

Researchers

Madeline Duhon
Pepperdine University

Lia Fernald
University of California, Berkeley

Joan Hamory Hicks
Center for Effective Global Action (CEGA)

Edward Miguel
University of California, Berkeley
Center for Effective Global Action (CEGA)

Eric Ochieng
Research Manager

Michael Walker
University of California, Berkeley
Center for Effective Global Action (CEGA)

Timeline

2015-2027 (Expected)

Study Status

Results

Study Type

Descriptive / Surveillance

Sample Size

3,500 children of dewormed parents

Research Implemented by IPA

Yes

NBER WORKING PAPER SERIES

INTERGENERATIONAL HUMAN CAPITAL IMPACTS AND
COMPLEMENTARITIES IN KENYA

Madeline Duhon
Lia Fernald
Joan Hamory
Edward Miguel
Eric Ochieng
Michael W. Walker

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Assessing the Intergenerational Impacts of Deworming on Child Health & Development in Kenya



A dewormed father with his child. © Eric Ochieng

Researchers partnered with IPA Kenya to measure the development and cognitive functioning of children whose parents received deworming treatment during childhood. Dewormed parents reported greater health and socioemotional outcomes for their children. Older children had higher cognitive scores, but these gains did not emerge among the children most impacted by COVID-19-related school closures.

Previous evidence from Kenya has shown that school deworming programs can significantly reduce the likelihood of intestinal worm infection, in turn reducing school absenteeism and increasing secondary school attendance. Deworming can even have long-term impacts into adulthood: dewormed individuals worked more outside of agriculture and earned more than their non-dewormed peers.¹ Now, as parents, do these economic, educational, and health advantages translate into improvements in cognitive and non-cognitive development?



A dewormed father helping his child study. © Madeline Duhon

Researchers partnered with IPA to measure the development and cognitive functioning of children whose parents received deworming treatment during childhood. To do this, they leveraged the twenty-year Kenya Life Panel Survey, which tracked 7,000 participants of the 1998-2001 Primary School Deworming Project and was expanded between 2017 and 2021 to include 3,500 of their children aged 3-8. The study measured indicators including child health, non-cognitive development, and cognition.



A child with their parent learning. © Madeline Duhon

Dewormed parents reported better health outcomes for their children, including improved subjective health and socioemotional development for older children (aged 6-8) and enhanced overall health for younger children (aged 3-5). Additionally, prior to the COVID-19 school closures, older children of dewormed parents scored higher on an academic cognitive index covering math and language skills compared to their peers whose parents had not been dewormed. However, these cognitive gains did not emerge among the random group of children most impacted by the school closures due to widespread learning disruptions.

Sources

¹ Hamory, Joan, Edward Miguel, Michael Walker, Michael Kremer, and Sarah Baird. "Twenty-year economic impacts of deworming." *Proceedings of the National Academy of Sciences* 118, no. 14 (2021): e2023185118.

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