in multicountry analyses and gives an overall picture of progress. Of 86 LMICs with data, only 15 (17%) had a CCI over 80%. Both the survey-based indicators of demand satisfied with modern methods of family planning and care-seeking behaviour for sick children are affected by denominator measurement issues, which precludes universality. Therefore, a CCI value of around 80% is interpreted as high coverage.

Only countries that had at least two surveys since 2000 were included in the CCI analyses, resulting in 70 countries with 264 surveys. For the regional level analyses, five regions had enough countries with available data for a meaningful analysis: Eastern and Southern Africa, West and Central Africa, South Asia, East Asia and Pacific, and Latin America and the Caribbean. A multilevel linear model was used to estimate the average annual absolute change, in percentage points, for the MDG and SDG periods. Regional aggregated analyses are based on weighted averages of country results, with country weights given by their respective population in 2015. A detailed account of the methods and data availability are presented in the appendix (pp 79–82).

CCI trends

All country income groups presented statistically significant increases in CCI during the MDG period (figure 16). Progress was fastest in the LICs, at 1·5 percentage points per year. However, all groups had a slower increase in coverage during the SDG period compared with the MDG period. During the MDG period, the CCI increased, on average, by 1·2 percentage points per year, double the 0·5 percentage points per year average increase in the SDG period. The most worrying aspect in this set of results is the slowdown in progress in the group of the poorest countries, which had the fastest increase in coverage in the MDG period and now are stuck just above 50% CCI coverage. The countries in the upper-middle-income group also show stagnation but at a much higher level of coverage, close to 80%.

Eastern and Southern Africa, South Asia, East Asia and Pacific, and Latin America and the Caribbean regions presented patterns similar to the global trends (figure 17). There was no evidence of progress since 2015 in Eastern and Southern Africa and Latin America and the Caribbean. West and Central Africa, on the contrary, presented an increase in average annual absolute change from 0·6 percentage points to 1·6 percentage points from the MDG to the SDG period.

The meaning of these results is not the same for all countries and regions. Some regions have achieved a relatively high CCI, and a slowdown might not imply a lack of effort, but a ceiling effect. Many other countries still have a long way to go to achieve high levels of coverage of RMNCH interventions. The observed deceleration is disappointing and underscores the need for continued attention and investment so that the SDG goals are achieved.

The assessment of trends for the four composite RMNCH indicators of the CCI—demand for family planning satisfied with modern methods, skilled birth attendant, three doses of diphtheria–tetanus–pertussis vaccination, and oral rehydration salts for children with diarrhoea—are presented in the appendix (pp 83–92). Of these indicators, skilled birth attendant displayed the fastest increase, with an average annual absolute change of 2·3 percentage points during the MDG period and

1·6 percentage points during the SDG period. In contrast, demand for family planning satisfied with modern methods showed the slowest progress in both periods.

Adolescence is a crucial period in an individual's life, and health services are often not suitable for their needs, especially for sexual and reproductive health.[172] We compared adolescents (aged 15–19 years) with older women for three key interventions: demand for family planning satisfied with modern methods, four or more antenatal care visits, and skilled birth attendance. Adolescents tend to be underserved generally, but particularly for contraception (appendix p 93). Family planning services are often not prepared to received adolescents, particularly those who are not married or are considered too young to be sexually active.

The SDG period includes surveys done before, during, and after the COVID-19 pandemic. Post-pandemic studies did not find lasting and strong reductions in intervention coverage,[173–176] suggesting that, largely, our findings cannot be attributed to the COVID-19 pandemic.

Trends in inequalities

The slope index of inequality (SII) was used to assess inequalities in health intervention coverage at an individual level. The SII estimates the difference in coverage between the wealthiest and poorest extremes of the wealth distribution in each country through a logistic model, using information on all sampled individuals. The SII is expressed in percentage points: a positive value indicates how much the coverage of the wealthiest extreme is higher than that of the poorest in the population.[170,177] Methodological details are presented in the appendix (pp 99, 100).

When considering all countries with available data pooled together, the average annual absolute reduction in the SII calculated for the CCI coverage was 1·1 percentage points per year in the MDG period, compared with 2·0 percentage points per year in the SDG period, which was significantly faster. The reduction in CCI inequality is driven by an accelerated increase in coverage in the poorest individuals in the SDG period and by stagnation in the wealthiest (figure 18).

Inequalities by country income group (figure 18A) show a disappointing situation for LICs. Despite a visual impression of a faster reduction in inequalities in the SDG period than the MDG period, neither slope is significantly different from zero, meaning that there is no evidence of progress in reducing inequalities. The nearly parallel lines of the CCI over time for the

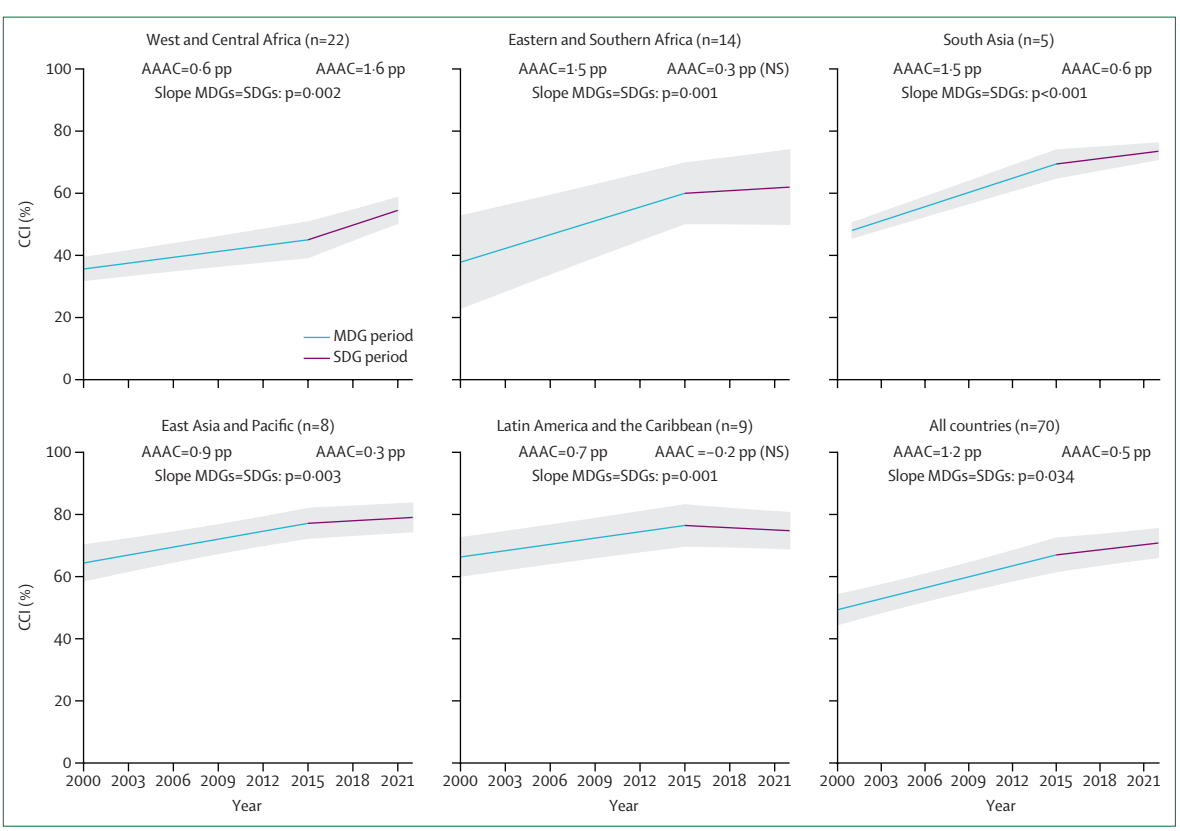

Figure 17: **CCI trends for countries grouped by region and for all countries in 2000–20**
Data are presented with shaded areas that represents 95% CIs for the regression line. The MDG period is 2000–15; the SDG period is 2015–20. AAAC estimates that are not different from 0 are labelled NS. The lines stop at the year for the latest survey in each region. AAAC=average annual absolute change. CCI=composite coverage index. MDG=Millenium Development Goal. NS=not significant. pp=percentage points. SDG=Sustainable Development Goal.

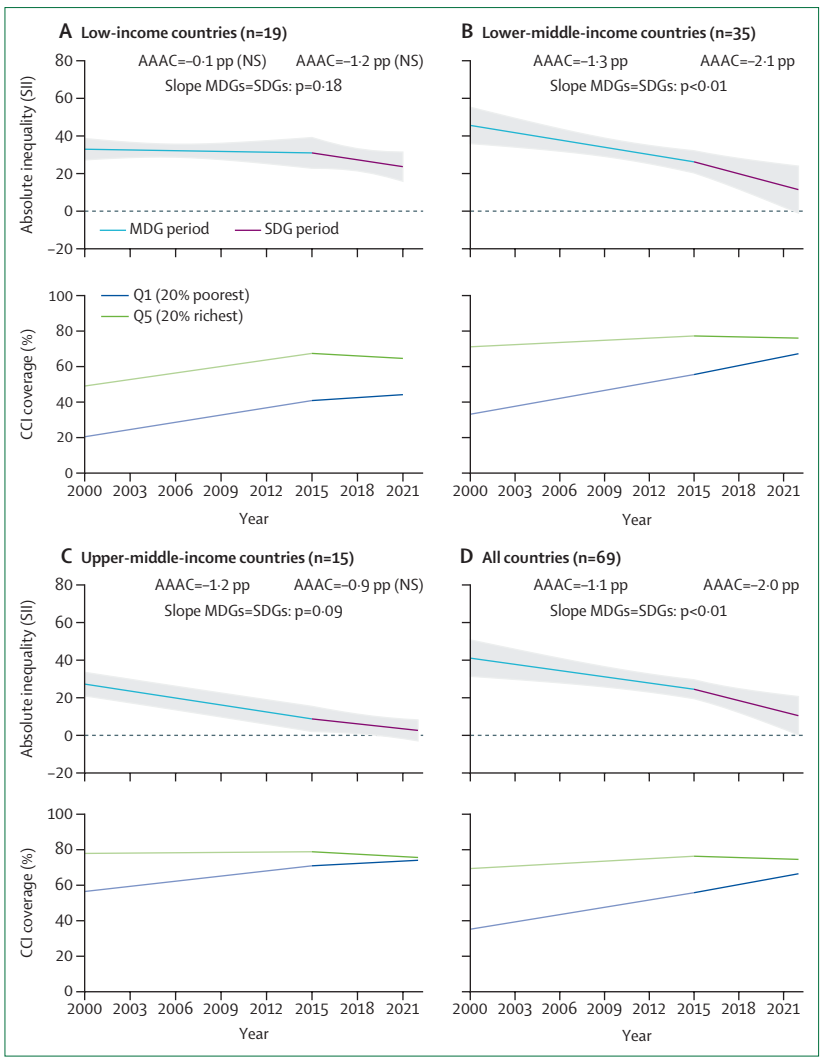

Figure 18: **Trends in SII for the CCI for low-income countries (A), lower-middle-income countries (B), upper-middle-income countries (C), and all countries (D) in 2000–20**
Data are presented with shaded area that represents 95% CI for the regression line. The MDG period is 2000–15; the SDG period is 2015–20. AAAC in the SII estimates that are not different from 0 are labelled NS. The graphs under each of the main SII trend graphs show the pattern of CCI coverage for the 20% poorest and the 20% wealthiest individuals. AAAC=average annual absolute change. CCI=composite coverage index. SII=slope index of inequality. MDG=Millenium Development Goal. NS=not significant. pp=percentage points. SDG=Sustainable Development Goal.

wealthiest and the poorest individuals explain this lack of progress and might suggest that equity will increase only when the best-off households do not have more room for improvement. Lower-middle-income countries experienced a reduction in inequalities, with an acceleration in the SDG period. In this group of countries, the CCI trends by wealth show that the pace of increase in CCI coverage for the poorest individuals was faster over the entire time period compared with the wealthiest. For this group, the CCI coverage stagnated in the SDG period at just under 80% (figure 18B). The upper-middle-income countries also presented a reduction in inequalities during the MDG period, but a slower pace of decline in SII during the SDG period. However, by 2022, the SII was not significantly different from zero, at just 2·6 percentage points, meaning that inequality practically disappeared.

In the regions of West and Central Africa and Eastern and Southern Africa, inequalities declined in the SDG period, whereas there was no evidence of change during the MDG period (figure 19). However, the patterns in CCI change comparing the poorest and the wealthiest groups are different between the two regions. In West and Central Africa, the CCI coverage increased faster during the SDG period than the MDG period, faster for the poorest than the wealthiest individuals. In Eastern and Southern Africa, we observed sustained increases in CCI over the two periods for the poorest individuals, but there was a deceleration in the wealthiest.

