

Leaving no woman or child behind

Addressing health inequities in Zambia

Zambia remains one of the countries in the sub-Saharan region with the highest maternal and child mortality ratios. Although Zambia has made progress in reducing maternal deaths from the estimated 729 per 100,000 live births in 2002, declining to 591 deaths per 100,000 live births in 2007 and a further decline to 398 deaths per 100,000 live births in 2013-14, progress has been slow and uneven. Reduction of mortality and morbidity for mothers and children can be increased by successful coverage and utilization of services.

The Sustainable Development Goals (SDGs) include ambitious targets – including ending all preventable maternal, newborn and child deaths by 2030. A vital element of the SDGs is to effectively mitigate inequalities and ensure universal coverage of essential preventive interventions to facilitate access to life saving services for Reproductive, Maternal, Neonatal and Child Health (RMNCH).

In line with the SDG goals, Zambia will need to better understand inequalities in order to prioritize effective and equitable strategies for improving women's and children's health. To do this, there is need to examine current performance in coverage along the continuum of care in order to track progress and ensure that the set targets are achieved.

Measuring health inequalities

As a part of the Countdown to 2030 for Women's, Children's, and Adolescents' Health, East and Southern Africa Regional Initiative, Zambia's Ministry of Health and University of Zambia, School of Public Health worked side-by-side to analyze existing RMNCH data.

The aim is to assess sub-national variations in coverage and the equity of cost-effective interventions for the leading causes of maternal and child deaths. Further, monitoring existing inequalities in a country is essential to achieving meaningful progress in creating equity in the health sector.

This brief describes the findings and actions that we believe will accelerate progress towards ending preventable maternal and child deaths, regardless of people's location and ability to pay.

Key statistics on maternal and child health in Zambia

Source: CSO, 2007, 2013-14

In 2010 Zambia had a population of 13.1 million and an annual population growth rate of 2.8 percent

Population:

-% Urban: 39.5
-% Rural: 60.5

Maternal mortality per 100,000

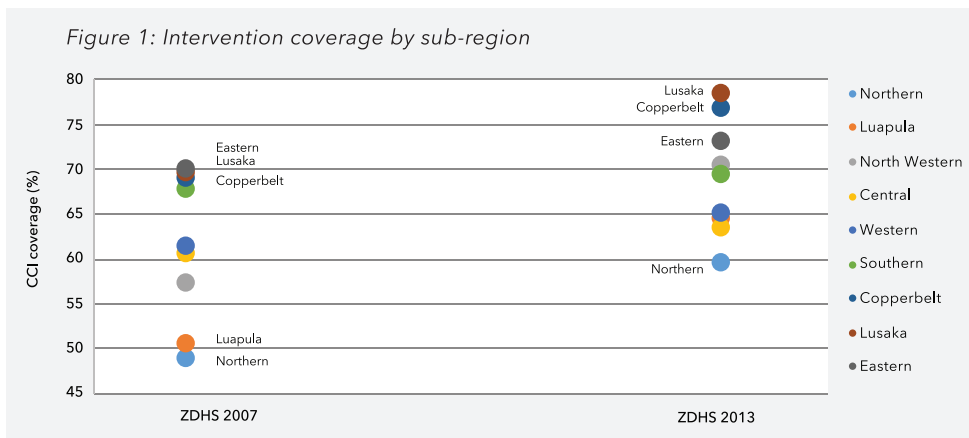
- In 2013-14: 398
- In 2007: 591 (32% change)
- 82% change needed to meet SDG target of 70 deaths per 100,000 live births
- 9.7 % Average annual reduction rate is needed to meet SDG target of 70 deaths per 100,000 live births

Under-five mortality per 1,000 live births:

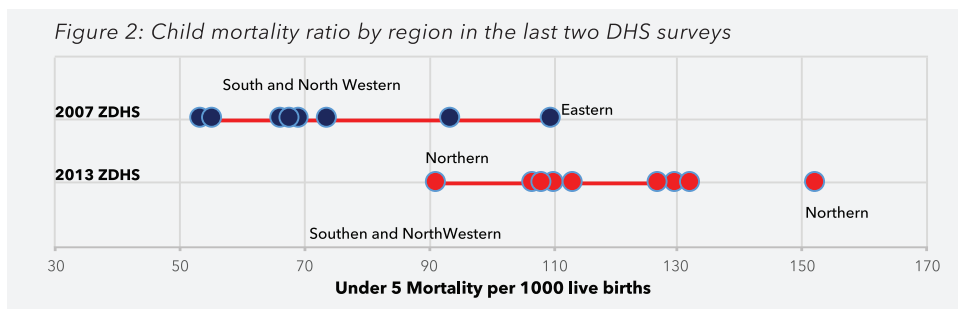
- In 2013-14: 75
- In 2007: 119
- 37% change
- 66 % change needed to meet the SDG target of 25 deaths per 1,000 live births
- 6.3% Average annual reduction rate to meet the SDG target

Sub-national inequalities in under-5 mortality

Overall, there has been a marginal increase between 2007 and 2013-14 surveys in the coverage for essential RMNCH interventions across the regions in Zambia (from 59.7% to 70.1%). Sub-regional comparison of the Composite Coverage Index (*CCI) shows that between the two-time points, Lusaka Province continues to perform better compared to other regions and currently ranks highest. However, Northern Province has lagged (at 48% in 2007 and 62% in 2013-14) compared to other provinces. This could be explained by the fact that the majority of the population is poor and located in hard to reach areas.



