On the Schooling Effect of Mosquito Nets

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Abstract

This paper analyzes the effect of using long lasting insecticide treated mosquito nets (LLINs) on school attendance based on a large-scale natural experiment in Madagascar. In 2009, Malagasy government launched a mass distribution campaign of LLINs under which all families receive nets for free. Yet, the dates of distribution varied across regions substantially because of the government's distribution capacity constraints. Comparing bordering areas in the malaria prevalent eastern coast of Madagascar where there is one year gap in distribution, we found that uses of LLINs significantly reduced school absences among 6–12 years old children by about eight days per year on average. Based on our best estimate, we found that LLIN will cost 7.3 US dollars per additional year of school participation. According to the Rapid Diagonal Test (RDT) results, we also found that uses of LLINs reduced malaria infection rate significantly. Overall results support the hypothesis that the schooling improvement effects of mosquito nets were caused by reduced malaria infection. Hence, LLINs may be considered as an effective policy instrument to facilitate human capital accumulation of elementary school age children in high malaria risk areas.

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[1]However, empirical studies show inconsistent findings on the effect of disease on economic growth. Gallup and Sachs (2001), Bloom et al. (2004), and Lorentzen et al. (2008) support the idea that diseases have negative effect on economic conditions,