The steepest decline in inequalities by region was observed in South Asia, with an acceleration in SII reduction during the SDG period from 1·6 to 3·4 percentage points per year. This change is explained by slower progress in the wealthiest individuals and sustained and fast progress in the poorest. The CCI trend for the wealthiest individuals reversed, becoming negative in the SDG period, an undesirable way of reducing inequalities.

By 2022, countries in South Asia presented a predicted SII of only 2·4 percentage points, not significantly different from zero. Inequality remained substantial in West and Central Africa, with a predicted SII of 34·0 percentage points, and Eastern and Southern Africa, with 17·5 percentage points.

Skilled attendant at birth, typically one of the most inequitable interventions, presented the steepest reduction in inequalities when all countries were pooled together. The SII for this indicator decreased by 3·6 percentage points per year in the SDG period, so that the SII narrowed from a gap of 70 percentage points between the wealthiest and poorest quintiles in 2000 to 22 percentage points in 2022. These results are presented in the appendix (pp 101–20), along with tables used to create the graphs showing inequality trends.

Subnational inequalities

Subnational inequalities in health indicators are an important aspect of equity monitoring because they reveal gaps often related to the health system and policy implementation, and differences in socioeconomic development and epidemiology, rather than individual characteristics, such as wealth.[178] Survey and health facility data can be used to monitor subnational inequalities, with facility data offering more granularity for district assessment. For this Countdown analysis, data from surveys were used to estimate subnational inequalities for the CCI, using the weighted mean absolute difference to the mean at two timepoints. The early survey was conducted around 2009, the middle of the MDG period, and the second (more recent) survey

around 2021. Only countries with surveys within 5 years of these reference timepoints were used for this analysis.

Of 56 countries with suitable data, 28 (50%) reduced subnational inequalities. The results are presented in figure 20, with countries grouped by income level. Five (31%) of 16 LICs reduced subnational inequalities, 17 (57%) of 30 lower-middle-income countries, and six (60%) of ten upper-middle-income countries.

The number of countries with decreasing regional inequalities is similar to that of countries with increasing regional inequalities; the magnitudes of increase and decrease are also somewhat similar. The largest decreases in absolute subnational inequality using the methods specified for this analysis were observed in India (reduction of 7·2 percentage points) and Sierra Leone (reduction of 5·7 percentage points). The countries with the largest increase in subnational inequalities were Pakistan (increase of 3·2 percentage points) and Haiti (increase of 3·1 percentage points). Further details and data are available in the appendix (pp 121–25).

These results contrast with the robust reduction in inequalities between the poorest and wealthiest individuals shown in the previous section. The increase in subnational inequalities is mostly due to some country regions making quick progress on CCI coverage while other regions are left behind. Another recent Countdown study on subnational inequalities in sub-Saharan Africa presented a similar picture, with 16 (47%) of 34 countries showing reduced inequalities.[179] The authors argue that most of the countries failing to make progress were those with low baseline coverage levels or fragile states. Conflict is associated with wider subnational inequalities and also with between-country inequalities, as health intervention coverage and maternal and child mortality tend to be worse.[91]

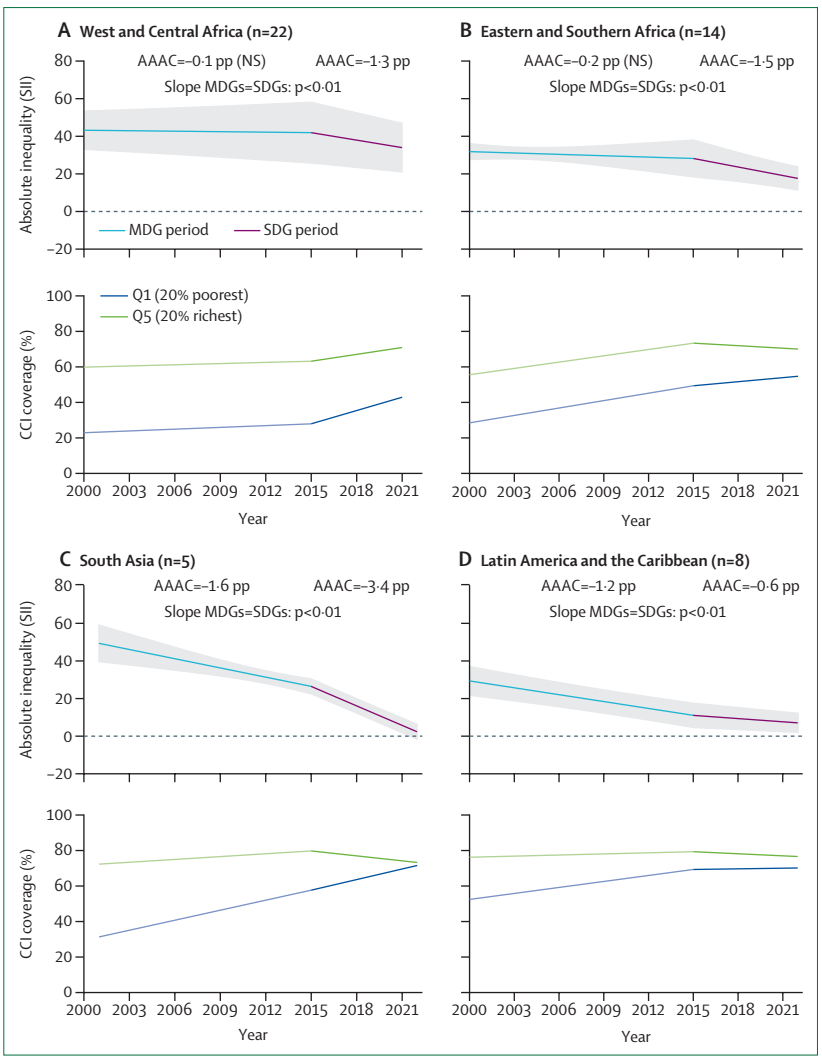

Figure 19: **Trends in SII for the CCI for countries grouped by region in 2000–20**
Data are presented with shaded areas that represents 95% CIs for the regression line. The MDG period is 2000–15; the SDG period is 2015–20. AAAC in the SII estimates that are not different from 0 are labelled NS. The smaller graphs under each of the main SII trend graphs show the pattern of CCI coverage for the 20% poorest and the 20% wealthiest individuals. AAAC=average annual absolute change. CCI=composite coverage index. SII=slope index of inequality. MDG=Millenium Development Goal. NS=not significant. pp=percentage points. SDG=Sustainable Development Goal.

Quality of health care: is quality improving in pace with increases in service availability and usage?

The previous sections showed rapid coverage increases and inequality reductions in many countries, despite an overall slowdown in the pace of coverage change in the SDG period. Service availability and access improvements can only translate into expected health gains if these services are delivered according to quality standards. The extent to which health facilities have kept pace with increased utilisation and improved the quality of care, or at least maintained the same level of quality, is more difficult to assess. Quality of care encompasses several dimensions, including health system readiness to deliver quality services, provision of care according to established standards, and user adherence and experience of care.[180,181] Measuring all dimensions requires multiple data sources and factoring in the context of local health systems and demand-side factors rooted in socioeconomic, political, and cultural realities.

The measurement and monitoring of quality of care is challenging. In this Countdown report, trends in quality of care were examined using three indicators from national survey programmes to ascertain trends and inequalities in the quality of maternal and newborn health services: a content-adjusted antenatal care indicator, delivery by caesarean section in the 20% poorest mothers as an indication of referral system functionality under emergency conditions, and a co-coverage measure for maternal and newborn health interventions that capture continuity of care.

Quality of antenatal care

The content-qualified antenatal care coverage (ANCq) indicator[182] was developed to address limitations in existing antenatal care indicators that only consider

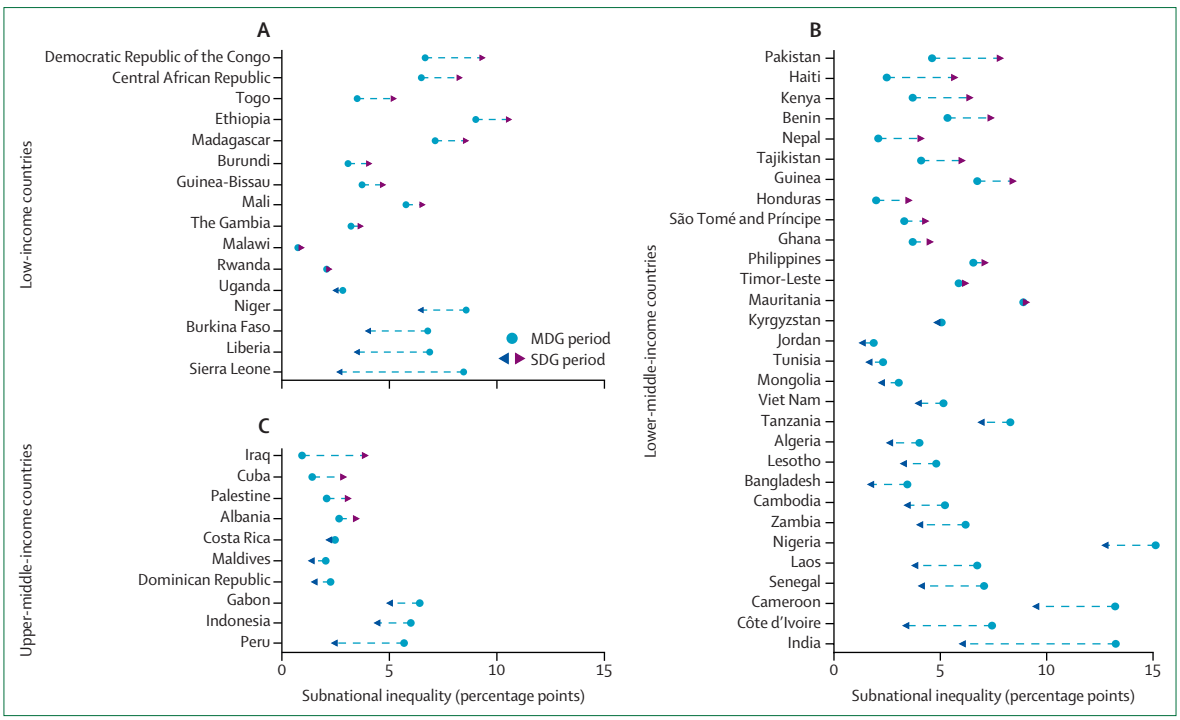

Figure 20: **Change in subnational inequalities in CCI for low-income countries (A), lower-middle-income countries (B), upper-middle-income countries (C) in 2000–20**

Absolute inequality was measured with the weighted mean absolute difference to the mean, measured in percentage points, around the year 2009 (for the MDG period) and for the latest survey available during the SDG period, around 2022. The arrows indicate the direction of change: red arrows pointing right indicate an increase in subnational absolute inequality; blue arrows pointing left indicate a reduction. MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

contact with health services. The ANCq comprises multiple indicators: service contact (timing and number of visits) and care content (skilled antenatal care provider, blood pressure measured, urine and blood samples taken, and tetanus protection), which are combined into a score ranging from 0 (no antenatal care) to 10 (best possible scenario). The ANCq indicator expresses quality aspects of antenatal care and reveals inequalities hidden by contact-only indicators.[183]

For this analysis of change between the MDG and SDG periods, the ANCq score was dichotomised into a score of 8 or higher (ie, good quality antenatal care) or a score of less than 8. We refer to the dichotomised indicator as ANCq+. Results from 44 countries with suitable data are presented in figure 21. All LICs had a positive change in ANCq+ coverage, with Liberia and Sierra Leone as the best performers. Of lower-middle-income countries, 18 (78%) of 23 countries had increases in ANCq+ coverage. The most notable progress in this group was achieved by Cambodia (increase of 43 percentage points) and Nepal (increase of 39 percentage points). There was little change in the seven upper-middle-income countries with data and mixed results regarding direction of change. Only four (9%) of 44 countries presented considerable reductions in ANCq+ coverage: São Tomé and Príncipe (decrease of 34 percentage points), Mauritania (decrease of 21 percentage points), Benin (decrease of 6 percentage points), and Guinea (decrease of 5 percentage points).

In absolute terms, except for Indonesia, all upper-middle-income countries—ie, Honduras, Sierra Leone, Nepal, Cambodia, Viet Nam, Liberia, Ghana, and Cuba—presented endpoint ANCq+ coverage of at least 76%, and as high as 100% in Cuba. Additional data on ANCq+ is available in the appendix (pp 126–30).

