Social determinants of under-five mortality in Ethiopia:

Issue brief for stakeholders

Policy makers who should read this policy brief are federal parliament, regional parliament, various nongovernmental organizations, ministry of education and ministry of health in Ethiopia.

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Introduction:
Under-five mortality is one key indicator of development and a critical component of the millennium development goals (MDGs) for the reduction of child mortality. It is one of the measures that determine population size and distribution. Decreasing childhood mortality is a focus of communities and governments all over the world. However, children in the developing countries are still more likely to die before their fifth birthday compared to children in rich countries; in 2011 the under-five mortality rate in developing regions was 57 deaths per 1,000 live births—more than 8 times the rate in developed regions (UNICEF, 2010, UNICEF, 2012). Under-five mortality varies across different physical, ecological, and political structures within countries. One such contextual determinant is the regional environment (Antai, 2011). In Ethiopia, marked regional disparities in mortality of children under age 5 have been reported, with higher rates observed in the developing and marginalized regions (Dejene 2013, Child Health in Ethiopia, 2004). Furthermore, studies have also shown regional differences in coverage for maternal and child health services with most of the services being concentrated in urban areas, and its accessibility being biased towards the richer parts of the population. Education level of mothers have also been reported as a determinant of access to health, mothers with formal education have a higher likelihood of seeking maternal and child health services as opposed to those with low literacy level (Getiye, 2011).
To develop polices and design future strategies aiming at narrowing inequality in child mortality, it is vital for policy makers to better understand factors associated with under-five mortality. This study aimed at investigating factors associated with inequalities in under-five mortality by various social indicators, and identify key areas of focus for future intervention strategies.

To assess the social determinant of under-five mortality in Ethiopia, we carried out a study using the Ethiopian Demographic and Health Survey (EDHS) 2011 in collaboration with researchers at the Harvard Center for Population and Development Studies.

During the period, a total of 846 deaths of under five children were identified, and the overall incidence rate of under-five deaths was 24.95 per 1000 person years. The under-five mortality was prominent among male’s sex, rural resident and economically deprived family. After adjusting for other factors, mortality was significantly higher among twin birth, children from less educated and economically deprived mothers.

Our findings also showed that there was a significant difference across different geographic areas; i.e the under-five mortality was high in less developed and marginalized regions, namely Affar, Benshangul Gumuz and SNNPR have registered the highest under-five mortality risks, 3.8[1.4-10.0], 2.8[1.05-7.4] and 2.7[1.01-7.1] respectively. This suggests that the survival outcome of the children is more strongly associated with the living environment, highlighting the urgent need to improve access to education, economic development, improving access to health care especially for pregnant women and around delivery).

**Policy analysis:**
In spite of the fact that during the last decade’s Ethiopian government has made tremendous progress on enrollment of students at various levels of education, large proportions of mothers and adolescents remain outside the school system. Less developed regions in Ethiopia are receiving the higher share of the budget. It does not, however, mean that the grant system brings equity, availability and accessibility of basic health care for the community. There are other issues which enter in to the picture, affecting the extent of reducing the exposure for under-five
mortality. Internal allocation of benefits and access to benefits are equally important for reducing child mortality in the regions.

Based on these findings and policy analysis, we make the following recommendations for a coordinated response, both at the National Government and District Government levels, collaboration with non-governmental organizations, to address gaps in policy, and programming toward reducing under-5 mortality.

**Ministry of Health**

Interventions should be targeted at empowering women and more attention needs to be paid to regional inequalities. Moreover, the federal government should seek the need for comprehensive prevention strategies to further reduce child mortality.

**Regional Government and Non-governmental organizations**

- Develop short- and long-term implementation plans to promote female education, and adolescent education.
- Coordinate governmental efforts and budgeting across Ministries and between national and district levels to provide support for uneducated mothers and other most vulnerable regions.
- Give more attention to developing regions, in budgeting, education and sustaining various effective interventions.

**Researchers:**

More researches are required to explain what causing the variation across the regions.

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References:


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