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Household cost-of-illness study in the Nouna Health District, Burkina Faso

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The use of precise, reliable and updated cost information is the central guiding factor for the formulation of evidence-based health policy. However, data constraints on cost analysis especially on household cost-of-illness have severely affected realistic planning and policy decision in low and middle-income countries. This is particularly true for Burkina Faso (and its Nouna District) where health care financing plans do not reflect the proper use of cost analysis data.

This study was therefore planned to address the following objectives: (i) To analyse household direct cost-of-illness in the Nouna Health District; (ii) To investigate factors determining the magnitude of household expenditure on western institutional health care and examine whether or not these determinants can play an important role in illness reporting and in influencing choice of western institutional care; (iii) To identify the extent and determinants of household catastrophic expenditure for health care; (iv) To analyse household indirect cost-of-illness by using different valuation methods; (v) To investigate the household total cost-of-illness.

In order to fulfill above objectives, data from the household panel survey with 800 households conducted in 2000-2001 was analysed. A willingness-to-pay study with 100 households was done and information on daily wage rate was collected in the study area in 2004. Descriptive, bivariate and multivariate analyses were carried out to assess household cost-of-illness. With the help of different econometric models, determinants of household health expenditure were explained.

The study found low health care utilization among the study population. Those who sought treatment often decided to take self-medication instead of visiting a health care facility. Severe illness, belonging to a household headed by a literate person and high economic status made it more likely to use western institutional health care.

Household health care spending was directed more on productive members of a household such as adults and the household head. The estimated direct cost per household per year represented 6% of household proxy income. Richer households had a higher expenditure on health compared to the poor households. However, a regressive cost burden was found among poor households. A large proportion of households (6% to 15%) in the study area faced catastrophic health expenditure. Economic status, household

health care utilization especially for modern care, presence of a member with chronic illness in household and average illness episodes in adult household member were found as key determinants.

Malaria accounted for 28% of total illness episodes. People spent less on malaria compared to other diseases and malaria had a low direct cost burden on the household economy. However, the estimated household indirect cost for malaria was 3% to 4.7% of household proxy income. Although malaria is still a major killer disease in the study area, people relied on self-medication to treat malaria or sought no care. Thus, Information, Education and Communication (IEC) programmes are urgently needed to inform about causes and potential risks of malaria.

Household indirect cost was higher than direct cost irrespective of the valuation methods used. Among the three methods, indirect cost assessed by willingness-to-pay method was considerably higher than other methods. Estimation of indirect cost-of-illness should not be neglected for getting the complete picture of household cost-of-illness.

Lack of attention to child health care and to disabled people appeared repeatedly in all types of analysis. Poorest members of the community were victims of catastrophic financial consequence of illness. Protection of the interests of these disadvantaged groups should be addressed in policy considerations to ensure better access to health services and a higher degree of financial protection against economic impact of illness.