Caesarean section delivery in the poorest and the wealthiest women

Caesarean section delivery is often used as a proxy indicator of over-utilisation and under-utilisation of care. When clinically indicated, caesarean sections can save lives. Because delivery complications resulting in need for a caesarean section can arise at any time during childbirth, health systems must be equipped to provide 24-h, 7-days-a-week access to this service, including maintaining a functional referral network. Evidence suggests that maternal and child mortality rates do not improve with caesarean sections exceeding 10% of all deliveries.[184] However, a prevalence below this threshold signals insufficient access to the procedure and poor-quality obstetric care. There is wide between-country variation in caesarean section use and substantial within-country disparities. Caesarean section prevalence tends to increase as the location of births shifts from

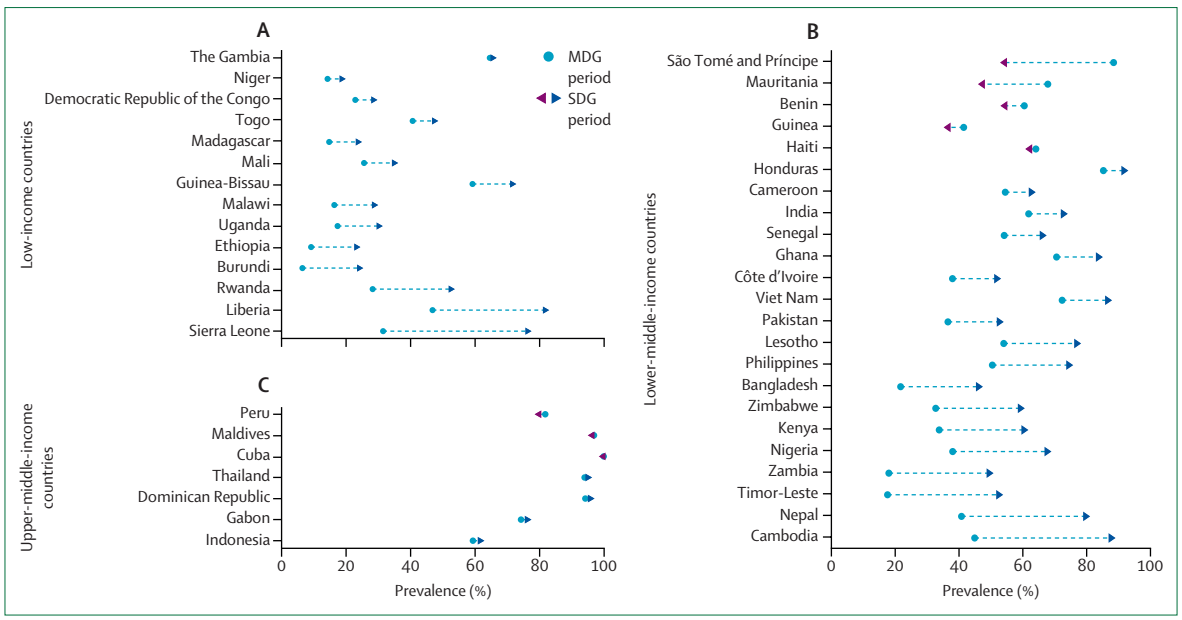

Figure 21: **Change in ANCq8+ coverage for low-income countries (A), lower-middle-income countries (B), upper-middle-income countries (C) in 2000–20**
Data show how the proportion of mothers who received a score of 8 or more in the ANCq indicator changed from the MDG period (around 2009) to the SDG period (around 2020). The arrows indicate the direction of change: blue arrows pointing right indicate an increase; red arrows pointing left indicate a reduction. ANCq8+=Antenatal Care Content-qualified Indicator 8 or more points. MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

non-health-care facilities or lower-level facilities to hospitals.[185]

Caesarean sections are usually more common in the wealthiest and more educated women and private sector users.[186] The use of caesarean section also varies between countries, typically staying below the recommended threshold of 10% in high maternal and child mortality settings.[187,188] Therefore, caesarean section rates in women who are at the highest mortality risk should be compared against this threshold 10%. This comparison was done by selecting LMICs with national health surveys around 2009 in the MDG period and around 2020 in the SDG period. Caesarean section prevalence was estimated for women with a livebirth 2 years (for Multiple Indicator Cluster Surveys) or 3 years (for Demographic and Health Surveys) before the survey, stratified by wealth quintiles. Results were obtained from 75 countries with suitable data from surveys, and presented for the poorest 20% of women and the wealthiest 20% of women (figure 22).

Of the LICs, an increase in caesarean section rates in the poorest 20% of women was observed in 13 (68%) of 19 countries, but at very low levels (median 2·1% in SDG period), and only Rwanda exceeded 10% prevalence in the poorest 20% of women. For the richest 20% of women in LICs, 14 (74%) of the countries had a caesarean section prevalence above 10% in the SDG period.

The increase in caesarean section prevalence in the poorest 20% of women was more pronounced in the 34 lower-middle-income countries but, in the SDG period, still remained below 10% in 22 (65%) of these 34 countries. In the same group, 31 (91%) countries had at least 10% caesarean section prevalence in the wealthiest 20% of women. Overuse of caesarean sections was common, with 35 (47%) of 75 LMICs having a prevalence above 30% in the wealthiest 20% of women.

The results underscore that a large proportion of women, mostly the poorest, are not receiving the care that they need in emergency obstetric situations and that investments in delivery care must be prioritised if maternal and neonatal mortality are to be reduced.[189] The wide disparities between the poorest and wealthiest women suggest that most countries have the infrastructure to offer caesarean sections for those in need, at least in urban settings. A major step to improve the situation is to increase the relative share of hospital deliveries or strengthen referral networks so that high-quality caesarean sections can be safely provided for women who need them.

Maternal and newborn care co-coverage

Maternal and neonatal care is essential for saving the lives of mothers and newborns and preventing stillbirths. The maternal and newborn health indicator is a survey-based composite indicator that gives a simple count of how many of three interventions were received by each mother-baby dyad: antenatal care, institutional delivery, and postnatal care for the mother and the baby. This indicator provides information on how successfully countries provide continuous care to mothers and babies during the pregnancy, delivery, and postnatal periods. Analysis around this indicator was similar to that of the quality of antenatal care indicator discussed earlier. Our analysis

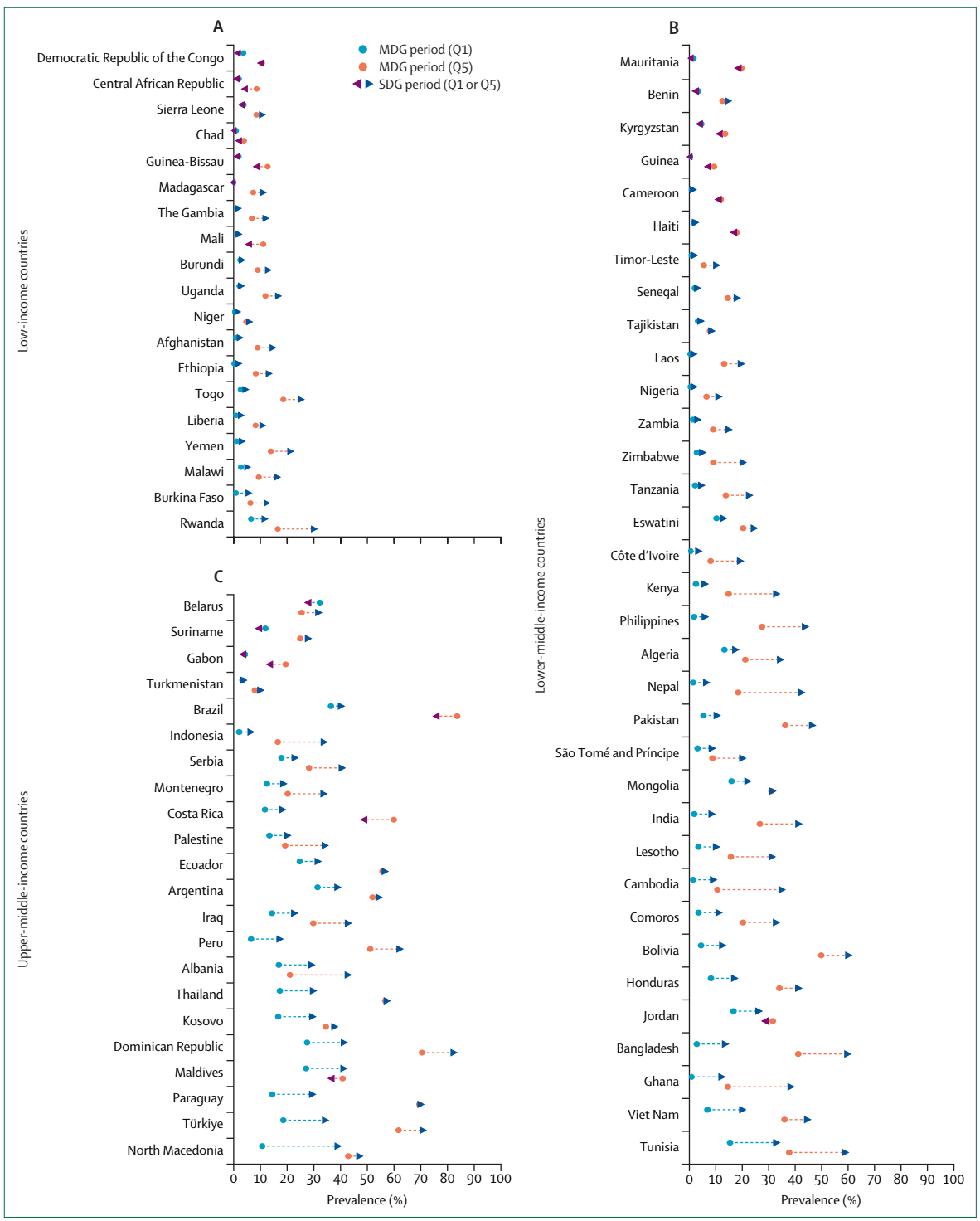

Figure 22: **Change in caesarean section prevalence for low-income countries (A), lower-middle-income countries (B), and upper-middle-income countries (C) in 2000–20**

Data show how the proportion of mothers who received a caesarean section changed from the MDG period (median survey year 2010) to the SDG period (median survey year 2019). The arrows indicate the direction of change: blue arrows pointing right indicate an increase; red arrows pointing left indicate a reduction. MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

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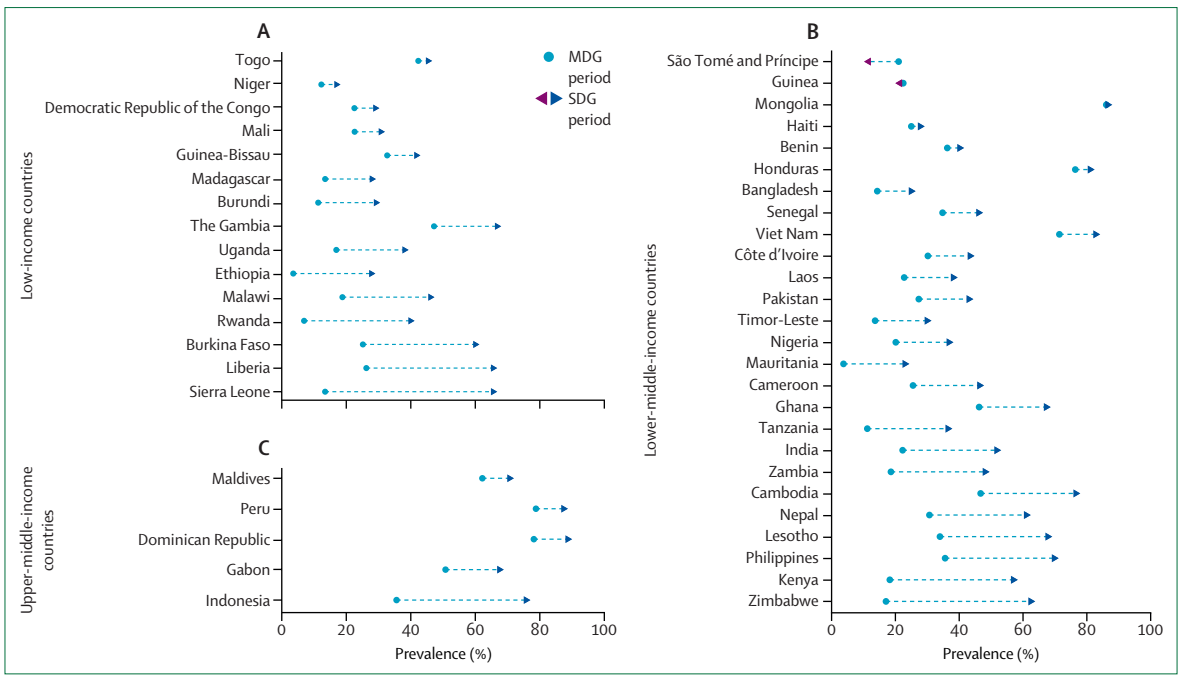

Figure 23: **Change in the maternal and newborn health indicator for low-income countries (A), lower-middle-income countries (B), upper-middle-income countries (C) in 2000–20**

Data show how maternal and newborn health indicator coverage changed from the MDG period (median survey year 2010) to the SDG period (median survey year 2019). The maternal and newborn health indicator represents the proportion of mother–baby dyads who received all three key interventions: at least one antenatal care visits, institutional delivery, and postnatal care for the mother and the baby. The arrows indicate the direction of change: blue arrows pointing right indicate an increase; red arrows pointing left indicate a reduction. MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

centred on estimating the coverage with all three interventions for 46 countries with suitable data, comparing the MDG period (median survey year 2010) with the SDG period using the latest available survey (median survey year 2019).

