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Providing Safe Water: Evidence from Randomized Evaluations

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Abstract

This paper uses a public economics framework to review evidence from randomized trials on domestic water access and quality in developing countries and to assess the case for subsidies. Water treatment can cost-effectively reduce reported diarrhea. However, many consumers have low willingness to pay for cleaner water; few households purchase household water treatment under retail models. Free point-of-collection water treatment systems designed to make water treatment convenient and salient can generate take-up of approximately 60% at a projected cost as low as \$20 per year of life saved, comparable to vaccine costs. In contrast, the limited existing evidence suggests that many consumers value better access to water, but it does not yet demonstrate that better access improves health. The randomized impact evaluations reviewed have also generated methodological insights on a range of topics, including (a) the role of survey effects in health data collection, (b) methods to test for sunk-cost effects, (c) divergence in revealed preference and stated preference valuation measures, and (d) parameter estimation for structural policy simulations.

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