



Demand for Literacy and the Production of Child Health/Nutritional Status in Cameroon

Abstract

This study seeks to evaluate spill-over effects of literacy on child nutritional status, controlling for other covariates. Specifically, it estimates the determinants of demand for literacy (endogenous in the health production function); evaluates the complementary effects of literacy on child nutritional; and disaggregates these effects by zone of residence, poverty status and gender. Land related assets positively explained the demand for literacy by household heads, while the opportunity cost of time and distance to access public goods where, on the average, unambiguously negatively associated with demand for literacy programmes. As regards the production of child health and nutrition, control function modeling was preferred because it can be applied to purge the structural parameters of most potential econometric problems. Literacy status of household heads and nutrition of under-3-year old children are found to be positively and significantly associated. This result is attributable to spill-over effects of literacy on child health and nutrition and considered as validating the complementary hypothesis. The rural, poor, nonpoor and male sub-samples registered complementary effects of literacy that are in excess of the national average. In particular, the male household head sub-sample captured effects of literacy on child nutrition that were almost twice that depicted by the pooled sample—a result attributable to synergy achieved by working as a couple when seeking healthcare technologies. Moreover, nutritionists and economists expect that healthy and well nourished children would enhance future schooling outcomes and productivity of these children when they become adults and thereby fostering more rapid economic growth. This is indication that public expenditures on literacy programmes can have both short- and long-term implications for reproductive health and child nutrition, as well as economic growth and development.

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Country where the research takes place

Cameroon

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

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

Malnutrition among children under 36 months is widespread in Cameroon. In 2001, using anthropometric estimates from ECAM II data set, about 48 per cent of children were stunted, that is their height (given age) was less than -2 z-scores below the reference population of well nourished children. In terms of weight-for-age, which measures acute malnutrition, 20 per cent were malnourished, while considering weight (given height), 26 per cent were undernourished. Malnutrition during childhood can also affect growth potential, capacity to learn, future standards of living and the risk of morbidity and mortality in later years of life. Nutritionists and economists expect that healthy and well nourished children would enhance future schooling outcomes and productivity of these children

when they become adults and thereby fostering more rapid economic growth.

Methods used

The theoretical framework of the “new household economics” model of the family is increasingly used to drive the analysis of demand and supply of reproductive health care. This framework recognizes that households derive utility from goods and services that are also produced at home or for which there is no market.” In a simple version of the model, the household is typically seen as maximizing a utility function defined over leisure, market-purchased goods, and home produced goods such as child health, and faces three main constraints: a budget constraint, a time constraint, a distance constraint and a health production function. The health production function will depend on market-purchased inputs such as food (or nutrients) and health services, the time and characteristics of the main household worker, environmental features and community characteristics of the household such as sewerage and sanitation facilities, access and proximity to public goods, as well as the endowments of the child.

In our specific context, we glimpse at household utility through the utility function of the household head in terms of three representative commodities: (1) a health-neutral good, X , (that is, a good that yields utility to the household head but has no direct effect on reproductive health status of the household, e.g. clothing etc.; (2) a health-related good, service or behaviour, Y , that yields utility to the household head and also affect child health and nutrition, e.g. smoking and alcohol consumption; and (3) health and nutritional status of the child, H , captured by anthropometric indicators.

Data used

This study uses data extracted from the second Cameroon Household Consumption Survey (CHCS II) collected by the National Institute of Statistics in the period September—December 2001. This survey includes 12000 household and 56443 individuals, and was designed to construct poverty profiles at the national and regional levels. In this regard, Douala (economic capital) and Yaoundé (political capital) were considered as separate strata and each of the ten provinces were divided into two strata—one rural and the other urban. The survey was, therefore, realised with 22 strata—10 rural and 12 urban.