Do Public Health Interventions Crowd Out Private Health Investments? Malaria Control Policies in Eritrea

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Abstract
It is often argued that engaging in indoor residual spraying (IRS) in areas with high coverage of mosquito bed nets may discourage net ownership and use. This is just a case of a public program inducing perverse incentives. We analyze new data from a randomized control trial conducted in Eritrea which surprisingly shows the opposite: IRS encouraged net acquisition and use. Our evidence points to the role of imperfect information. The introduction of IRS may have made the problem of malaria more salient, leading to a change in beliefs about its importance and to an increase in private health investments.

Gender Connection: Gender Informed Analysis
Gender Outcomes: Use of healthcare services
IE Design: Clustered Randomized Control Trial (Clustered at village level)
Intervention: The intervention involved the control of adult mosquito populations using Indoor Residual Spray with the insecticide DDT. The spray targeted all households in a village.
Intervention Period: June - July 2009
Sample population: The sample was drawn from 58 treatment and 58 control villages in Gash Barka Zone. A random sample of 15 houses was selected in each village. There were 870 households in each the treatment and control.
Comparison conditions: 58 villages in Gash Barka Zone were randomly assigned treatment and 58 villages were randomly assigned as the control group and received other malaria prevention service, but not Indoor Residual Spray.
Unit of analysis: Household Level
Evaluation Period: October, 2009

Results: This paper adds to Keating et al. (2011) to provide behavioral results to the IRS campaign. The study finds that public provision of Indoor Residual Spray does not crowd out private investment of malaria control in Eritrea. Public provision of spray does not reduce ownership or use of bednets, if anything, the spray led to an increase in preventative behaviors.
## Primary study limitations

The study design was post-test only and may have failed to capture important pre-test differences. Since the rate of malaria is so low, very large sample sizes are needed to detect impact. The data was collected at the end of peak malaria transmission season possibly biasing the results downwards.

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## Reference(s)


## Link to Studies