STATE OF INEQUALITY
Reproductive, maternal, newborn and child health

EXECUTIVE SUMMARY
The State of inequality: reproductive, maternal, newborn and child health report delivers both promising and disappointing messages about the situation in low- and middle-income countries. On the one hand, within-country inequalities have narrowed, with a tendency for national improvements driven by faster improvements in disadvantaged subgroups. In certain indicators and countries, these improvements have been substantial. On the other hand, however, inequalities still persist in most reproductive, maternal, newborn and child health (RMNCH) indicators. The extent of within-country inequality differed by dimension of inequality and by country, country income group and geographical region. There is still much progress to be made in reducing inequalities in RMNCH.

The State of inequality: reproductive, maternal, newborn and child health report looks at the state of inequality in health, answering key questions: according to the latest available data, what is the status of inequality across and within countries? How have levels of health changed in population subgroups over time?

The objective of this report is to showcase best practices in reporting the state of inequality in low- and middle-income countries using high-quality data, sound and transparent analysis methods, and user-oriented, comprehensive reporting.

This report encompasses the latest status of inequality and changes over time across 23 RMNCH indicators, disaggregated by four dimensions of inequality (economic status, education, place of residence and sex). It draws on data from 86 low- and middle-income countries from all world regions. In a subset of 42 low- and middle-income countries (where data availability permitted), it was also possible to assess how the extent of inequality had changed over time.

The use of effective reporting practices helps to convey clear, salient messages about the state of inequality. Visualization technology facilitates the presentation and interpretation of large amounts of data, as results can be displayed using interactive, customizable views.

Overall, inequalities were to the detriment of women, infants and children in disadvantaged population subgroups; that is, the poorest, the least educated and those residing in rural areas had lower health intervention coverage and worse health outcomes than the more advantaged. In a minority of cases, child health interventions or outcomes were unequal between boys and girls.
Latest situation of inequality

The latest situation of inequality in RMNCH revealed inequalities across low- and middle-income countries in terms of national figures. Within-country inequality differed across health indicators. Maternal health intervention indicators demonstrated pronounced within-country inequalities. The largest gaps in coverage – between the richest and poorest, the most and least educated, and urban and rural areas – were reported for births attended by skilled health personnel, followed by antenatal care coverage (at least four visits). Inequalities were also reported in antenatal care coverage (at least one visit), though to a lesser extent than the two above-mentioned maternal health interventions.

- The proportion of **births attended by skilled health personnel** differed by up to 80 percentage points between the richest and poorest subgroups; this difference was 37 percentage points or higher in half of countries.
- In half of countries, **antenatal care coverage (at least four visits)** differed by at least 25 percentage points between both the most and least educated, and the richest and poorest.
- **Antenatal care coverage (at least one visit)** was at least 10 percentage points higher among women in the richest subgroup than those in the poorest subgroup in half of countries.

Reproductive health intervention indicators also indicated a situation of inequality.

- The **use of modern contraception** was at least twice as high among women with secondary schooling or higher than among women with no education in nearly half of countries.

Immunization indicators demonstrated low to moderate coverage gaps across different dimensions of inequality.

- Countries demonstrated no – or very low levels of – sex-related inequality in immunization coverage. The difference in **immunization coverage** between boys and girls did not exceed 10 percentage points in any study country.
- Looking at **BCG, polio, measles** and **DTP3 immunization among one-year-olds**, in each case there was a difference of less than 5 percentage points between coverage in rural and urban areas in half of countries.
- Over one third of countries reported a gap of less than 5 percentage points between **BCG immunization coverage** in the richest and poorest subgroups.

Indicators related to care-seeking for sick children showed higher inequality in care-seeking for pneumonia symptoms than for diarrhoea. (Note that estimates were subject to small sample sizes, and results were highly variable across countries.) There were divergent patterns across countries in the level of inequality in the early initiation of breastfeeding.

- In half of countries, there was at least an 18 percentage point gap in **care-seeking for children with pneumonia symptoms** between the poorest and richest subgroups.
- About the same number of countries reported pro-poor inequality in **early initiation of breastfeeding** (higher prevalence of breastfeeding in the poorest than in the richest subgroup) as reported pro-rich inequality (higher prevalence in the richest than in the poorest subgroup). Overall, there was no prevailing pattern in economic-related inequality in breastfeeding practices across countries.
Inequalities were also reported in child health outcomes. Under-five mortality rate and stunting prevalence in children aged less than five years demonstrated particularly high levels of inequality by economic status, education, place of residence and, to a lesser extent, sex.

- A large majority of countries reported a higher **under-five mortality rate** in rural than in urban areas. In half of countries, the difference between rural and urban areas exceeded 16 deaths per 1000 live births.

- **Stunting prevalence in children aged less than five years** was elevated by as much as 39 percentage points in the children of mothers with no education compared with those children whose mothers had attended secondary school or higher. In half of countries, the education-related difference between these two subgroups was 15 percentage points or more.