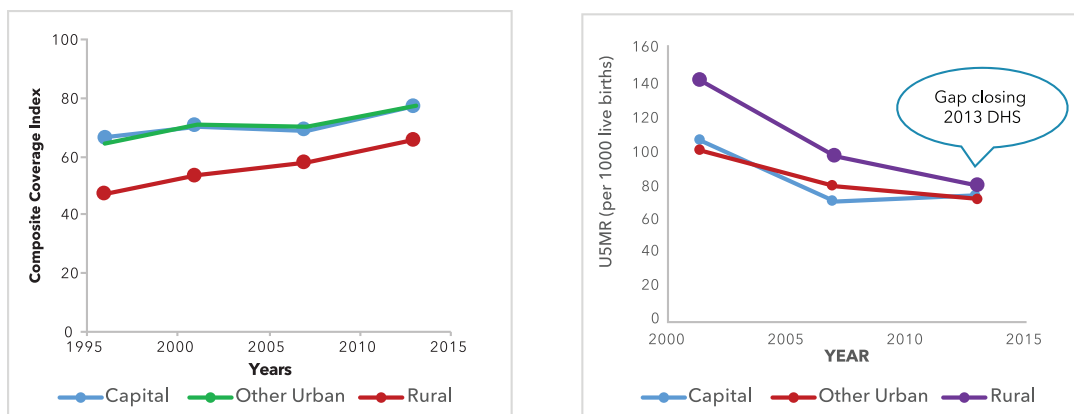
As shown in Figure 2, a significant decrease in under-five mortality is observed in all the sub-regions. One of the factors that could explain this observation could be associated with improvements in the CCI. The 2013-14 survey shows that Eastern province has lagged and accounts for the highest ratio (109 deaths per 1000 live births) of under-five mortality in the country compared to the other provinces.



Urban vs. rural inequalities in child health

Inequalities in the RMNCH CCI in regards to residence were measured and compared between 2007 and 2013-14 demographic health surveys (DHS). As shown in Figure 3, Lusaka, Zambia’s capital and other urban areas are generally performing better than the rural ones. The most recent DHS data shows that the CCI for necessary interventions is similar in Lusaka and other urban areas at 77%. However, the rural areas are lagging at 66%. This has been the case for the last 20 years, indicating that rural areas are not being targeted by these key interventions. Further, analysis of the under-five mortality ratio reveals that inequalities by residence has been reducing over time as observed in the most recent survey. Improvement in the CCI coverage over time could explain the reducing under-five mortality rates across residential areas.

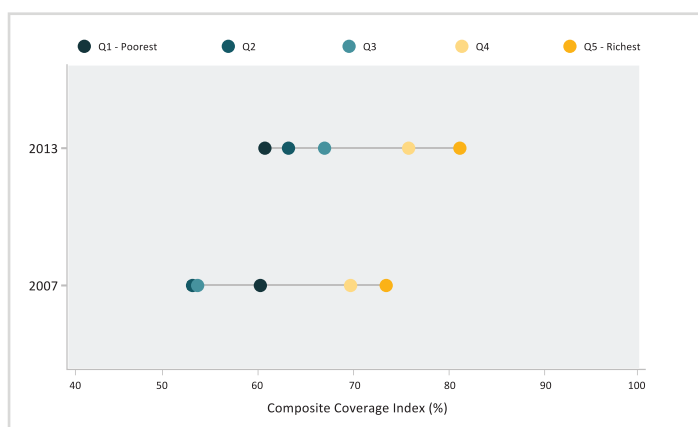
Figure 3: Trends in interventions coverage and Under-five mortality by residence.



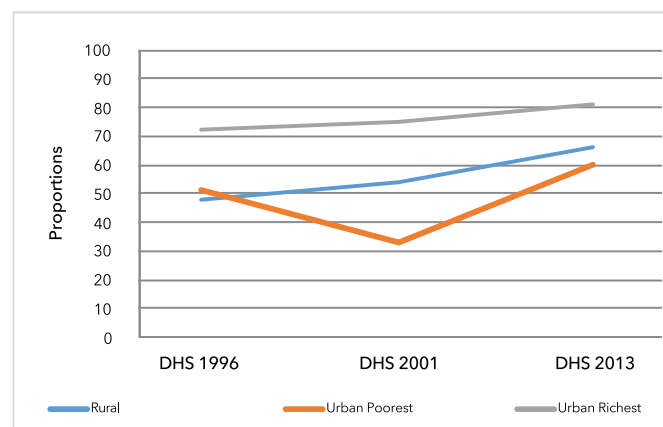
Wealth inequalities in the vaccination coverage

In Zambia, the richest people continue being more advantaged in coverage for the RMNCH interventions compared to the poorest. Figure 4 presents the summary index for CCI by wealth quintiles in an equiplot. Although there is some improvement observed in the CCI between the 2007 and 2013 surveys, the gap in coverage has become wider in the 2013-14 survey. In regards to under-five mortality ratios, a significant decrease is observed in all the wealth quintiles over a 15 year period. One of the factors that could explain this observation could be some improvements in the coverage of essential RMNCH interventions and overall health system such as an increased number of trained personnel and possibly donor support.

