



Household Out-of-Pocket Expenditures on Childhood Pneumonia and Diarrhea

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Summary

Illnesses can have economic consequences on individuals and families. Out-of-Pocket (OOP) medical payments can lead to catastrophic health expenditures and impoverishment. In a recent study published in *BMJ Global Health*,¹ the authors found that households in Ethiopia incurred high costs associated with childhood diarrhea and pneumonia. Diarrhea and pneumonia are the two most common reasons for hospital admission of children and the leading causes of death in Ethiopia.^{2,3} The findings from this study call for a revisiting of the health financing strategy for high-priority services that result in high OOP expenditures.

Background

There is a lack of data on current household OOP medical payments. Without such data, it is challenging for developing countries to estimate the potential poverty reduction impact of health interventions.

In Ethiopia, the 2005 healthcare financing reform allowed facilities to use revenues from OOP fees to improve the quality of health services.⁴ A system of fee waivers and exemptions was part of this reform. However, despite fee waivers for preventive health services, OOP expenditures for curative care for children represent a significant burden in Ethiopia, accounting for close to 50% of total child healthcare expenditures in 2010/2011.⁵

The expected impact of interventions on poverty reduction, independent of their health benefits, can be identified with better estimates of current household OOP expenses.^{6,7}

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Disease Control Priorities-Ethiopia (DCP-E)

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Methods

In their study, Memirie and colleagues¹ collected data from six public hospitals, 15 public health centers, nine health posts, and five private health facilities (figure 1). Children aged 0-59 months with a clinical diagnosis of pneumonia or diarrhea but without other illnesses were included.

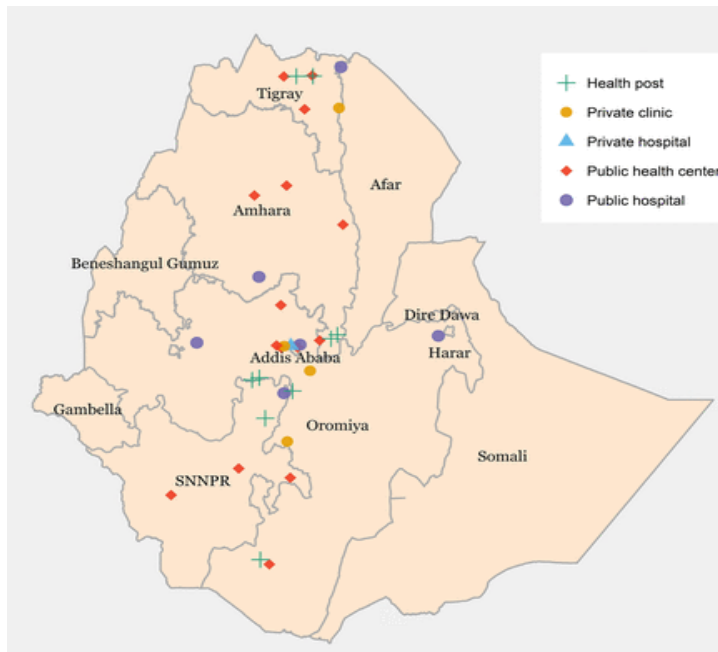


Figure 1. Distribution of health facilities included in the study. Source: Memirie and colleagues (2016).

Analysis

To calculate direct medical expenses per diarrhea/pneumonia case, the authors added OOP payments for registration, diagnostic work-up, medications and hospital stay. For direct non-medical expenses, the authors added OOP payments for transportation, food, lodging and other costs incurred that were related to treatment services received. Total OOP payments per case were then calculated as the sum of medical and non-medical expenses.

Results

Among the 686 patients enrolled in the study, 631 had complete data on costs incurred for the treatment of their current illness and on household consumption expenditures.

The mean OOP direct medical expenses (in 2013 USD) were \$6 and \$5 for outpatient pneumonia and diarrhea services, respectively.

Average OOP expenses were higher for inpatient services at \$51 (severe pneumonia) and \$59 (severe diarrhea). Medication costs were the largest portion (60%) of direct medical costs. The mean total medical expenditures for an episode of pneumonia, diarrhea, severe pneumonia or severe diarrhea were 2-4 times higher in private facilities than at government hospitals. The wealthiest households spent six times more on treatment on average when compared to the poorest households.

Next Steps

This study indicates that OOP payments are high for the treatment of diarrhea and pneumonia among Ethiopian children. Revisiting the financing strategy for health services that result in high OOP, such as for pneumonia and diarrhea treatment, would help to reduce the medical impoverishment of individuals and families in Ethiopia.

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