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The burden of household out-of-pocket health expenditures in Ethiopia

AUTHORS

Mizan Kiros¹, Ermias Dessie^{2,3}, Abdulrahman Jbaily⁴, Mieraf Tadesse Tolla⁴, Kjell Arne Johansson⁵, Ole F. Norheim^{4,5}, Solomon Tessema Memirie^{5,6}, Stéphane Verguet⁴

AFFILIATIONS

¹ Ethiopia Health Insurance Agency, Addis Ababa, Ethiopia

² Federal Ministry of Health, Addis Ababa, Ethiopia

³ World Health Organization, Addis Ababa, Ethiopia

⁴ Department of Global Health and Population, Harvard T.H. Chan School of Public Health, Boston, MA, USA

⁵ Department of Global Public Health and Primary Care, University of Bergen, Bergen, Norway

⁶ Department of Pediatrics and Child Health, College of Health Sciences, Addis Ababa University, Addis Ababa, Ethiopia

Author contact information:
mizukiros@gmail.com

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Summary

Ensuring financial protection in Ethiopia is a government priority. Out-of-pocket (OOP) health expenditures can have various financial impacts among Ethiopian households at national and regional levels. However, there is little known surrounding the extent of out-of-pocket health expenditures in Ethiopia. Using data from the 2015/2016 Ethiopian Household Consumption and Expenditure and Welfare Monitoring surveys, incidence and distribution of catastrophic and impoverishing health expenditures were calculated.

Results show that many Ethiopian households face catastrophic health expenses that contribute to financial hardship in the household. The most affected areas were found to be Afar, Benshangul-Gumuz, and Somali Regions.

It is imperative that financial risk protection is thoroughly studied regional, nationally, and subnationally in Ethiopia to protect households from catastrophic health expenses. This periodic evaluation can aid progress towards universal health coverage in Ethiopia.

Methods

Secondary data was used from the 2015/2016 Ethiopian Household Consumption and Expenditure (HCE) and Welfare Monitoring (WM) surveys. Data was analyzed using Stata to calculate health services utilization and Household consumptions and expenditures. Furthermore, the number of catastrophic headcounts (Hc) was used to measure catastrophic health expenditures (CHE) incidence using 10% budget share as a threshold. Impoverishing health expenditures (IHE) was estimated using Ethiopia's national poverty line (ETB 7184 per adult per year).

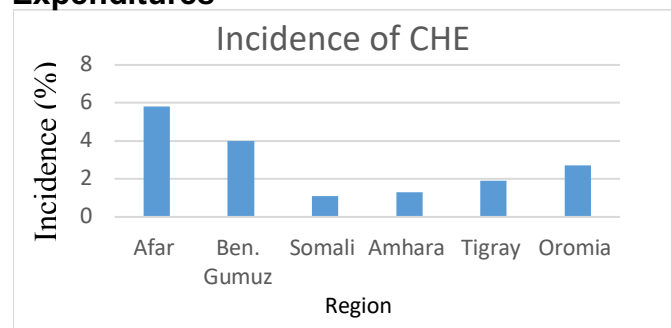
Results

Table 1. Characteristics of households.

Region	Mean Total consumption per adult (ETB)	Mean Total OOP per adult (ETB)
Afar	11,953	298
Ben. Gumuz	13,307	217
Somali	9,816	86
Amhar.	12,051	115
Tigray	14,018	144
Oromia	12,060	197

Around 2.1% (SE: 0.2, $P < 0.001$) of households would face CHE with a 10% threshold of total consumption, and 0.9% (SE: 0.1, $P < 0.001$) of households would encounter IHE, annually in Ethiopia. CHE rates were high in the regions of Afar (5.8%, SE: 1.0, $P < 0.001$) and Benshangul-Gumuz (4.0%, SE: 0.8, $P < 0.001$). Oromia ($n=902\,000$), Amhara ($n=275\,000$) and Southern Nations Nationalities and Peoples (SNNP) ($n=268\,000$) regions would have the largest numbers of affected households, due to large population size. Families in lower income quintiles would become further impoverished from OOP health expenditures.

Figure 1. Incidence of Catastrophic Health Expenditures



Future Directions

These results show that OOP health expenditures can be deterrents for households in Ethiopia to access health services. Compared to the catastrophic health expenditures in surrounding countries, Ethiopia has a lower average while having comparable effective health services coverage. However, many households in Ethiopia still suffer from financial hardship from OOP health expenditures; especially in Afar, Benshangul Gumuz, Oromia, Amhara and SNNP regions. As Ethiopia improves access to health services, OOP expenditures could increase further negatively impacting households, if proper public financing is not implemented. Further national and regional level periodic analyses on effective health coverage and financial risk protection is important to inform progress towards universal health coverage.

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