Figure 4: Trends in interventions coverage



Trends in interventions coverage by residence and wealth



Understanding the Composite Coverage Index

A composite coverage index then, (CCI), is one way to summarize information from several different coverage indicators to estimate a country's degree of health inequality. A CCI is a weighted average of the percent coverage of eight different health interventions to capture different points along a person's life when they are likely to need healthcare, and one's ability to access care could mean the difference between life and death. These include 1) preventing or planning pregnancy, 2) maternal care during pregnancy, at childbirth, and in the post-natal period 3) childhood immunization, and 4) care for routine and potentially deadly childhood illnesses including diarrhea and pneumonia.

CCI is expressed as a percentage. For example a CCI of 100% means that all people regardless of their income, place of residence in a country have access to basic quality health services. Zambia's national CCI of 70% is an average across all of its 10 sub-regions. Although sub-regions CCI's range from a high of 76.6% in the capital Lusaka to a low of 62.0% in Northern province. Comparing sub-national CCI's is critical in helping government decision-makers better understand where to invest resources.

Analysis of the DHS data over time for CCI in terms of residence and wealth reveals that the urban poorest are performing poorly and worse than the rural areas. See Figure 4. This suggests that within the urban populations, inequality in access of essential interventions exist between the richest urban populations (82%) and the poorest urban populations (60%), with the poorest urban being more disadvantaged.

Recommendations to improve health equity for RMNCH in Uganda

1. Close coverage gaps by;

a) Focusing investment in poorest performing sub-regions:

There is need to repackage targeted high impact strategies that account for contextual factors for the most impoverished such as the people of Northern Province. This should not, however, mean shifting resources from better-performing sub-regions. Mentorship across the sub-regions, through peer learning and sharing lessons learned from sub-regions that are performing well such as North Western Province is critical to inform the implementation of interventions that work.

b) Integrate existing health care strategies with poverty reduction strategies:

Closing the gap in coverage for RMNCAH services between the poorest and wealthiest populations in Zambia may require poverty reduction strategies that aim at empowering women and communities. To do this will require, coordinated of efforts such as engaging stakeholders, civil societies and other line ministries.

2. Develop urban health strategies and interventions:

While “leading” and “lagging” areas often correspond to urban-rural divides, in Zambia the needs of poorest in the urban areas are being masked by high urban coverage averages. This finding suggests the need for interventions that target people living in slums.

3. Enhancing implementation of the Zambia Health Insurance Scheme:

Coverage changes associated with the National Health Insurance Scheme may provide some opportunities to reach communities most at risk and for improvement of equity. Enhancing the implementation of the National Health Insurance Scheme is urgently needed to achieve universal health coverage, including financial risk protection, access to quality and affordable essential health-care services.

4. Building an on-going multi-pronged research agenda for tracking health inequities and planning targeted actions to close health gaps:

To close health gaps between rich and poor, urban and rural, across sub-regions, there is need to continually generate evidence to inform decision making, planning and implementation of strategies. An example would be periodic health equity analyses carried out jointly by the Ministry of Health and the University of Zambia, School of Public Health could lead to improved dialogue and action between academic, policy, and budgetary realms.

Call to action

Zambia should focus its investment in the poorest performing sub-regions and facilitate mentorship for the lesson learned by well-performing sub-regions. For this reason, the Zambian government and other implementing partners should consider a collaborative approach (with designed implementation models with outlined unique roles of partners including a coordinator) through community-based interventions to effectively close the sub-regional divides for RMNCH services and outcomes

About the Countdown to 2030 East and Southern Africa Regional Initiative

As part of Countdown to 2030 for Women’s, Children’s and Adolescents’ Health, a global, multi-institutional initiative that aims to improve coverage measurement and monitoring, and strengthen the regional and country capacity for evidence generation and use, the African Population and Health Research Center coordinated a regional consortium that brought together research and public health institutions as well as government agencies from 20 countries of Eastern and Southern Africa (ESA), to help them better track and analyze data, and communicate research findings on maternal, newborn, child and adolescent health, reproductive health, and nutrition. The initiative calls on governments and development partners to be accountable, identifies knowledge gaps, and proposes new actions to achieve universal coverage for women’s, children’s, and adolescents’ health. It is hoped that the evidence will be used by government decision-makers to improve programming, and increase resource allocation to achieve the national and global targets to end preventable maternal, newborn, and child deaths.

For more information, please visit <http://countdown2030.org/>

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