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Disparity in the Prevalence of Anemia Among Non-Pregnant Women in 49 Low- and Middle-Income Countries from 2011-2021

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Extended Abstract

Background: Globally, one-third of all women of reproductive age are anemic [1]. While some studies have monitored socioeconomic inequalities in anemia prevalence in low- and middle-income countries (LMICs), they have often been limited to single countries or have only considered household wealth index at the national level [2,3]. This study aims to assess within-country socioeconomic and education-based inequalities in anemia prevalence among non-pregnant women.

Method: Data from 49 Demographic and Health Surveys conducted in LMICs from 2011 to 2022 were analyzed. The weighted prevalence of anemia in each country was estimated and then disaggregated by wealth quintiles and educational status. The slope index of inequality (SII) was used to assess socioeconomic and education-based inequality in anemia.

Results: Anemia prevalence varied significantly across countries, ranging from 11.3% in Rwanda to 70.0% in Yemen. Wealth-based absolute inequality in anemia prevalence was pro-poor (higher prevalence among the poor) in 32 countries (Fig. 1). The highest level of inequality was observed in Burundi, where anemia prevalence was 32 percentage points higher among disadvantaged women compared to wealthy women. Conversely, pro-rich inequality (higher prevalence among the rich) was most pronounced in Honduras, with a 22-percentage point difference. Education-based inequalities showed higher anemia prevalence among less-educated women in most countries.

Conclusion: This study highlights substantial socioeconomic and education-based inequalities in anemia prevalence among non-pregnant women in LMICs. Country-specific, effective interventions are needed to reduce the anemia burden and address these inequalities.

References

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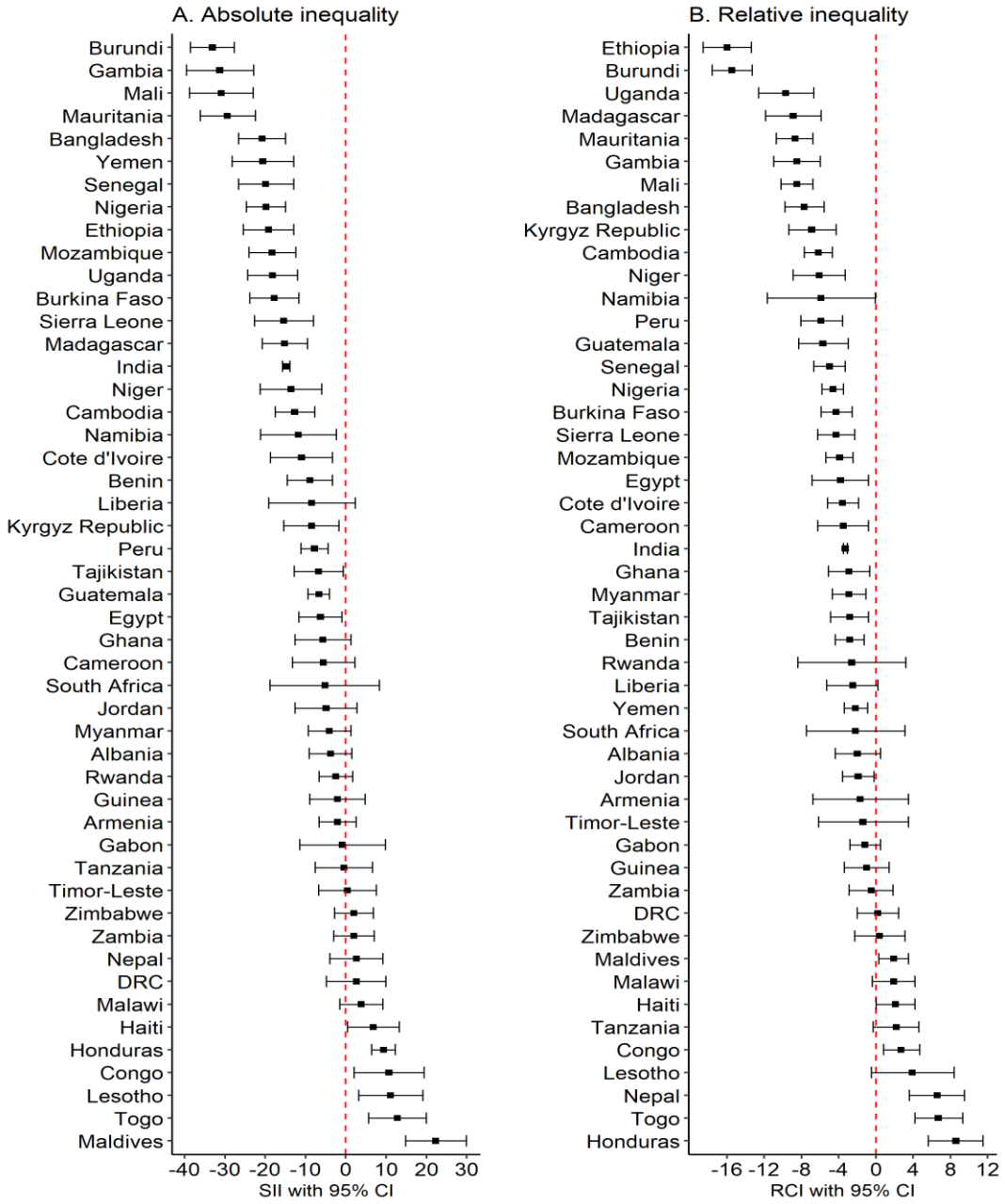

Figure 1: Wealth-based absolute and relative inequality in the anemia prevalence among women at the national level.

(DRC = Congo Democratic Republic, SII = Slope index of inequality, and RCI = Relative concentration index)