





#### UNIVERSITY OF BERGEN Global Health Priorities



## Catastrophic Out-of-Pocket Expenditure Related to Seeking Health Services for Cardiovascular Disease in Ethiopia

## Summary

This policy brief discusses Catastrophic Health Expenditure (CHE) related to Cardiovascular Disease (CVD) care in Addis Ababa where CVD is the leading cause of death.<sup>1</sup> While the discussion is focused on Addis Ababa, the findings have implications for Ethiopia more broadly. In order for Ethiopia to achieve the Sustainable Development Goals (SDGs), Ethiopia will need to ensure financial risk protection for its population, <sup>2</sup> including for the prevention and treatment of CVD.

## Background

In low-income settings where direct out-of-pocket (OOP) payments to health service providers represent a major health financing mechanism, households are often forced to trade off essential consumption (e.g. food, child education) to pay for health services. This is further compounded by additional direct non-medical costs (e.g. transportation) and indirect costs (e.g. income loss due to decreased productivity).<sup>4</sup> When the above costs become too large, households turn to various coping mechanisms, like borrowing from family or friends in order to cover expenses.<sup>5</sup>

The phenomenon described above often results in CHE. CHE occur when a household's OOP payments exceed a given fraction of the total income or consumption expenditure of the household.<sup>6</sup>

In Ethiopia, OOP payments are about 33% of the country's total health expenditure, and less than 10% of the population have prepaid health insurance.<sup>7</sup> It is imperative that Ethiopia identifies risk factors associated with CHE and help design relevant policies to ensure financial risk protection.

#### Disease Control Priorities-Ethiopia (DCP-E)

This policy brief is based on preliminary work from the DCP-E project funded by the Bill & Melinda Gates Foundation. DCP-E is a partnership between Ethiopia's Federal Ministry of Health, the Harvard T.H. Chan School of Public Health and the University of Bergen.

#### August 2018

AUTHOR Mieraf Taddesse Tolla

#### AFFILIATION

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

EMAIL mtolla@hsph.harvard.edu

## Determining the magnitude of financial burden when seeking health services for CVD

In a recent cross sectional cohort study, Tolla et al.<sup>8</sup> selected eight hospitals in Addis Ababa and recruited about 600 individuals. Tolla et al. defined CHE as annual OOP expenditure >10% of total household income. OOP payment was calculated as the sum of direct medical costs and direct non-medical costs.

### CHE on CVD Care

More than a quarter of households experienced CHE on CVD care. The incidence of CHE tended to be inversely related with income level: 28% among the poorest quintile suffered CHE in contrast to 14% among the richest quintile.

Households reported use of several mechanisms to cope with OOP payments. Reliance on such mechanisms was more common for inpatient care than for outpatient care. Family support was the most common means that households resorted to: 39% of households fully covered the cost of inpatient care through such mechanism, while 27% used the same source to pay for outpatient care costs. Furthermore, 48% and 20%, respectively, used their own cash; while 6% and 14%, respectively, used savings to cover outpatient and inpatient care costs. A remaining 5% borrowed and 2% had to sale assets to pay for inpatient care costs.

## Breakdown of OOP payments

Drug costs were the major source of financial burden, both in public and private hospitals constituting about 50% of the outpatient care costs, followed by transportation costs in public and laboratory tests in private settings. **Figure 1**. Breakdown and share of cost items for out-of-pocket outpatient care, by type of hospital visited.



# Taking action: suggestions for effective interventions

Households face substantial financial burden when seeking prevention and treatment services for CVD in Addis Ababa. The poorest households, those that developed CVD events (e.g. stroke), those who were hospitalized, and those that travelled from outside Addis Ababa to receive CVD care, faced a greater financial risk. Expanding the coverage of primary prevention of CVD through prepaid financing arrangements, could help to reduce the financial burden that households face related to accessing CVD care.

#### References

- Misganaw A, Mariam DH, Araya T, Ayele K. Patterns of mortality in public and private hospitals of Addis Ababa, Ethiopia. BMC Public Health 2012; 12(1):1007.
- 2. United Nations. Sustainable Development Goals. Available from: http://www.un.org/sustainabledevelopment/health/
- Wagstaff A. Measuring financial protection in health. Policy Research Working Paper No. 4554. Washington, DC: World Bank, 2008.
- Leive A, Xu K. Coping with out-of-pocket health payments: empirical evidence from 15 African countries. Bulletin of the World Health Organization 2008; 86(11):849-856.
- Saksena P, Hsu J, Evans DB. Financial risk protection and universal health coverage: evidence and measurement challenges. PLoS Medicine 2014; 11(9):e1001701.
- Wagstaff A, Flores G, Hsu J, et al. Progress on catastrophic health spending in 133 countries: a retrospective observational study. Lancet Global Health 2018; 6(2):e169-179.
- Federal Ministry of Health, Ethiopia. Ethiopia's sixth National Health Accounts-2013/2014. Addis Ababa, Ethiopia: Federal Ministry of Health, 2017.
- Tolla MT, Norheim OF, Verguet S, et al. Out-of-pocket expenditures for prevention and treatment of cardiovascular disease in general and specialised cardiac hospitals in Addis Ababa, Ethiopia: a cross-sectional cohort study. BMJ Global Health 2017; 2(2):e00280.