Research brief: User Fees and Demand for Health Care

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Background

Instability in the DRC over the past several decades has resulted in a severely weakened healthcare delivery system and poor financing arrangements, affecting the availability and quality of healthcare services. The public healthcare system remains chronically underfinanced, and as a result, zonal healthcare facilities have been heavily reliant on household out-of-pocket payments and humanitarian programs. A number of health financing assessments in the DRC have found that user fees are the primary mechanism by which healthcare providers finance their operating costs.

In past DFID-supported projects in the DRC, healthcare was provided free of charge, however, recent efforts to create sustainable services have entailed health facilities in some health zones to begin charging fees for services. This transition raises concerns regarding the responsiveness of households to changes in the prices of care, and to what extent these changes affect people's care seeking behaviour. This study examines the responsiveness of households to changes in the price of key health services at health facilities.

Previous studies from low-income countries on household responsiveness to changes in price of health care show inconsistent results. Some studies report that changes in price have substantial effects on health care service utilization (i.e. that demand is elastic), while other studies have found that the demand for health care changes little in response to changes in price (i.e. that demand is inelastic).

The purpose of the study was to assess whether increases in user fees in rural areas of Nord Ubangi, Maniema, Tshopo, Kasai-Central, and Kasai would influence health care utilization. Of most interest is whether charging for health services – or raising the prices of non-free services – would cause large numbers of people to turn to self-treatment of illnesses, to seek out inferior care, to substantially reduce their use of health care or simply to forego needed care, thereby potentially worsening their overall health.

Study Methods and Design

This study uses data from a household and healthcare facility survey, which was administered in Nord Ubangi, Maniema, Tshopo, Kasai-Central, and Kasai in 2014. Data on care-seeking behavior and expenditures were collected from 1,738 households in rural areas. Data were also collected from 105 health facilities that serve those households. Statistical modelling techniques were used to estimate the relationships between facility characteristics and household and

women's characteristics and service utilization. The models specifically focus on the utilization of outpatient curative care, antenatal care (ANC), facility delivery, postnatal care (PNC) and use of modern contraception. All models account for household wealth, education, other household characteristics and characteristics of the nearest health facility such as proximity, size, services offered, staffing and the price of services. The results of the statistical model are used to calculate *own price elasticity of demand*, a measure of how responsive potential clients are to different price levels, as well as, *income elasticity of demand*, a measure of how the use of health services differs for different income levels. In order to aid in the interpretation of the results, simulations were also carried out using the estimated models to make predictions of the effects of various policy scenarios on health care utilization, such as changing the levels of user fees charged and household wealth.

Key Findings

Price elasticity of demand

This study found that users of health services in the study areas are relatively insensitive to changes in the price of care, particularly for services deemed more necessary, and insensitive to the prices currently being charged by health facilities in this sample. These findings hold true for both males and females and for different wealth quintiles. All estimates of price elasticity of demand indicate that within the range of prices observed in the data, changes in price will not affect the probability of using those services very much.

The simulation of how health service utilization would be affected by different price levels (Figure 1) demonstrated that, in general, people are not very responsive to changes in price at low levels of cost (0 – 2,000 francs). Prices within this range could be potentially increased with little detrimental effect on service utilization. However, there appears to be a threshold at 2,000 francs beyond which people sharply reduce health care service utilization. Also, for people aged 55 years and older, increasing prices appeared to be associated with decreased outpatient care utilization.

Income elasticity of demand

Demand for healthcare appears to be relatively independent of income (i.e. income inelastic) for outpatient curative care and PNC, but somewhat more dependent on income for ANC, facility delivery and modern contraception use. In ASSP areas, most of the statistically significant differences in utilization are between the lowest wealth quintile and the quintiles immediately above (2nd lowest and middle quintile).

Facility characteristics

In comparison to the price of healthcare services, some facility attributes were found to be more strongly associated with service utilization. For example, distance to the health facility and having a maternity ward are significantly related to the likelihood that a woman delivers in a health facility, while number of services offered tend to be more attractive for ANC, PNC, as well as facility delivery. Interestingly, there were very few facility characteristics significantly related to the use of out patient care, except for years open (16-54 age group), having safe drinking water (16-54 age group), and having at least one doctor (6-15 age group).

