# Mass deworming greatly reduces helminth prevalence among children

23 March 2017

Dr Suhail Doi. Credit: Qatar University

A study finds that mass deworming leads to a significantly greater reduction in prevalence in children than targeted deworming.

A study co-authored by Qatar University College of Medicine (QU-CMED) researcher Dr Suhail Doi who is also affiliated with The Australian National University, and published in *The Lancet*—one of the world's leading medical science journals—showed that mass deworming leads to a significantly greater reduction in prevalence in children than targeted deworming, for both hookworm and Ascaris lumbricoides, while no effect was seen for Trichuris trichuria.

This study was conducted in collaboration with The Australian National University in Canberra, Australia.

Soil-transmitted helminth infections are a major global health issue, causing substantial morbidity in the world's poorest populations. Regular delivery of anthelmintic drugs is the mainstay for global soil-transmitted helminth control. Deworming campaigns are often targeted to school-aged children, who are at high risk of soil-transmitted-helminth-associated morbidity. However, findings from the study suggest that deworming campaigns should be expanded community-wide for effective control of soil-transmitted helminth transmission. The research team carried out a systematic review and meta-analysis to compare the effect of mass (community-wide) and targeted (children only) anthelmintic delivery strategies on soil-transmitted helminth prevalence in school-aged children.

These worms are not common in Qatar, said Dr Doi, adding, "but a study conducted this year by QU and published in Parasites and Vectors reported a prevalence of combined helminths of 7% in Qatar's migrant population being highest among the western Asians. While this is an indirect impact of the burden of infection with Qatar's Asian neighbors, the eradication strategy recommended in this study will be of much greater consequence for these nations themselves."

He added: "The results of this meta-analysis contribute to the evidence base surrounding the benefits of expanding drug therapy programs for control of soil-transmitted helminths to all members of the community. Our findings support those of modelling and cost-effectiveness studies. We suggest that soil-transmitted helminth control guidelines should be re-evaluated with consideration of expansion to community-wide drug administration in endemic areas."

Provided by Qatar University

APA citation: Mass deworming greatly reduces helminth prevalence among children (2017, March 23) retrieved 28 August 2022 from https://medicalxpress.com/news/2017-03-mass-deworming-greatly-helminth-prevalence.html

*This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.*