Figure 23 shows that all but two countries increased the proportion of mother-baby dyads receiving all three interventions. These trends show positive improvements in providing mothers and babies with life-saving care.

To address the leading causes of newborn deaths, additional small and sick newborn services need to be brought to scale. Preterm birth is the current leading cause of mortality in children younger than 5 years, yet prematurity has not reduced in any region in the last decade.[160] Each year, an estimated 30 million small and sick newborns, half of whom are preterm, have life-threatening conditions that require inpatient care.[190] Saving their lives requires more intensive health system approaches beyond routine postnatal services. The ten countries making the most rapid progress in newborn survival over the past 10 years have all invested in newborn care units that provide a package of care to reduce disabilities and address prematurity, intrapartum complications, jaundice, and congenital conditions.[191] The required investments in newborn care units are not small, but evidence suggests that they yield large returns.[190,192,193]

Conclusion

Overall, coverage of essential maternal, neonatal, and child health interventions continued to increase during the SDG period, but at a slower pace than that of the MDG period. The West and Central Africa region was the exception, with progress faster in the SDG period than the MDG period. Somewhat unexpectedly, given the slowing increase in coverage of key interventions, important reductions in wealth inequalities occurred, including faster reductions in the SDG period than during the MDG period. In this respect, the disappointing exception was LICs. In most cases, the reduction in inequalities is explained by a faster increase in coverage for the poorest individuals, but not for the wealthiest. In some cases, a ceiling effect might explain the slowing of progress in the richest individuals.

In contrast, subnational inequalities did not present a clear pattern across the countries studied. There was a split, with about half the countries showing decreasing subnational inequalities, and the other half showing increasing inequalities. Taken together, the results imply a faster increase in coverage for the poorest individuals in most countries, compared with the wealthiest, but with inequitable progress across the countries' subnational divisions. This situation must be addressed with suitable policies for each context. Assessing trends in quality of care is limited by the scarcity of data. Our content-qualified ANC indicator

with a score of eight or more (ANCq+) showed that most countries present good progress and that no LIC has a reduction in coverage. The co-coverage maternal and newborn health indicator showed similar findings, and the results taken together suggest good progress in pregnancy and delivery care. However, some groups, especially adolescents, do not benefit equally. For example, adolescents present lower levels of demand for family planning compared with older women.[172]

Finally, we have a worrisome scenario for caesarean sections, especially in LICs. The caesarean section prevalence rate in the poorest 20% of women in LICs is well below the estimated demand and progress over time is slow. Conversely, the proportion of births by caesarean section in upper-middle-income countries is too high, even for the poorest 20% of women. Caesarean sections are a life-saving intervention when used with a medical indication, but overuse represents unnecessary costs and increased risks for mothers and babies, including for future deliveries. The resources that go into unnecessary caesarean sections should be used to improve delivery care, focusing on quality of care and emergency care for complicated cases.

Section 4: health systems and supportive policies

Well functioning health systems are essential for the provision of life-saving interventions for women, children, and adolescents.[181] This section addresses policies and several dimensions of health systems functionality. Health financing is presented in section 5 as it encompasses external aid, a measure of global prioritisation of RMNCAH.

Health systems are rooted in each country's context, are dynamic, and must be responsive to changing population health needs. Countries must regularly adapt their health systems in response to acute crises, such as disease outbreaks, but also evolve to account for demographic and epidemiologic transitions. For maternal and newborn health, an integrated five-phase transition model for maternal mortality, stillbirth, and neonatal mortality showed that a transition from high to low mortality can be characterised by health-care changes. These changes include gradual increases in coverage and quality of health services, reductions in inequality in access to care, improved referral systems and emergency obstetric and newborn care, and reductions in fertility levels.[185] Strategic planning to reduce maternal and neonatal mortality and stillbirths can benefit from comparing the current country situation and trends with other countries that are in the same transition phase and those that have advanced further in the mortality transition. As maternal and child mortality becomes more concentrated in the perinatal and neonatal periods due to improvements in health-care access, water and sanitation services, and nutrition, including the availability of nutrient-dense foods and nutrition services, countries need to redesign their health systems for better emergency obstetric and small and sick newborn care, while continuing to provide other essential RMNCAH and nutrition services. Similarly, changes in leading causes of child deaths and population dynamics have substantial implications for the mix of health, nutrition, and social services that countries need to provide to continue accelerating progress (appendix p 143).

Several developments in the Sustainable Development Goal period have reinforced the importance of ensuring health systems are person-centric and sensitive to community demands. Such developments include the endorsement of the Declaration of Astana in 2018 that promotes a primary health-care model with three pillars: community engagement;[194] growing awareness of respectful care as essential for improving service utilisation and health outcomes;[195] and lessons learned from the COVID-19 pandemic about the role of trust in health service uptake.[196]

Case studies of country success during the MDG era and more recent Exemplars in Global Health studies stress the combination of country leadership and civil society voices in driving progress for women's, children's, and adolescents' health.[6,197] These two elements can, in some contexts, be in opposition. As the global community pledges to align health funding with country priorities[198] and devolve more national health strategy decision-making power to LMIC governments,[199] questions have emerged about the implications of rising authoritarian sentiments on efforts to decentralise health systems to subnational levels and incorporate local voices into the design, implementation, and evaluation of health policies and programmes.[200,201] Reports of increasing hostility in many countries to civil society action are antithetical to the primary health-care model promoting people-centred care and community participation.[202,203]

Policies in support of human rights to health

Countdown's theory of change is vested in a conviction that everyone has the right to health, including women, children, and adolescents, and that norms in ratified international human rights treaties[194,204–207] should be embedded in country legal frameworks.[208–212] The country's policy environment reflects political commitment to health, determines the scope and scale of services provided, and facilitates coordination across sectors to expand health service access and to ensure health facilities are equipped with basic features, such as running water and electricity.

Scholarship that promotes action and accountability related to women's, children's, and adolescents' health is centred on a human rights framework, calling out governments and partners for failing to fulfil their commitments. The *Lancet* Commission on child health and wellbeing,[213] and its spin-off Children in All Policies 2030,[136] leverages human rights principles to stress that governments have a duty to ensure all children receive their rights and entitlements. The *Lancet*

Commission on adolescent health and wellbeing similarly emphasises the collective responsibility to uphold adolescents' human rights.[146,214] The existence of supportive legislation is also a marker of country prioritisation of women's, children's, and adolescents' health.

Data collection methods for policy surveys have changed over time, making trend analyses challenging. This section focuses on abortion and a selection of social protection measures, drawing on the most recent data available in global policy databases. Legislation related to women's empowerment and gender discrimination, including laws concerning marriage, violence against women, and equal education and employment opportunities are discussed in section 1 of this report.

Sexual and reproductive health and rights: a focus on abortion

Sexual and reproductive rights are fundamental to overall social and economic development, women's autonomy and empowerment, and gender equality.[215] Access to safe abortion is considered a human right in numerous international and regional human rights bodies, and this normative ethos has underpinned the liberalisation of restrictive abortion laws in many diverse contexts over the past 30 years.[216] However, the decision of the US Supreme Court to overturn *Roe v Wade* in 2022, which guaranteed the constitutional right to abortion, is a reminder that sexual and reproductive rights that are essential for women's and girls' health are not immutable and can be lost.

Unsafe abortion is a leading preventable cause of maternal mortality and morbidity worldwide, including death and short-term and long-term poor health outcomes from infections and haemorrhage (see section 2 for information on maternal mortality trends).[217] The proportion of unsafe abortions tended to be significantly higher in countries with restrictive abortion laws than those with less restrictive laws.[218] The criminalisation of abortion has not been found to act as a deterrent to seeking an abortion. Instead, restrictive laws and penalties are associated with elevated risks of women resorting to unsafe and unregulated abortion services.[219] Countries typically consider abortions performed outside of specified legal grounds a criminal offense. For instance, 132 (73%) of 182 countries have criminal laws that penalise abortion-seekers, according to the WHO Global Abortion Policies Database.[219,220] Only 55 (30%) of 186 countries allow abortion at a woman's request and 20 (11%) countries provide no access grounds for abortion (appendix p 143).

Legislation that promotes universal access to family planning services, including comprehensive sexuality education and laws that permit adolescent girls to access family planning without parental or spousal consent, have been found to decrease the frequency of unintended pregnancies and unsafe abortions and should be part of countries' strategies to prevent abortion-related deaths and disability.[215,221] Around 15% of unsafe abortions worldwide are estimated to take place in adolescent girls younger than 20 years.[222] Programming and policies addressing unsafe abortion should therefore account for the unique informational and service needs of this vulnerable population group.

Social protection measures for families

Social protection measures ranging from cash benefit programmes to programmes that protect vulnerable population groups are fundamental to prevent and reduce poverty across the lifecycle.[223] Such measures are also crucial to give children a healthy start in life, ensure access and gender equity in education, and protect children and adolescents from harmful commercial marketing practices that contribute to risky behaviours (eg, smoking and alcohol consumption) and rising rates of obesity and overweight. A non-exhaustive list of policies protective of maternal, newborn, and child health includes maternity protection policies, the International Code of Marketing of Breastmilk Substitutes, child and family cash benefit and cash transfer programmes, incentives for service utilisation, such as childbirth services and childhood vaccination, policies on early childhood development, food fortification policies, and food assistance programmes, including through schools.

There are major gaps in the adoption of all or some of these important policies in LMICs with available data: 111 (83%) of 134 countries have not yet adopted the Maternity Protection Convention (convention 183), which includes minimum standards around work conditions for women who are pregnant or breastfeeding, maternity leave, cash benefits during maternity leave, and breastfeeding breaks and facilities.[224] 56 (64%) of 88 countries with available data had less than 20% of their population covered by social protection or cash benefits, based on analysis of the International Labor Organization World Social Protection Database (2016–21).[225] 56 (42%) of 134 countries have not adopted a multisectoral early childhood development policy. In sub-Saharan Africa, 31 (65%) of 48 countries did not have a policy, whereas seven (88%) of eight countries in South Asia have adopted such policies.[226] 50 (37%) of 134 countries have no mandatory or voluntary policy on wheat fortification, 115 (86%) countries have no such policy for rice, and 122 (91%) countries have no such policy for maize.[227] 37 (28%) of 132 countries with data have no legal measures in place aligned with the International Code of Marketing of Breastmilk Substitutes,[228] 27 (20%) of these countries have measures that are substantially aligned with the Code, and 68 (52%) of these countries have some provisions or are moderately aligned with the Code. Even when measures are in place, implementation is not guaranteed, especially due to strong push-back from industry.[229]

Much more work is needed to increase country adoption and implementation of a comprehensive set of transformative human rights-based policies that can

improve women's, children's, and adolescents' health and nutrition, and contribute to overall social development. There is growing evidence of the need for government regulation of social media and other online platforms to protect children and adolescents from bullying and predators,[230] and to control the spread of misinformation that can seed distrust in the health-care system, as well as promote harmful behaviours with immediate and long-lasting consequences for women, children, and adolescents.[231,232] Similarly, as discussed in section 1, greater commercial regulation is needed to address the growing rates of childhood and adolescent overweight and obesity, and efforts to improve food systems to reduce food insecurity are also essential.

Dimensions of health system functionality

Health systems are complex and made up of interconnected components. Aspects central to the provision of quality services for women's, children's, and adolescents' health include human resources and commodities. We also discuss is the role of the private sector in providing services in this section.

Human resources

High-quality health care relies on a sufficient supply of well trained providers who are equitably distributed, fairly remunerated, and who work in an enabling environment with supportive supervision, opportunities for career progression, and adequate equipment and medicines.[233] Shortages of health-care personnel are a major threat to health system performance, yet they are common in LMIC settings. According to WHO's Global Health Workforce statistics database, there has been little improvement in health workforce density across most regions and country income groups since 2010 (appendix pp 149–54).[234] Figure 24 shows the large gaps by region and income groups. Upper-middle-income countries have seven-times more core health professionals than LICs and three-times more than lower-middle-income countries. Regionally, South Asia, Eastern and Southern Africa, and particularly West and Central Africa are lagging substantially behind other regions (appendix pp 149–54). These figures should be interpreted with caution, as the quality of health workforce data is poor, limiting the ability to reliably ascertain densities and trends.

In 2006, WHO proposed a minimum threshold density of 23 doctors, nurses, and midwives per 10 000 individuals to achieve adequate coverage rates for primary health care.[235] WHO updated this threshold to 44·5 per 10 000 individuals in 2016 based on estimates of health workforce requirements for providing the interventions in the universal health coverage index.[233] In both the MDG and SDG periods covered for this report, the same four regions achieved the relevant benchmarks—East Asia and Pacific, Middle East and Northern Africa, Latin America and the Caribbean, and Eastern Europe and Central Asia—whereas West and Central Africa, Eastern and Southern Africa, and South Asia fell far short of reaching them.

