



Demand of Reproductive Health Services: Case Study on Senegal

Abstract

Health constitutes an essential target of the Millennium Development Goals (MDG). The improvement of mother health and the reduction of the infant mortality constitute the goals to be reached between 1990 and 2015. Senegal understood very early the importance of health in the economy activity. Over the period 1998-2007, the Senegalese government implemented new orientations of its health policy while being based on the approach programs express through the National plan of Medical and Social Development (PNDS) follow-up of the Integrated Development program of Health and the Social action of Sectional Investment (PDIS) quinquennial (1998-2002) which covers the first 5 years of the PNDS of which it constitutes the priorities. The strategic direction of the PDIS relating to the increase in the performances of the health Reproduction program constitutes a major axis of the PNDS.

Contact information

Latif Dramani and (dramaniarmel@yahoo.fr) and
Oumy Laye (layendiaye78@yahoo.fr)

Lead institution

Agence Nationale de la Statistique et de la Démographie

Country where the research takes place

Senegal

How does the research describe the impact of population/reproductive health on poverty reduction and/or economic growth?

The results of demand for tetanus immunization from the full sample show that age and education of the mother, income, money and time costs of general health care, strongly affect utilization of vaccination services. An interesting finding from the probit estimates is that, young mothers in rural areas are more likely to deliver at a clinic compared to urban young mothers. And that, education of the father and the mother increase the probability of reporting a birth weight. However, money prices of general health services reduce this probability.

How will the research addresses a policy need, and what kind of policy lesson is expected?

The control function estimates of the birth weight production function suggest that the information that mothers possess about health-improving technologies plays a critical role in motivating them to invest in behaviors and consumption that complement tetanus immunization in increasing birth weight. A mother's immunization against tetanus while pregnant reduces the risk of a child dying from tetanus infection during delivery. As a consequence, the complementary hypothesis of the competing risk model predicts that mothers would be strongly motivated to reduce other risks to child survival, e.g., the risk of a child dying from syndromes associated with a low-birth weight.

The mechanisms through which pregnant mothers reduce this risk include investing in better nutrition and using prenatal care services. These are elements of a health production technology. Unless mothers possess information about this technology, they are unlikely to adopt behaviors and consumption patterns that are complementary to tetanus immunization in improving child health. The reasons can come to the fact that sociological and psychological rigidities often too present in the African context lead the women to change behavior and to invest in services which can harm their own health or on the long run the health of their babies.

For example, mothers could receive vaccination against tetanus, and continue to take traditional medical medicaments which are incompatible with their own health, because they lack information about harmful effects of these types of substances on the foetus.

We can hypothesize that the heterogeneity of information on health-improving practices and technologies among women is the source of variation in birth weight across income levels and geographic area. There is need therefore to investigate the content of health education extended to mothers in different regions and at different clinics during vaccination days.

Standardization of such information would enable women to have access to the same reproductive health care technology. As a consequence, immunization of mothers against tetanus would be accompanied by behaviour and consumption patterns that increase rather than reduce child health. More generally, the need for health facilities and health policy makers to do more than simply immunize mothers. They suggest the need for immunization plus interventions. Specifically, when receiving immunizations, mothers should be counseled about other things they can do to maintain their health and that of their unborn children. Data on the content of the counseling that occurs during immunization days would help design immunization plus programs in both rural and urban areas. The information on the content of existing immunization programs would also provide a basis for pointing out the imperatives for effective empowerment of women (providing sound education and training especially to young women and promoting remunerative employment for mothers). Indeed, the immunization plus interventions provide the link between reproductive health, economic growth and poverty reduction. The unified demand framework presented in the paper helps the policy makers evaluate how participation in immunization plus interventions empowers women by improving

their health, equipping them with useful skills, and connecting them to productive livelihoods. The collective household model that informs demand analysis can be used to assess whether empowerment of women benefits the whole family.

Methods used

We analyze demand behaviour for reproductive health services by a mother using a model in which child is embedded in a utility function.

Data used

The data used in this study come from the Demographic and Health Survey of 1997 (DHS-III). It is the third survey in Senegal which enters within the framework of the international program of the Demographic and Health Survey (DHS). The target sample of the DHS III included 8000 old women from 15 to 49 years and 4500 old men of more than 20 years. Eleven fields of studies were identified, each divided into urban area and rural. The selected sample is stratified, weighted and representative at the national and regional level and on the area of residence (urban and rural). The number of households selected in the 320 survey district of the DHS of 1997 is of 5040.