Deworming as a public health intervention: can it have lasting effects?

On May 16, 2011, the Center for Global Development hosted an event for Michael Kremer and Sarah Baird to present data on their long-term follow-up research study called "Worms at Work: Long-run Impacts of Child Deworming in Kenya." Other authors on the paper include Joan Hamory Hicks and Edward Miguel). This paper concludes that deworming in Kenyan schools can show significant, long-term gain in employment and earnings and among dewormed children.

The study examined the impact of deworming by following participants in Kenya that were dewormed in 1998. The study found that individuals that had been deworming in their youth self-reported better health, increased years in school, and improved test scores significantly. Additionally, hours worked increased by 12%, and work days lost to illness fell by a third in the treatment group. There was a tripling in the number of people employed in well-paid



manufacturing jobs, especially men, and fewer people seeking casual labor jobs. The paper suggests that externality benefits alone justify fully subsidizing school-based deworming.

An interesting aspect of the deworming efforts in Kenya was that when individuals had to pay for part of their deworming medicines, the coverage rates decreased sharply. When the medicines were completely free, many more people were treated. An important lesson.

David McKenzie from the Development Research Group, World Bank discussed some of the research and operational aspects of the study and was inclined to believe that the impacts need to be explored further. For example, although children are staying in school longer, the study did not show if they necessarily completed more grades. Also, the increase in wages could be attributed to changes in sector (perhaps farming to manufacturing), rather than deworming. In David's analysis, he made the case for further research to examine externalities.

Kremer and Baird maintain that although more needs to be done before a comprehensive policy implication could be put forward, this research demonstrates that investments in child health can boost adult earnings later in life. Perhaps that seems rather intuitive – if you're healthy when you're young, you're more likely to go to school and stay in school longer. It's up to the research to prove just how effective these interventions are – but if we're talking the difference between making \$1 per day to \$1.25 per day, although it seems minute, this could make a huge difference to a family.

More research on the impact of deworming is needed in order to really prove long-term health and economic effects; however, this was certainly a good start.