Other dimensions of human resources for health have scarce data to track trends in the SDG period. Community health-care workers have a crucial role in multiple countries.[236–238] Tracking community health-care worker density and distribution is challenging given the diversity in roles, training, and authorised tasks across countries and time. Task-shifting modalities are an effective strategy to expand service access and address shortages in health-care workers and have been found to improve access to lifesaving maternal, newborn, and child health interventions.[239–241] Investments in recruitment and retention are difficult to monitor, and often face major challenges that deplete their health-care workforce, including so-called brain-drain,[242] migration, the attrition of health-care workers due to and during conflicts and epidemics, and violence against health-care workers. Although the WHO Global Code of Practice on the International Recruitment of Health Personnel was adopted at the 63rd World Health Assembly in 2010,[243] its effects seem to be limited in redressing high levels of emigration of skilled health-care providers from LMICs to HICs and there are few reliable data.[244] Another data gap regards the health workforce modalities during and immediately after conflicts.[245,246]

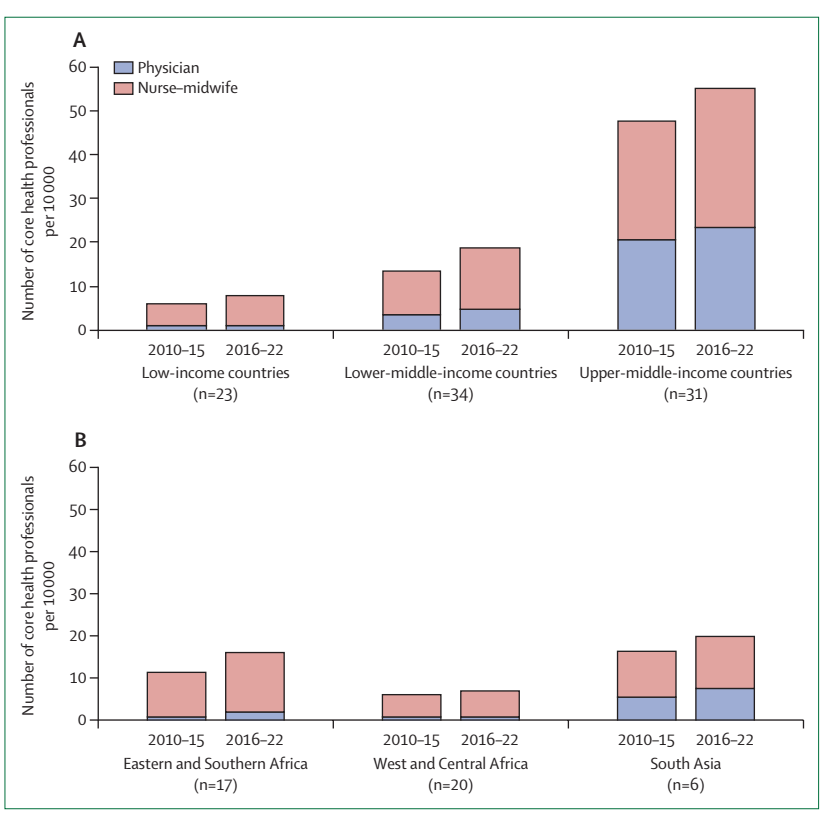

Figure 24: **Density of physicians and nurse–midwives per 10 000 population by income group (A) and selected regions (B) in 2010–15 and 2016–21**

Countries with available data in both time periods organised by regions. Data sourced from WHO.[234]

The low health worker densities in LICs and lower-middle-income countries, and particularly in sub-Saharan Africa, are a major impediment to large-scale implementation of the more complex maternal, newborn, and curative child health interventions that are required to reach the SDG targets. Although innovations in diagnostics and service delivery can improve health worker efficiency, investments to expand the health workforce in these countries should be prioritised even in the context of budget pressures due to debt burdens.

Logistics and supply chain management systems

Efficient and secure supply chains are crucial for the provision of quality health services through facilities and community health programmes.[247] In LMICs, logistics and supply chain management systems often function poorly, severely restricting the availability, affordability, and accessibility of essential commodities for women's, children's, and adolescents' health.[248]

Obtaining a comprehensive view of trends in commodity availability is difficult. An assessment of ten countries with data from health facility assessments in both the MDG and SDG periods showed modest improvement over time, suggesting that these countries were able to sustain, but not ensure, a consistent and readily available supply of crucial commodities for maternal, newborn, and child health (appendix pp 144, 145. This finding points towards the importance of functional logistics systems supported by a reliable supplier base for uninterrupted stocks of health commodities. Investments in technological innovations and technology transfer to improve women's, children's, and adolescents' health should also factor in health systems issues that will inhibit or facilitate their uptake to ensure sustainability and to avoid market distortion.

The role of the private sector

Private sector engagement is considered a potential strategy for achieving universal health coverage when governments have strong oversight and the ability to regulate its involvement.[249–251] The portion of RMNCAH and nutrition services covered by the private sector varies widely across LMICs.[252] Regionally, the private sector's contribution is larger in South Asia than in sub-Saharan Africa.[253]

To examine changes in the contribution of the private sector to service delivery between the MDG and SDG eras, data from household surveys on coverage by private and public sector for three key maternal, newborn, and child health interventions were examined. The public sector remained the primary provider of institutional delivery and care seeking for symptoms of acute respiratory infection in LICs and lower-middle-income countries, but not for caesarean section delivery. The proportion of services provided through the public sector in the SDG era was 92% for institutional deliveries, 29% for caesarean section, and 81% for care seeking for symptoms of acute respiratory infection (figure 25). The contribution of the private sector to service delivery was relatively constant between the MDG and SDG periods. Caesarean sections are the exception, as the proportion of this intervention provided in the private sector increased from 62% in the MDG period to 71% in the SDG period. Details on the methods for selecting countries, computations, and results by region and income classification are available in the appendix (pp 162–66).

Health information systems

Assessing the strength of health information systems is complex, particularly in terms of gauging the extent to which data influence decisions. Data collection mechanisms are the most objectively measurable component of country health information systems.[254] These mechanisms include population health data sources (eg, civil registration and vital statistics systems, population census, and household surveys), data from health facilities (eg, routine information systems and health facility assessments), and other sources (eg, health workforce databases, and financial databases. Further information on data gaps is available in the appendix (p 144).

Most LICs and lower-middle-income countries do not have well functioning civil and vital registration systems, especially in sub-Saharan Africa. Since 2015, technological advances have increased momentum to build and strengthen such systems,[255] resulting in improvements in several countries. Birth registration coverage in 65 LMICs with at least one survey in both the MDG and SDG periods increased from 45 (69%) countries in 2000–14 to 50 (77%) in 2015–23 (appendix p 176). Nevertheless,

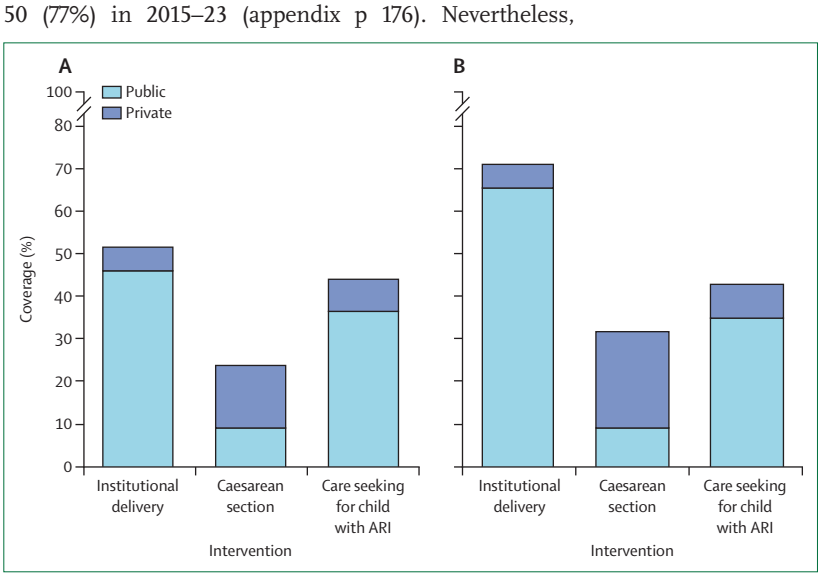

Figure 25: **Intervention coverage for institutional delivery, caesarean section, and care seeking for symptoms of ARI, by private or public sector for low-income and lower-middle-income countries with available household survey data in 2000–15 and 2016–23**

Data sourced from Analyses by the Countdown, International Centre for Equity in Health, Federal University of Pelotas, Brazil, based on Demographic and Health Surveys and Multiple Indicator Cluster Surveys, 2000–23.[147] ARI=acute respiratory infection.

coverage remained below 50% in Eastern and Southern Africa and below 70% in both South Asia and West and Central Africa. Progress in reducing wealth-related inequalities in birth registration coverage has also been slow.[256] Given that birth registration is central to establishing a child's legal identity, increased investments in birth registration services in these three regions are essential. Death registration coverage tends to be considerably lower than birth registration coverage, and registration with a reliable cause of death is even lower.

Population censuses, typically conducted once every 10 years, provide data on denominators for the health sector and selected health indicators. The COVID-19 pandemic led to postponement of censuses in many countries. The proportion of 134 LMICs with a census in the preceding decade dropped from 113 (84%) countries in 2014 (ie, conducted a census during the 2004–13 period) to 88 (66%) countries in 2023 (ie, a census in the 2014–23 period). The most precipitous drop was in West and Central Africa (appendix p 176).

Population-based surveys are a crucial source of representative data on levels, trends, and inequalities in mortality, nutritional status, intervention coverage, and risk factors for RMNCAH and nutrition. Global survey programmes, notably the Demographic and Health Surveys and Multiple Indicator Cluster Surveys, account for over 90% of the survey data in international databases and drive planning and monitoring efforts in LICs and lower-middle-income countries. Programme-specific national surveys, such as for malaria, family planning, and nutrition, are also conducted.

The implementation of surveys with major RMNCAH and nutrition components has fluctuated over time and across regions (figure 26). In 2020, there was a major drop in household surveys due to the COVID-19 pandemic causing survey implementation to be postponed. Overall, 125 (96%) of 130 LMICs with data conducted a household survey in 2010–15 compared with 82 countries (63%) in 2019–23 in the SDG period. The frequency and quality of household surveys, along with the limited availability of death registration data, affect the ability to accurately monitor trends, as highlighted in UN reports on child mortality,[20] maternal mortality,[16] and the Global Strategy for Women's, Children's, and Adolescents' Health indicators (appendix pp 176, 177).[13]

Health facility and other system data are major sources for quality of care and system readiness assessments, especially at the subnational level. Health facility assessments, whether through a sample or census of facilities, appear to have been conducted more frequently with greater integration across health topics since 2015, although they have not been comprehensively tracked. The most important advance accelerated by the COVID-19 pandemic is the collection of data on health facility readiness through telephone surveys, as for instance promoted by the Global Financing Facility.[257] Phone survey approaches offer opportunities for regular monitoring at low cost, with the potential of increasing the availability of timely data for country use.

The COVID-19 pandemic also spurred increased interest in strengthening routine health facility data, which are often hampered by quality issues. Routine health information systems are primarily based on monthly reports from health facilities on range of indicators. Many LMICs use the web-based District Health Information System (DHIS2) approach to digitise facility data at the district level.[258] Several global and regional initiatives aim to improve the quality and use of health facility data, such

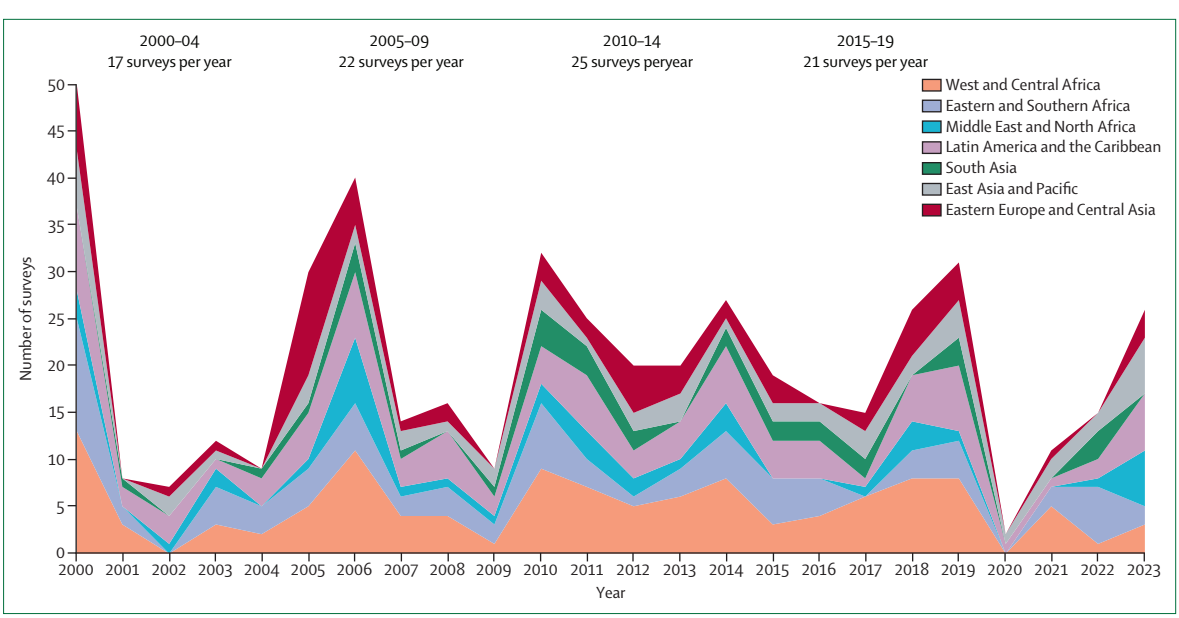

Figure 26: **Number of national household surveys by region and mean number of surveys per year for each 5-year increment in 2000–22**
The total number of surveys was 483, most were Demographic and Health Surveys and Multiple Indicator Cluster Surveys.

