

Subhash Pokhrel  
Dr. sc. hum.

**Role of price, income and gender on the demand for child health care in Nepal:  
exploring a four-step construct on household decision making**

Born on 06.02.1970 in Chandragadi, Jhapa, Nepal  
High school graduation in 1988 in Nepal  
Graduated from Tribhuvan University, Nepal in 1991

Doctorate subject area: Tropenhygiene  
Academic supervisor: Prof. Dr. med. R. Sauerborn

This dissertation asked three questions: 1) How useful would the analysis of household decision making on child health care be if the decision making is considered as a 'pathway' involving four hierarchical steps, beginning with the perception of illness, then moving to seeking care and provider, and finally expending money to buy health care goods and services? 2) What role does price and income play in determining children's utilization of health care in Nepal? 3) To what extent does gender explain the variation in the use of child health care in Nepal?

In order to answer all the three questions, a nationally representative sample of households from the 1996 Nepal Living Standard Survey was analyzed. The sample consisted of 8,112 children aged 15 years or less from 2,847 households in 274 communities. Four decision steps in a pathway, namely, reporting an illness, seeking care, choosing a provider and expending money to buy health care, were considered. Descriptive and multivariate analysis was carried out.

The illness perception rate was found to be 10%, and about 69% of ill or injured children sought care, most frequently at public providers. The expenditure level ranged from 2.5-4.3% of income depending on the type of provider chosen.

The explicit consideration of illness reporting as the first and most important step of household decision making has revealed many interesting insights as to why differentials in health care use exists. In addition, the pathway model made it possible to see where (in which step) a particular factor appeared as a policy lever.

The price elasticity of demand for formal child health care was estimated at -0.16, implying that although price is a significant determinant of health care demand its responsiveness is modest. However, a substantial part of the 'true' price responsiveness which affects the illness choices is not reflected in estimates being conditional on illness reporting. The demand curve was relatively steep above the present average price but relatively flat below it, indicating that subsidy policies could improve health care utilization substantially but fee increase would lead to only a modest drop in utilization. As income effects are larger, user fee policy would not be welfare enhancing.

This study explicitly documents the gender differentials in illness perception. The results show that gender not only counts in the decision to seek care (only a measure of demand), it

in fact counts in all steps of one health seeking action. It is likely that this differential is embedded in the low value placed on females in South Asian societies. The scarcity of resources was strongly associated with the bias against girls. Despite the broader socio-cultural context of gender, the analysis shows that effective financing policies might help reduce it to some extent, particularly in the poor segment of the society.

In short, the main findings of this dissertation are:

- a) It makes enormous sense, from both analytical and policy point of views, to consider household decision making on child health care as a pathway of different steps.
- b) Price and income are significant determinants of demand for formal child health care. Price effects are modest with elasticity falling at -0.16
- c) The nature of the demand curve is such that while subsidies can improve utilization substantially, fee increase may lead to a modest drop in utilization with increased revenue. As income effects are large, the user fee policy may not be welfare enhancing.
- d) Gender not only counts in the decision to seek care (only a measure of demand), it in fact counts in all steps of a health seeking action. Though this is a complex socio-cultural problem, financial subsidies may help reduce this gap to some extent.