

**Title: Out-of-pocket health payments and coping strategies in urban
Nepal**

(ネパール都市部における医療費自己負担と対処戦略に関する
研究)

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Abstract

Objective: Disease-specific public subsidies are increasingly being introduced in low-income countries to prevent healthcare payment-related financial catastrophe. Assessing the incidence and intensity of catastrophic out-of-pocket spending by disease type may reveal how far existing public subsidies that target specific diseases are protecting the population from the out-of-pocket (OOP) spending. This thesis describes and analyzes the level of household OOP spending in urban Nepal, and the risk factors for catastrophic expenditure by disease type and for distress financing.

Methods: I conducted a cross-sectional multi-stage probability-sampled population survey in five municipalities of Kathmandu Valley from November 2011 to January 2012. A total of 1997 households were interviewed. I assessed the levels and distribution of catastrophic spending associated with treatment of the 10 most commonly-reported diseases. I also assessed the risk factors for distress financing due to chronic illnesses in the last 12 months using a random-effects Poisson regression model.

I used classification and regression trees (CART) to illustrate decision-making processes leading to distress financing.

Results: This study shows that 13.8% of Kathmandu households experienced catastrophic expenditure, which was concentrated among the poor. After confounder adjustment, increased risk of catastrophic spending was observed in households with at least one episode of diabetes, asthma, gastritis/peptic ulcer, injury, arthritis and heart diseases. Hospitalization, lack of home ownership, total treatment costs above the median (NRs. 6,000), education level of the household head and injury were risk factors for distress financing. CART analysis predicted that the most important factor for distress financing was treatment cost exceeding NRs. 5,424 per year. For people above 52 years old, poorer subjects and treatment cost above NRs. 9,734 the chance of distress financing increased.

Conclusion: The high incidence of catastrophic OOP spending and distress financing suggest that existing financial protection mechanisms in Nepal fall short both in depth and in coverage in the context of growing non-communicable disease burden. The Government of Nepal should introduce pre-payment for healthcare services and risk-pooling systems in a sustainable manner, which goes beyond the current subsidiary scheme that is heavily concentrated in public, primary healthcare services.

Keywords: Cost of illness, out-of-pocket health expenditure, catastrophic payment,

coping strategies, distress financing, classification trees, multilevel analysis