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as WHO work on standards[259] and Countdown to 2030's multiyear country collaborations with public health institutions and ministries of health in sub-Saharan Africa.[260] In addition, ongoing efforts to strengthen continuous maternal and perinatal death surveillance and response systems should lead to more complete reporting of deaths and more reliable monitoring of institutional mortality.

The overall picture on data availability and health information systems indicates some improvements, albeit at a slow pace.

Conclusion

Country policy frameworks reflect country prioritisation of women's, children's, and adolescents' health and commitment to protect the human right to health. The overview of human-rights-based policies shows that adoption of policies to protect women's, children's, and adolescents' health is far from universal across the LMICs. Fracturing global consensus around international human-rights-based agreements might further dampen country interest in introducing laws on universal health and social protection.

Countries adjust their health systems to meet changing population needs as they undergo a health transition or adapt to acute crises ranging from conflict, climate-related disasters, or disease outbreaks.

The slow increase in the proportion of well trained health-care personnel to the population in LICs and lower-middle-income countries is a major obstacle to their ability to transform and scale-up essential service packages for women, children, and adolescents and provide more advanced care for all. The COVID-19 pandemic spurred technological and digital advancements that improved service access and quality. However, the commodity analysis is a reminder that for sustainability, investments in technological innovations should happen in tandem with investments in health system infrastructure that is essential for their distribution and functioning, such as logistics and supply chains.

Section 5: health financing and global prioritisation

The level, distribution, and efficiency of health-care funding determine whether financing arrangements are sufficient for achieving universal health coverage and for meeting the health needs of women, children, and adolescents.[261–263] Health financing drives health workforce motivation and performance and affects the availability of medicines and equipment, the affordability of services, and out-of-pocket health-care costs.[264,265] Financing is also needed to develop robust country health information systems.

This section examines trends in the health financing landscape with a focus on external aid, which reflects global commitment to women's, children's, and adolescents' health and to supporting country health systems. We also examine challenges and opportunities affecting the global prioritisation of RMNCAH.

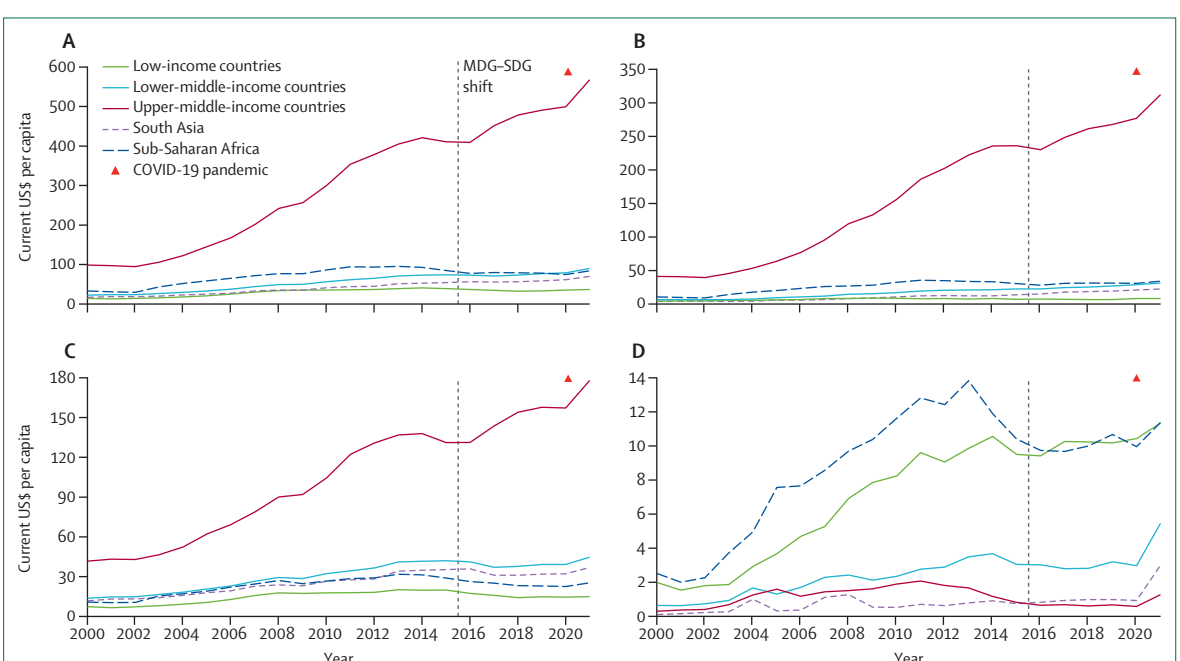

Figure 27: **Current health expenditure (A), government health expenditure (B), out-of-pocket expenditure (C), and external health expenditure (D) per capita by country income group and selected regions in 2000–21**

The difference between the current health expenditure and the sum of government health expenditure, out-of-pocket expenditure, and external health expenditure is accounted for by private sector and voluntary insurance payments (data not shown). Data sourced from WHO global health expenditure database.[42]
MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

Overall health financing

The World Bank's database, derived from WHO's Global Health Expenditure Database, was used to explore overall health funding levels by source.[42] The data considered are the weighted averages of health expenditure per capita for sub-Saharan Africa, South Asia, and for three country income groups. The level of current health expenditure (comprising government, donor, and household expenditure) varied across country income groups in 2021 from US$37 per capita in LICs to $90 in lower-middle-income countries and $568 in upper-middle-income countries. Comparable per capita expenditure levels were $84 per capita in sub-Saharan Africa and $70 in South Asia (figure 27). During 2000–15, rapid increases occurred in current health expenditure in the three country income groups and sub-Saharan Africa and South Asia, all at average annual rates of increase exceeding 6% (appendix pp 178–91).

Following the onset of the COVID-19 pandemic, current health expenditure per capita continued to increase in 2020 and 2021 across all country income groups (and in sub-Saharan Africa and South Asia), although the increase was more pronounced in upper-middle-income countries (figure 27).

During 2016–21, the domestic government share of current health expenditure declined in LICs (average annual rate of change –3·8%) and lower-middle-income countries (–2·1%), but was still positive in upper-middle-income countries (0·7%). Both sub-Saharan Africa (–1·9%) and South Asia (–3·9%) had declining shares.

Levels of government health expenditure per capita increased between the periods 2010–15 and 2016–21 in all country income groups (figure 27). The trend in government health expenditure per capita is broadly similar to the trend observed for current health expenditure per capita over the period 2000–21. Between 2019 and 2021, government health expenditure per capita increased by 23% in LICs, 17% in lower-middle-income countries, and 17% in upper-middle-income countries. These increases might be explained by governments' sectoral budget allocations in response to COVID-19, although further analysis is needed to confirm.

Our analysis found that external assistance is higher in LICs than in lower-middle-income and upper-middle-income countries. Sub-Saharan Africa received more external assistance than South Asia. In 2020, per capita aid to sub-Saharan Africa (US$10) was ten-times greater than that to South Asia ($1; appendix pp 178–89).

Out-of-pocket expenditure is considered an inequitable health financing source because it is typically regressive and risks driving households into poverty. Out-of-pocket expenditure was high with little change in the SDG period (figure 27). During the SDG period, the decline in the share of out-of-pocket expenditure of total current health expenditure was slow (average annual rate of change less than –0·5%) in all country income groups, sub-Saharan Africa, and South Asia (appendix pp 178–89). This decline was similar to the trend in the MDG period, except for the upper-middle-income countries, which had a higher pace during 2000–15 (–1·9%), and sub-Saharan Africa, which had an increase of 0·4% per year during the MDG period and –0·2% per year during the SDG period.

External financing for RMNCAH

Data on RMNCAH aid disbursements from international donors are available from the 2021 creditor reporting system aid activities database,[266] which is maintained by the Organisation for Economic Co-operation and Development. Application of a method called the Muskoka2 algorithm to the creditor reporting system data allows estimation of aid for RMNCAH and for subcomponents of RMNCAH. Funding for adolescents is captured within the maternal and newborn health and reproductive health categories, although it is not possible to isolate this funding and funding for other adolescent health services is not included in our analysis. The Muskoka2 method includes specific disbursements for RMNCAH and relevant shares of wider health system investments that benefit RMNCAH.[267]

Average annual aid flows for RMNCAH before 2015 and in 2015–20 have divergent trends (figure 28). In LICs, the average annual rate of increase slowed from 9% before 2015 to 1% after 2015 and in lower-middle-income countries from 5% to 1% in the same time periods. In South Asia and sub-Saharan Africa, there was a stagnation in aid levels. There was a decrease in RMNCAH aid allocation across all country income groups (except upper-middle-income countries) and in sub-Saharan Africa and South Asia in 2021, suggesting potential aid displacement due to the COVID-19 pandemic.

Aid to child health accounted for 42% of the total resources for RMNCAH in period from 2015, followed by reproductive health (39%), and maternal and newborn health (19%). Despite downturns in pace, the amount of aid for each RMNCAH component increased after 2015 compared with the 2010–15 period (38% increase for child health, 29% for maternal and newborn health, and 1% for reproductive health; figure 29; appendix p 183).

Improvements were observed in funding sources, with grants predominating over the 2010–21 period. Reproductive health and child health accounted for most grants, although there was a slight decrease of 4% between the 2010–15 and 2016–21 averages for reproductive health grants. Loans, the second largest source of external funding after grants, are concentrated mainly in child health, and have grown between the two periods for all RMNCAH components (increases of 62% for reproductive health, 91% for maternal and newborn health, and 68% for child health). Private development finance contributes first to child health, then to reproductive health, and maternal and newborn health. Private development finance also increased considerably in 2016–21 compared with 2010–15 (147% increase for

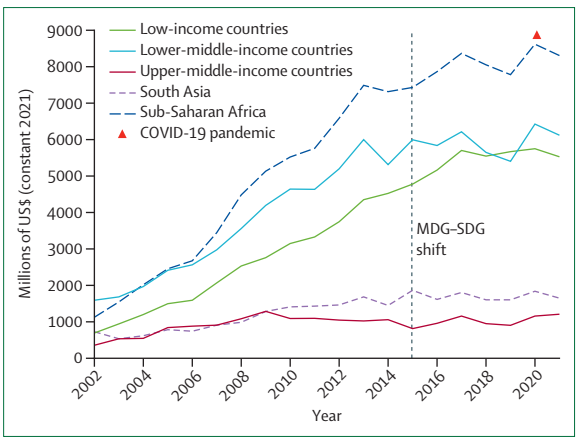

Figure 28: **Aid to reproductive, maternal, newborn, and child health across country income groups and selected regions in 2002–21**
Data sourced from the Muskoka2 algorithm applied to the credit reporting system database.[266] MDG=Millenium Development Goal. SDG=Sustainable Development Goal.

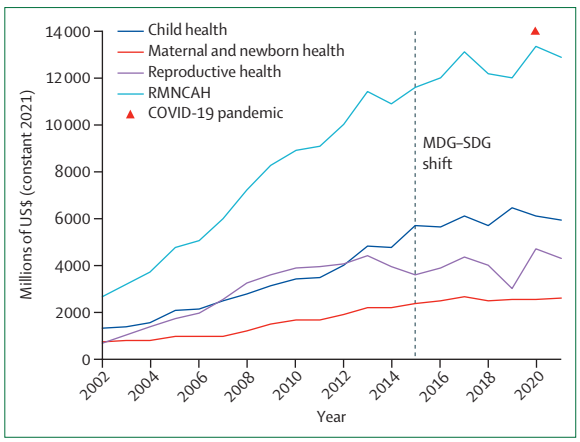

Figure 29: **Aid for RMNCAH by component in 2002–2021**
Muskoka2 algorithm permits disaggregation of aid for RMNCAH into aid for reproductive health, maternal and newborn health, and child health. Funding for adolescents is captured within the maternal and newborn health and reproductive health categories, although it is not possible to isolate this funding and funding for other adolescent health services is not included in our analysis. Aid for RMNCAH is determined by the Creditor Reporting System purpose code, with around 20 out of 223 codes considered to benefit RMNCAH. Based on the purpose code, various percentages are applied to disbursements from bilateral, multilateral, and private donors to estimate the amounts of aid for each RMNCH component.[266] Data sourced from the Muskoka2 algorithm applied to the credit reporting system database.[266] MDG=Millenium Development Goal. RMNCAH=reproductive, maternal, newborn, child, and adolescent health. SDG=Sustainable Development Goal.

reproductive health, 77% for maternal and newborn health, and 90% for child health). The Bill & Melinda Gates Foundation, the biggest contributor to private development finance, provided 82% of this funding from 2010 to 2021.

