

Free versus Paid Distribution of Health Products in Uganda

Researchers:Greg FischerDean KarlanMargaret McConnellPia RafflerSector(s): FinanceFieldwork: Innovations for Poverty Action (IPA)Location: UgandaSample: 3,884 IndividualsTarget group: Rural populationOutcome of interest: Market accessIntervention type: Health care delivery Pricing and feesAEA RCT registration number: AEARCTR-0001414Research Papers: Short-term Subsidies and Seller Type: A Health Products Experiment in Uganda.

Previous research suggests that charging even very small user fees sharply limits access to preventive health care, such as bed nets or home water purification. While distributing health products for free in low-income countries is common, it is unclear whether this is the best practice for all products. In northern Uganda, researchers found that free distribution of three health products led to lower demand for the same products when they were later offered for sale, highlighting the importance of product characteristics in determining pricing policy.

Policy issue

Previous research suggests that charging even very small user fees sharply limits access to preventive health care, such as bed nets or home water purification. While distributing health products for free in low-income countries is common, it is unclear whether this is the best practice for all products. Some practitioners argue that free distribution of life-saving products is a moral imperative, while others argue that free distribution actually makes consumers less likely to value and use certain health products.

Lower prices and "free trial" periods increase demand for certain products while also giving consumers the opportunity to learn about the product's effectiveness. Depending on prior beliefs about the value of the product, this learning effect can either increase or decrease subsequent demand. At the same time, lower initial prices may also serve as a reference point or "anchor" for the customer, which could lower subsequent demand. This research investigated how product learning and price anchoring affects future demand for health products.

Context of the evaluation

This study took place in the Gulu District of northern Uganda, close to the borders of Sudan and the Democratic Republic of Congo. The district is remote and very rural, with about 95 percent of the population engaging in crop production. The Gulu District was destabilized by an insurgency from 1987 until 2006. In the wake of the insurgency, the area received a large amount of NGO and government attention. Compared to other regions in Uganda, Gulu District has experienced a relatively high amount of free or heavily-subsidized distributions of health goods. Researchers believe this setting provides a good testing ground for measuring the effect of past prices on current demand.



Photo credit: Jonathan Torgovnik/Getty Images/Images of Empowerment.

Details of the intervention

Researchers partnered with two Ugandan organizations¹ to design a field experiment in northern Uganda where health products were distributed door-to-door either for free or for sale at market prices. The evaluation took place among 3,884 households in 120 villages in Gulu District.

Marketers offered 3 different products: a) Panadol, a pain reliever widely known to consumers; b) Elyzole, a deworming drug that was moderately well-known and had unpleasant side effects; and c) Zinkid, an improved treatment for childhood diarrhea that was largely unknown but worked well and did not have unpleasant side effects. By offering three different products with varying degrees of familiarity, researchers were able to specifically investigate whether product learning plays a role in future demand.

Marketers visited each household twice. During the first visit, marketers from either a for-profit or non-profit company offered households one of three products either for sale or at market prices. Marketers from a different for-profit company visited the households again approximately 10 weeks later. Three-fourths of these households were offered the same product they were offered the first time, but for sale at market prices. The other quarter of households were offered a different water purification product to assess any potential demand effects for other products.

Results and policy lessons

Overall demand for the three products was lower at market prices if the household had previously received the product for free. Relative to households who had previously bought the product at full price, households who received the product for free were 10 percentage points less likely to pay for the product later. Households' qualitative responses also support this conclusion: those who received free distribution were more likely to report that they did not want to purchase the product because they or someone in their community had received it for free in the past.

The overall results were driven by large drops in demand for Panadol and Elyzole, both very familiar products. Demand for Panadol was 11.6 percentage points (13.5 percent) lower and demand for Elyzole was 11.8 percentage points lower (30.4 percent). Demand was not significantly lower for the less familiar product Zinkid, suggesting that free distributions or subsidies may not have an effect on demand for new products just being introduced. In other words, learning about the benefits of a less familiar product may have offset some of the price anchoring.

The relative drop in demand following free distributions was the same whether the product was offered by a for-profit entity or an NGO. There was also no effect of having received a product for free on the demand for the different water purification product, suggesting that the lower demand, or anchoring effect, persists only for the same or similar products. In sum, while lower prices today can dampen future demand by setting low price reference points, opportunities to learn the value of a new product may counteract this effect.

Fischer, Greg, Dean Karlan, Margaret McConnell, and Pia Raffler. ‰ÛÏTo Charge or Not to Charge: Evidence from a Health Products Experiment in Uganda.‰Û� Working Paper, October 2014.

1. A large Kampala-based NGO focused on the distribution and promotion of health products and a Kampala-based pharmaceutical company that imports, distributes and markets medicines and other products for sale throughout Uganda.