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Price Subsidies, Diagnostic Tests, and Targeting of Malaria Treatment: Evidence from a Randomized Controlled Trial

By JESSICA COHEN, PASCALINE DUPAS, AND SIMONE SCHANER

Both under- and over-treatment of communicable diseases are public bads. But efforts to decrease one run the risk of increasing the other. Using rich experimental data on household treatment-seeking behavior in Kenya, we study the implications of this trade-off for subsidizing life-saving antimalarials sold over-the-counter at retail drug outlets. We show that a very high subsidy (such as the one under consideration by the international community) dramatically increases access, but nearly one-half of subsidized pills go to patients without malaria. We study two ways to better target subsidized drugs: reducing the subsidy level, and introducing rapid malaria tests over-the-counter (JEE, D12, D82, I12, O12, O15)

Limiting the spread of infectious diseases has positive spillovers. As such, subsidies for prevention and treatment products are often central to infectious disease programs. Financing such subsidies is obviously subject to a budget constraint, however, and it is important to ensure that subsidy dollars are spent where they have the highest return. For products whose usage has heterogeneous returns, the introduction of a subsidy creates a trade-off between access and targeting. That is, subsidies for the product are likely to increase demand among both those for whom the health returns are high and among those for whom the private health benefits are marginal (and the social returns possibly negative). The problem of how to set prices in the context of this type of moral hazard has been dubbed the “menu-setting problem” by Olmstead and Zeckhauser (1999).

This paper studies the menu-setting problem introduced by subsidies for the latest class of antimalarials, artemisinin combination therapies (ACTs). This setting

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