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Household Demand for Preventive HIV/AIDS Vaccines in Thailand: Do Husbands' and Wives' Preferences Differ?

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ABSTRACT

Objectives: The aims of this study were to estimate household demand in the general population of Thailand for a (hypothetical) preventive HIV vaccine; to determine whether spouses in the same household would purchase the same number of vaccines for household members and have the same demand function; to determine whether spouses would allocate vaccines to the same household members; and to estimate household and per capita average willingness to pay (WTP) for an HIV vaccine price.

Methods: The data come from a national contingent valuation survey of 2524 residents (aged 18–20 years) of 1235 households in Thailand during the period 2000 to 2001. In a subsample of 561 households, both head of household and spouse completed independent (separate) interviews. Respondents were asked whether they would purchase an HIV vaccine for themselves and for other household members if one were available at a specified price.

Results: For the full sample, average household WTP for the vaccine was substantial (US$610 at 50% vaccine effectiveness, US$671 at 95% effectiveness); the average per capita WTP for household members was US$220 at 50% effectiveness and US$242 at 95% effectiveness. Although spouses reported that they would purchase the same total number of vaccines, and had essentially the same demand functions, at lower vaccine prices wives were significantly more likely than husbands to allocate vaccines to their daughters than to sons.

Conclusions: Because wives are more likely to allocate vaccines to daughters, vaccination programs aimed at women and girls might have different outcomes than programs directed at males or at all potential adults without regard to sex.

Keywords: AIDS, contingent valuation method, HIV, intrahousehold allocation, Thailand, vaccine demand, willingness to pay.

Introduction

Studies conducted in Mexico [1], Kenya [2], Thailand [3], and Uganda [4] to estimate private demand for a (hypothetical) preventive HIV vaccine have all found high willingness to pay (WTP) for self-protection. These studies did not address whether an individual might want to purchase HIV vaccines for other household members. Nor did they address whether spouses in the same household have different preferences regarding how many vaccines to purchase for household members and which household members should receive them. The present study investigates these questions.

We interviewed both head of household and spouse separately to investigate the similarities and differences in their preferences for a hypothetical preventive HIV vaccine. Our results touch on crucial aspects of private demand for an HIV vaccine. The sexual transmission of HIV discourages open discussion in household contexts. Historically, the disease has afflicted sexes differentially in various places and at various times; male and female decision-makers may view the risks to family members, the practicality of protection, and prevention strategies differently.

There are at least two reasons why exploring household demand for a preventive HIV vaccine could be valuable even before one is available. First, uncertainty about the size of a future private market could discourage efforts to produce a vaccine. Estimates of aggregate household private demand can help pharmaceutical companies and public health planners to gauge the potential market. This market could prove to be enormous despite concerns that people with the highest risk of infection live in developing countries, where ability to pay for vaccines—either by governments or by private purchasers—is low. For example, two recent

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