### Change in inequality over time

Inequalities in health are not static, but change over time. Looking at changes over a period of about 10 years, global figures indicated improvements at the national level in many areas of RMNCH. Also, countries tended to report gains that were faster in disadvantaged subgroups than in advantaged subgroups, which is desirable for the reduction of inequalities. The patterns of change in inequality over time varied by health indicator, and according to country and dimension of inequality.

For example, among the immunization indicators, improvements at the national level tended to be accompanied by gains in the disadvantaged subgroups that outpaced those in the advantaged subgroups.

- In half of countries, the changes in **polio** and **DTP3 immunization coverage among one-year-olds** indicated situations that were pro-poor, favouring children in the poorest subgroup over the richest by a margin of at least 9 percentage points over 10 years.

For a given indicator, the change in inequality over time sometimes varied across the dimensions of inequality.

- **Demand for family planning satisfied**, for example, showed substantial progress in narrowing education-related inequality over the past 10 years, with increases in the no education subgroup exceeding increases among those who attended secondary school or higher by at least 9 percentage points in half of countries. The gains in reducing place-of-residence inequality, however, were slower, with progress in rural areas outpacing that in urban areas by at least 3 percentage points over the 10-year period in half of countries.

Overall, the change over time in child mortality indicators indicated improved national averages and narrowing inequalities, particularly for under-five mortality. Child malnutrition indicators reported a similar tendency towards decreasing national averages; however, there was little change in the level of existing inequality.

- The **under-five mortality rate** decreased more rapidly in the poorest than in the richest subgroup, by a margin of at least 26 deaths per 1000 live births over a 10-year period.

- Comparing the pace of change in **stunting prevalence among children aged less than five years** in the poorest and richest subgroups revealed divergent patterns across study countries. Several countries reported a strong pro-poor situation (changes in prevalence favoured the poorest subgroup) whereas several other countries reported a pro-rich situation (changes in prevalence favoured the richest subgroup). Overall, there was little indication that economic-related inequality in stunting prevalence had decreased globally.
The composite coverage index is a single indicator that summarizes the level of coverage across the spectrum of RMNCH interventions. It includes eight indicators: demand for family planning satisfied; antenatal care coverage (at least one visit); births attended by skilled health personnel; BCG immunization coverage among one-year-olds; measles immunization coverage among one-year-olds; DTP3 immunization coverage among one-year-olds; children aged less than five years with diarrhoea receiving oral rehydration therapy and continued feeding; and children aged less than five years with pneumonia symptoms taken to a health facility. Overall, more than half of countries reported composite coverage index values of 70% or more. The level of RMNCH interventions coverage varied substantially across countries, ranging from under 40% to nearly 90%.

Within-country inequality existed according to different dimensions of inequality, and variations were observed by country.

- There was a poorest-to-richest difference of at least 20 percentage points in half of countries; the maximum economic-related difference in combined RMNCH interventions coverage was over 60 percentage points.
- Those with secondary schooling or higher education reported composite coverage index levels of up to 46 percentage points greater than those with no education.
- The rural-to-urban gap in coverage was over 10 percentage points in half of countries.

Nationally, the coverage levels of RMNCH interventions increased over the past decade; this was usually accompanied by faster improvements in the most-disadvantaged subgroups, though there was variation by country.

- Half of countries reported an increase in coverage that was at least 6 percentage points higher in the poorest than in the richest subgroup over a period of 10 years.
- Countries reported coverage increases in all education subgroups, with the no education subgroup outpacing those with secondary schooling or higher by up to a maximum of 18 percentage points over 10 years.
- In most countries, the rural-to-urban gap in coverage narrowed, with faster improvements in rural than in urban areas by a margin of 4 percentage points or higher over 10 years in half of countries.

Implications of health inequality monitoring

While current national averages and improvements over time are important indications of progress on a global level, reporting inequalities within countries reveals the different experiences of rural and urban residents, the poor and the rich, the educated and the non-educated, and females and males. Monitoring the state of inequality, which includes tracking the change over time, unravels how progress in national averages is realized by population subgroups. Establishing goals and targets that specify a reduction in inequality encourages the orientation of policies, programmes and practices to promote health in disadvantaged subgroups. Without a dedicated focus on equity, efforts to improve health risk perpetuating or intensifying within-country inequality, even as increases in national coverage are achieved.

Equity-oriented health information systems are the foundation for monitoring health inequality. When health information systems are equity oriented they have the tools available to collect, analyse and report data about health inequality. Building capacity for health inequality monitoring requires developing, strengthening and/or expanding equity-oriented health information systems at the national level.

Health inequality monitoring is an essential step towards achieving health equity. It has broad applications and can be conducted across diverse health topics. Applying the best practices in health inequality monitoring presents an opportunity to share the state of inequality with stakeholders, indicate areas in need of improvement and track progress over time.
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