Medical Xpress

Misconceptions about foot disease common among Ethiopian children

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Podoconiosis, also called nonfilarial elephantiasis or "mossy foot," can be prevented—in the African countries where it's common—by wearing shoes. But many children in podoconiosis-affected families in Ethiopia have misconceptions about risk factors and prevention of the disease, researchers report in *PLOS Neglected Tropical Diseases*.

Podoconiosis develops, in people with a genetic predisposition, after prolonged barefoot exposure to certain red clay minerals in the soil. In susceptible individuals, these minerals can be absorbed through the skin of the feet and collect in the lymph system. Eventually, this can cause severe swelling and disfigurement of the feet and legs. Wearing shoes in places with the irritant soil and regularly washing ones feet can prevent the disease in those with the genetic risk for it.

In the new work, Abebayehu Tora, of Addis Ababa University, Ethiopia, and colleagues interviewed 117 children aged 9 through 15 from podoconiosis-affected families in Wolaita Zone, Southern Ethiopia. The children were asked about their beliefs surrounding the disease—its risk factors, causes, symptoms, preventive measures, and role of heredity.

The children expressed a variety of misconceptions about most aspects of the disease. Risk factors that were brought up included barefoot exposure to dew or pond water, worms, snake bites, and frog urine. Many children believed that the disease was contagious between individuals and had a poor understanding of the concept of heredity or genetic predisposition, instead often believing family members all had

disease due to sharing shoes. While many in the study were aware of the symptoms and severity of podoconiosis, as well as the benefits of wearing proper footwear, they also described many barriers to wearing shoes and washing their feet, including uncomfortable shoes and lack of soap.

"These findings imply that school-age children at high risk of podoconiosis might benefit from an intervention that improves their knowledge about podoconiosis and enhances their self-efficacy to sustainably perform preventive behaviors," the researchers say.

More information: Tora A, Tadele G, Aseffa A, McBride CM, Davey G (2017) Health beliefs of school-age rural children in podoconiosis-affected families: A qualitative study in Southern Ethiopia. *PLoS Negl Trop Dis* 11(6): e0005564. doi.org/10.1371/journal.pntd.0005564

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