The United States Agency for International Development (USAID) has remained the largest donor for RMNCAH since 2010. However, its funding levels were 4% lower in 2016–21 than in 2010–15. The Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund) and Gavi, the Vaccine Alliance, were the next two largest RMNCAH donors, although they concentrated their funding on specific diseases rather than on the broader RMNCAH continuum. The period 2016–21 saw a resurgence in financial contributions to RMNCAH from other donors, such as the International Development Association (91% increase relative to 2010–15), now the fourth largest source of funds, Germany (56% increase relative to 2010–15), and the Bill & Melinda Gates Foundation (54% increase relative to 2010–15). The UK financial support to RMNCAH decreased by 20% after 2015 relative to the pre-2015 period (appendix p 187). The Global Financing Facility for women, children, and adolescents hosted within the World Bank was launched in July, 2015, to catalyse investments through its multi-stakeholder Trust Fund and to align partner resources around country priorities for RMNCAH.

Equity of financing

Aid is an instrument to support poor countries with inadequate public health budgets. One metric of the equity or fairness of aid allocations is the degree to which health funding is directed toward poor countries with greater economic and health needs.[269] Up until 2015, donors increasingly targeted aid for RMNCAH to the poorest countries (based on per capita GDP) and to countries with greater health needs (based on neonatal and under-5 mortality levels), indicated by increasingly negative concentration indices (figure 30). However, since 2015, the degree of equity in the allocation of RMNCAH aid has stagnated, with some indication of slight worsening, especially in 2020. Generally, the degree of equity with respect to health need was stronger in aid for child health than aid for maternal and newborn health.

Evidence on the equity and efficiency of health funding sub-nationally within countries is scarce. The appendix (p 180) describes the findings of Countdown-supported research on equity and efficiency in the allocation of health funding in the three countries (ie, Tanzania, Kenya, and Liberia) during the post-2015 period.

Conclusions on health financing

Current health expenditure per capita overall increased post-2015, but much more slowly than during the MDG period and with no increase in sub-Saharan Africa and LICs. Gaps remained large: current health expenditure per capita in upper-middle-income countries, which have achieved the child mortality SDG targets as a group, was 16-times higher than in LICs and six-times higher than in lower-middle-income countries in 2021. Government health spending as a proportion of current health expenditure did not increase across all country income groups. Out-of-pocket expenditure remained a substantial proportion of financing across all income groups.

The average annual rate of increase for RMNCAH aid slowed after 2015, but continued to rise until the COVID-19

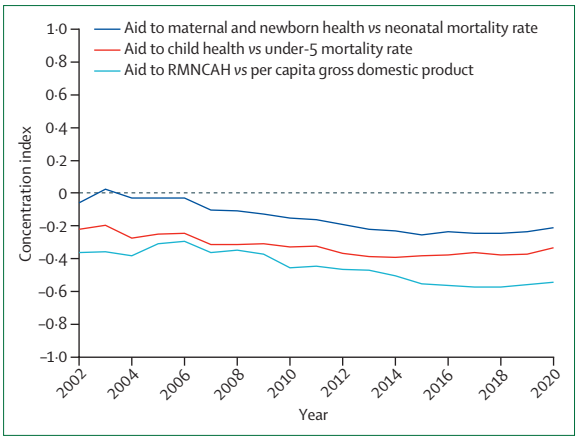

Figure 30: **Concentration of aid for RMNCAH according to economic and health need in 2002–20**
Muskoka2 algorithm permits disaggregation of aid for RMNCAH into aid for reproductive health, maternal and newborn health, and child health. Funding for adolescents is captured within the maternal and newborn health and reproductive health categories, although it is not possible to isolate this funding and funding for other adolescent health services is not included in our analysis. Negative values reflect greater allocation of RMNCAH aid to the poorest countries and to countries with higher child mortality and neonatal mortality. RMNCAH=reproductive, maternal, newborn, child, and adolescent health. Data sourced from the Muskoka2 algorithm.[266]

pandemic, after which aid to RMNCAH decreased across all regions and income groups except upper-middle-income countries. All components of RMNCAH suffered a decrease in aid in 2020, suggesting a displacement of funds towards pandemic responses.

The donor landscape remained similar during the SDG period. Traditional large donors to RMNCAH remained mostly stable or reduced their contributions, partly offset by increased financing from the World Bank's International Development Association and private development financing. Since 2015, the targeting of aid to countries with greater health needs worsened, particularly if looking at maternal and newborn health aid.

Global priority for RMNCAH

Global priority refers to the extent to which leaders publicly and privately express support for an issue, back up expressions of support with the allocation of financial resources, and launch initiatives and enact policies and programmes designed to address the issue.[270] Global priority does not guarantee effective implementation or improvements in population health, but might facilitate these effects. To examine global priority for RMNCAH in the context of this report, two sources of empirical information, drawing on social science frameworks,[271,272] were used: a structured literature review; and key informant interviews with individuals in leadership positions in institutions with a global reach that address RMNCAH (appendix p 192).

Global priority for RMNCAH has generally stagnated since 2016, after a decade and a half of unprecedented progress. Although leaders of global organisations and bilateral institutions concerned with RMNCAH, including UNICEF, WHO, the World Bank, and USAID, continue to express support for addressing the full continuum of care, aggregate development assistance has slowed after reaching a peak at the end of the MDGs (figure 28).

Moreover, while during the MDG era a flurry of global RMNCAH initiatives were launched, the SDG era has not had the same level of global activity. Three of the eight MDGs concerned RMNCAH directly: child mortality, maternal mortality, and HIV/AIDS and malaria. The Partnership for Maternal, Newborn and Child Health was established in 2005 and the then UN Secretary-General Ban Ki-moon launched the Every Woman, Every Child movement during the 2010 MDG Summit. This movement was grounded in the Global Strategy for Women's and Children's Health for 2010–15, which was updated in 2016 as the Global Strategy for Women's, Children's, and Adolescents' Health. Through the Muskoka Initiative for Maternal, Newborn and Child Health, announced at the Group of 8 (G8) summit in 2010, UN member states pledged US$5 billion toward achievement of MDGs 4 and 5.

In comparison, RMNCAH objectives do not appear as prominently in the broad, holistic SDG framework. The current UN Secretary-General, António Guterres, selected in 2017 during the SDG era, has not paid nearly as much attention to RMNCAH as did his predecessor Ban Ki-moon. In addition, external funding of the Global Financing Facility (GFF), a multi-organisation partnership intended to stimulate country investment in women's, children's, and adolescents' health, has been modest in comparison with the Global Fund and Gavi in terms of replenishment amounts. An internal assessment, however, suggests that, of 32 GFF-supported countries, there was a median increase of 40% in the proportion of World Bank International Development Association (IDA) funding allocated to RMNCAH and nutrition after engaging with the GFF.[273] This finding is consistent with the financial analysis in this report, showing an increase in IDA funding for RMNCAH during 2016–21 and provides some evidence of the GFF's catalytic and leveraging function.

Perceptions from key informant interviews (appendix p 192) mirror these observations: nearly all respondents view the RMNCAH agenda to be presently under threat. Some respondents worry that this might be the start of a sustained decline in resources and attention, whereas others are more optimistic that the stagnation will be reversed.

External factors behind the stagnation

Three external factors—ones not directly pertaining to RMNCAH—might have contributed to post-2015 stagnation in priority for the issue: competing priorities, constricted fiscal space, and declining multilateralism.

The emergence of competing priorities, both health-related and non-health-related, might have diverted attention from RMNCAH. Among health priorities,

COVID-19 and universal health coverage (UHC) have probably had the most marked effects. The financial analysis in this report suggests a displacement of funds towards the pandemic response, a finding supported by other analyses. Several studies showed that COVID-19 funding was diverted from already existing projects, some of which might have been RMNCAH-related.[274–276]

In comparison with COVID-19, there is less evidence concerning the effects of UHC on priority for RMNCAH and more conflicting perspectives on whether attention to UHC increases or decreases prioritisation of RMNCAH. Some key informants perceive adverse effects from attention directed toward UHC and a diminishing focus on women and children. Others anticipate that UHC will advance aspects of the RMNCAH agenda by increasing investments in health system strengthening, rather than in disease-specific programming.

Among non-health priorities, climate change and the war in Ukraine were commonly mentioned as potentially having diverted resources away from RMNCAH. Some key informants characterised these issues as non-negotiable priorities, contrasting the importance and urgency donors afford these issues with the de-prioritisation of RMNCAH.

In addition to competing priorities, constricted fiscal space appears to be harming the RMNCAH agenda. High debt repayments and economic disruption from the COVID-19 pandemic have made it difficult for governments in LMICs to allocate sufficient resources to health and social welfare concerns.[277] In the SDG period, interest payments as a percentage of government revenue have been above 20% in many LMICs, reducing fiscal space for RMNCAH.

Yet another factor that might be hampering priority for RMNCAH is declining commitment to multilateralism and the waning influence of the UN. This change might partly be a consequence of the rise of national politics oriented towards populism, nationalism, and a reassertion of state needs over global solidarity. One study presents evidence that the era of development cooperation is over, supplanted by growing disconnection between LMIC priorities and the narrow agenda of development agencies of high-income states in the OECD.[278] Another study finds that formal intergovernmental organisations are increasingly less central in international relations as the playing field shifts to a more multipolar world.[279] Some research links these trends to calls for decolonisation of global health, with LMICs perceiving the current multilateral system and development industry as maintaining power asymmetries between the so-called Global North and Global South.[280,281]

Internal factors behind the stagnation

In addition to external factors, several internal factors appear to be negatively affecting prioritisation of RMNCAH. One internal factor is fragmented governance, as a multiplicity of actors are working globally on RMNCAH in an uncoordinated manner, despite the existence of coordination mechanisms, such as the Global Strategy for Women's, Children's, and Adolescents' Health 2016–30.[282] Several entities whose remit encompasses much of the RMNCAH agenda could have a coordination and convening role, including the Partnership for Maternal, Newborn and Child Health, the WHO Department of Maternal, Newborn, Child and Adolescent Health and Ageing, and the GFF. However, none of these entities presently has sufficient power to effectively assume this role due to various factors, including inadequate funding and lower visibility following the dismantling of the UN Secretary-General's Every Woman, Every Child initiative.

Instead of acting as a united community, global actors have tended to advance a diverse and sometimes competing set of priorities, emphasising particular population groups or interventions while neglecting others. That individual global partners pursue specific mandates is neither surprising nor inherently problematic. But complications emerge because global partners at times work at cross-purposes, and without effective coordination, they are limited in their capacity to forge an effective coalition to secure adequate commitment and resources for RMNCAH. Key informants drew contrasts with the HIV/AIDS movement, noting that the RMNCAH community has forged weak alliances while the HIV community has strategically mobilised grassroots as well as international actors.

Intertwined with and contributing to the problem of fragmented governance is the lack of a compelling framing of the issue of RMNCAH that might incentivise agencies to work together and convince political leaders and donors to provide resources. RMNCAH actors recognise this problem and have been grappling with ways to effectively position the issue. For instance, proponents have suggested concepts that aspire to unity, including life course,[283] continuum of care,[285,285] and survive, thrive, and transform.[282] However, these ideas are largely technical in orientation and have not had the mobilising power or persuasive framing needed to inspire collective action.

According to several key informants, one problem RMNCAH proponents face in constructing a strong narrative is the perception that this issue already received outsized attention during the MDG era, which resulted in extensive declines in child and maternal mortality. Consequently, some political and health leaders believe the work is largely done, and it is time to address other issues.

Other analyses and key informants stress that there are limitations in framing RMNCAH with too much focus on survival, noting that mortality and burden of disease statistics are insufficient for capturing all aspects of health and wellbeing.[3,286]

RMNCAH proponents recognise the potential value of connecting the issue to existing and emergent global

priorities, including the three high-profile infectious diseases of HIV, tuberculosis, and malaria,[287] non-communicable diseases,[288] UHC, [289,290] climate change,[126] and pandemic preparedness.[268,291] But these proponents point to challenges in conveying mutual benefits of joining together, such as how focused attention on the specific population groups of women, children, and adolescents can attract more resources and collective action for broader issues, such as climate change and pandemic preparedness. Similarly, effective evidence-based communication materials are needed to convince proponents of non-communicable diseases of the benefits of investing in RMNCAH as a preventive strategy, in addition to investing in treatment services for the growing burden of non-communicable diseases in older population groups.