Policy simulations

Very few policy simulations reflected statistically significant effects on service utilization, and in almost all cases, setting the price to 0 only minimally increased predicted utilization. The only significant effect was for the use of outpatient care services among individuals age 55 and older, whereby setting a 0 price would increase use from 60.3percent to 64.0percent.

Increasing the number of healthcare services available at a facility had the largest effects on the use of delivery services. For example, increasing the services increased predicted ANC use from 66.8percent to 88.1percent, predicted facility deliveries from 58.4percent to 78.2percent and predicted PNC use from 37.6percent to 68.3percent.

Figure 1: Predicted Service Utilization by Price

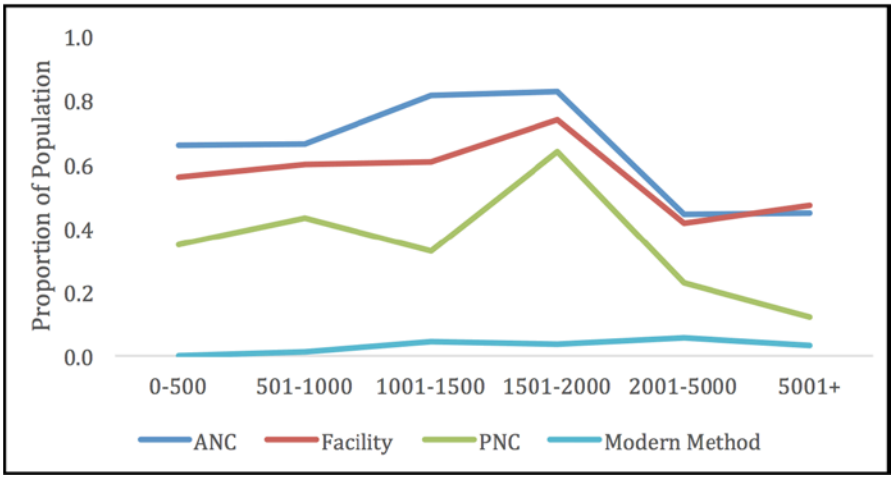

Figure 1: Alternative prices for health services are depicted along the horizontal axis, while the predicted proportion of the population that would use health services at each price range is depicted along the vertical axis.

Limitations

There are several limitations to this study. First, households were linked to only one health facility – the designated health center in the respective health area. In reality households in some areas may have had many more health care options, which could bias the results towards non-significance. For this reason, the study was restricted to households in rural areas where health care options were likely limited. Second, it was not certain which measure of price (i.e. the average of all prices at a facility or price of specific service at that facility) was most appropriate to use in the statistical models as using the latter would result in a smaller sample size. Thus, statistical models were run with the average price variable (and the full sample size) and with specific price variables (with reduced sample sizes). Third, it is possible that the process of setting prices is non-random. For example, decisions about what prices to set may be related to community characteristics such as levels of education or affluence. Statistical methods were used to test for this association and no association was found, but it is still possible that the tests were not sufficient enough to detect such correlations. Finally, it was difficult to capture an accurate picture of health care quality. Some factors that may affect health care demand, such as treatment of patients by health care providers and perceived quality of care, were not measured in this study.

Final Conclusions and Recommendations

- The results suggest that small increases in user fees are not likely to adversely affect the use of essential health services, and hence are unlikely to be harmful to households. For nearly all services, however, utilization rates are lower for poorer households than better off households. As a result, waiving prices for the poor and other vulnerable populations would help ensure that user fees do not serve as a barrier to service use. However, even zero prices for the poor may not ensure that utilization levels for the poor reach those of the non-poor.
- Given that the median prices for services at the time of the survey all appeared to be less than 2,000 francs, prices could potentially be increased modestly up to this threshold with little harmful effects, assuming that price increases were accompanied by careful monitoring of service utilization levels to verify this conclusion.
- Price is only one factor influencing decisions to use health care. Quality of care and physical accessibility have also been shown to determine health service utilization, particularly for health facility deliveries, and need to be considered.