Fragmentation and the absence of a compelling frame raises the basic question of whether the term RMNCAH refers to anything specific at all. Some respondents suggest that it is simply an awkwardly constructed acronym, intended to mesh multiple communities whose agendas are not fully aligned and therefore unlikely ever to meaningfully come together.

In summary, there are a range of internal and external factors that have resulted in reduced global prioritisation of RMNCAH in the SDG era. The challenge ahead for the RMNCAH community is multifold and tied with macroeconomic and political realities, as well as sharp internal divisions. A key question is whether positioning women's, children's, and adolescents' health at the heart of the primary health care model would constitute a way forward given the model's three pillared structure of community engagement, multisectoral approaches, and health sector reforms that could lead to sustainable, equitable progress, and greater country ownership.

Conclusions

Progress but major slowdown during the SDG period

There have been substantial improvements in health and development indicators during the SDG period. Mortality continued to decline in almost all age groups, from stillbirths and neonates to adolescents, in the low-income, lower-middle-income, and upper-middle-income country groups and high mortality regions in 2016–22. Stunting in children younger than 5 years also continued its pre-2015 decline. Coverage of key RMNCAH and nutrition interventions improved in the SDG period, most prominently in the lagging region of West and Central Africa. Inequalities in coverage by household wealth decreased on average due to a faster increase in coverage for the poorest households.

These positive developments might have benefited from modest country-level health system strengthening, such as current health expenditure, infrastructure, and workforce, and continued external funding for RMNCAH, close to the levels reached at the end of the MDG period. The COVID-19 pandemic disrupted services in 2020, but most countries rebounded rapidly, except for immunisation services, showing health system resilience.

Although there have been positive developments, it is crucial to acknowledge that the rate of improvement in most mortality, health, and nutrition indicators during the SDG period has slowed in comparison with the MDG period. Progress is falling well short of the pace needed to achieve the 2030 SDG targets and universal coverage of essential interventions. Most LMICs are at risk of not reaching the SDG targets for maternal, neonatal, and child mortality. Large inequalities persist between and within countries.

Key contributors to the slowdown

A range of contextual and health system issues have contributed to the slowdown of progress. First, the positive trends in socioeconomic determinants of RMNCAH and nutrition are facing increasingly strong opposition. Economic inequalities between regions and country income groups remain huge, economic growth is stalling, particularly in LICs, and a debt crisis is affecting fiscal space for health in many vulnerable LICs and lower-middle-income countries. Progress in women's education and gender equity has slowed down, with major implications for RMNCAH and nutrition, including sexual and reproductive rights, for this and the next generation. More women and children are affected by armed conflicts due to direct violence and indirectly due to the disruptions in critical services and forced displacement.

Second, as countries have reduced maternal and child mortality and reached higher coverage of basic interventions, further progress is increasingly dependent on access to more advanced, high-quality primary and secondary health services for all women, children, and adolescents. The progressive concentration of child mortality in the perinatal period requires universal access to more complex services, such as intensive care units for small and sick newborns. The physical and mental health needs of older children and adolescents have become prominent issues, including overweight and obesity. Addressing these issues requires well functioning health systems, but the current pace of systems improvements in LICs and lower-middle-income countries is grossly inadequate. Coordinated multisectoral strategies are also needed to address underlying determinants of poor health and nutrition, including improvements to food and education systems, commercial regulation, and water and sanitation.

Third, priority for RMNCAH and nutrition has waned due to several international and internal (ie, internal to the RMNCAH health community) factors. Although current evidence is scarce, transnational concerns, such as climate change and health security, as well as a broadened UHC agenda with similar resource envelopes, might be diverting attention and resources away from RMNCAH and nutrition. The consequences of national

political developments on commitment to the human right to health, including sexual and reproductive health, such as the rise of populism and declining support for multilateralism, is a major concern.

Internal factors might have further weakened the RMNCAH and nutrition community. Fragmentation across the RMNCAH and nutrition continuum, underfunded existing coordination platforms, continued emphasis on vertical programming, and the absence of a cohesive, unifying narrative have contributed to the waning visibility of women's, children's, and adolescents' health on global and country agendas. The UN Secretary-General Office (which led the Every Woman, Every Child initiative) has relegated responsibility for coordination to specialist agencies with much reduced global prominence. Existing actors, such as UNICEF and WHO, appear to be dealing with increasingly diverse portfolios. The Partnership of Maternal, Newborn, and Child Health similarly is under pressure due to a more expansive agenda and is underfunded to achieve its advocacy aims and civil society engagement. New global actors, such as the GFF, are contributing, but have not been able to secure the resources to transform the field or make a large country-level impact.

Priority areas for action

The report's analyses aim to fuel debates and suggest actions needed to ensure acceleration of progress in women's, children's and adolescents' health. Five themes were identified:

Priority 1: explicit focus on sub-Saharan Africa

Women's, children's, and adolescents' health in sub-Saharan Africa should be prioritised by global, regional, and country actors. The fertility rate in this region remains high, and more than 50% of the population is younger than 20 years, leading to continued pressure to provide more services to meet the increasing demand for RMNCAH and nutrition services, often with the same limited resource budget. The region has the worst maternal, newborn, child and adolescent mortality and health indicators, with infectious diseases predominating, and has the greatest set of external challenges. Economic threats, armed conflict, and food insecurity are disproportionately concentrated in sub-Saharan Africa, a region already burdened by weak health systems, high levels of poverty, and low levels of socioeconomic development. Sub-Saharan Africa's vulnerability to extreme weather events induced by climate change, such as droughts and floods, is higher than in most other regions.

The debt crisis is threatening advances in RMNCAH and nutrition in many countries. Progress in the urban poor appears to have stalled in many countries, which is concerning given the growing numbers of urban residents living in poverty and informal settlements. West and Central Africa lags behind other regions on nearly all indicators. All 48 countries in sub-Saharan Africa, excluding four small population island states with more favourable health indicators, will need to accelerate the pace of mortality decline to reach the 2030 targets. Major multi-country initiatives led by regional political and technical institutions, such as African Centres for Disease Control and Prevention and African Population and Health Research Centre, with strong global support are needed to strengthen country health systems and help address underlying drivers, including economic development.

Priority 2: strengthening health systems for RMNCAH and nutrition

Inadequate health system strength—which can be reflected by major inequalities in accessing essential health services, poor service quality, untimely service, and difficulty accessing higher levels of care—are impeding progress. Country progression in the mortality and health transition to reach SDG targets will be challenging. Priority strategies include improving the health workforce, protecting country health budgets from fiscal constraints, increasing well targeted external aid, innovations in commodities and service delivery strategies, and quality of care improvements. Primary health-care strategies, including first-level hospitals, are essential to provide all with basic emergency obstetric and newborn care and integrated maternal, child, and adolescent health services.

Technological innovations hold promise for expanding service access, quality, and impact. New interventions, such as malaria vaccines or clinical practices that prevent adverse outcomes of pregnancy, can make a sustainable difference. Equitable scale-up of these innovations will require investments that account for local health system issues that could affect their uptake.

Priority 3: safeguarding progress against external crises

Safeguarding progress against multiple external threats to RMNCAH and nutrition requires special attention both within and outside the health sector. Much needed actions include continued focus on improvement of education and gender equity, mitigation of the consequences of armed conflict, centring children in all climate policies, implementation of commercial regulation to protect children and adolescents from harmful marketing and other practices, and protecting essential RMNCAH and nutrition services during health emergencies. Addressing malnutrition and preventable mortality also requires investments in water and sanitation systems and ensuring households have access to sufficient nutritious foods. Protecting country health budgets from fiscal constraints is imperative, including through debt servicing policies and practices that safeguard health services for women, children, and adolescents, and ensuring adequate financing for RMNCAH and nutrition with a strong focus on populations that are the most disadvantaged in all settings through, for instance, social protection programmes.

Priority 4: accountability for all actors

An iterative process of monitoring, review, and remedial action is core to holding countries and their partners to account for commitments. The large number of goals, targets, and indicators in the SDG mandate should not dilute accountability for women's, children's, and adolescents' health. Greater investments are needed to re-energise accountability mechanisms that examine progress overall, as well as progress in addressing inequalities within countries—eg, according to key stratifying factors, such as gender, socioeconomic position, place of residence, sexual orientation, religious identification, and ethnicity and race.

The current SDG country-led monitoring process through the UN is a flawed mechanism, as it relies entirely on self-reported progress. The annual SDG report by the UN is an informative synthesis of estimates by UN agencies. The bi-annual reporting on progress in RMNCAH in the World Health Assembly related to the Global Strategy for Women's, Children's, and Adolescents' Health (2016–30) helps but is not enough. These reports should be accompanied by additional independent analyses that include civil society voices and make recommendations around which actors are responsible for carrying forward specific actions. Strengthening of regional and country-level accountability mechanisms is needed, with a much greater emphasis on independent assessments supported by transparency and data sharing. Regional institutions and global agencies could have a crucial role in such processes. In particular, a major Africa-led monitoring and review initiative would be well placed.

Priority 5: revitalising RMNCAH and nutrition

In May, 2024, the WHO Member States approved a resolution to revitalise efforts towards the SDG targets for maternal and child mortality. The resolution reiterates much of the language of a 2015 resolution on the Global Strategy for Women's, Children's, and Adolescents' Health (2016–30), with added emphasis on the need to strengthen the health workforce. The resolution contributes to greater attention for RMNCAH and nutrition. However, the complexity of internal and external influences on progress requires further debate on new approaches.

Possible strategies moving forward to drive faster progress include recognising that emergent development priorities present opportunities for what political scientists call grafting—ie, attaching one's priorities to items on the ascent or already on global and national agendas.[292] For such a strategy to be effective, the global RMNCAH and nutrition community should consider how to reorient their arguments in ways that appeal to leaders across the political spectrum and how to secure participation in deliberations on major transnational issues, such as climate change and pandemic preparedness and response, which have inevitable long-term and potentially intergenerational consequences on the health of women, children, and adolescents.

In addition, RMNCAH and nutrition proponents should identify and address deficiencies in internal governance and framing. The present state of global governance for RMNCAH is not adequate. New coordinating structures might not be needed—on the contrary, the current fragmentation and poor coordination could be a function of too many of these—but instead key global actors should consider how to use and adequately support existing governing structures, such as global partnerships and UN agencies, with convening power to coordinate more effectively. A global platform with a visibility as great as the previous UN Secretary-General's initiative Every Woman Every Child would be desirable, along with stronger regional and country-level accountability mechanisms.

At the same time, there is a dearth of compelling ideas that bridge technical, pragmatic, and philosophical dimensions to bring these organisations together and inspire action. An important step could be global actors working with national leaders through existing forums to craft an energising set of ideas on RMNCAH and nutrition that motivate collective action, could be tailored to regional contexts, and support country aims to develop comprehensive single health plans that place women, children, and adolescents at the centre.

Women's, children's, and adolescents' health must remain central

To conclude, no matter what phase of the mortality and fertility transition a country is in, adequate investments in the health of women, children, and adolescents should be a clear and consistent priority of governments and development partners. Making and following through on such commitments are essential to secure the future of the current generation and for the strength and resilience of societies overall.[145,213,293] By working collectively across sectors and stakeholders, including civil society, to address systemic barriers and leverage emerging opportunities, major progress can be achieved.

The mid-point assessment of progress of the MDG period, circa 2008, was a case in point. An assessment at that time would have shown similarly discouraging results for many indicators. Although not all targets were eventually reached by 2015, major gains were achieved in the second half of the MDG period, propelled by a strong global commitment and country focus, increased resources, and enhanced accountability mechanisms. This history should inspire confidence that a similar acceleration is possible in the second half of the SDGs. There is an urgent need for a collective focus on RMNCAH and nutrition to prevent backsliding and put the world on course to achieve its commitments to women, children, and adolescents everywhere.

Contributors

The preparation of the report was led by AA, AJDB, JR, CF, and TB. This core team drafted the introduction and concluding sections and harmonised the different sections of the report. Section 1 was led by TB,

in collaboration with NA, EB, EMS, PS, HT, SEB, SH-N, FF, MC, MR, RH, AC, CK, and CI. Section 2 was led by AA, in collaboration with BM, MG, REB, LL, NA, GRMM, SW, JP, FV, EB, DY, and TB. Section 3 was led by AJDB, in collaboration with CB, FH, LZF, YW, BC-V, EH, JR, MM, WD-G, LA, and KN. Section 4 was led by JR, in collaboration with AJDB, CB, MM, NW, YT, AB, TB, and MK. Section 5 was led by JR; the part on health financing was prepared by PBe, PBi, CP, JB, NB; and the part of on global priority for reproductive, maternal, neonatal, child, and adolescent health was prepared by JS and YRS. In addition to the core team, MC and REB contributed to the overall shaping of the report. All authors contributed to the overall paper structure and concepts and provided input and expertise to the relevant sections.

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