

First ever rapid, cheap, bedside DNA test developed for parasitic diseases

December 20 2021



Oyime Poise Aula – PhD. Credit: QIMR Berghofer Medical Research Institute

The first rapid, cheap and easy DNA-based test for parasitic diseases has been developed to improve the lives of billions of marginalized people. Ms Oyime Poise Aula, from QIMR Berghofer Medical Research Institute, created a rapid 'bedside' test that cuts diagnosis and treatment time for patients by using inexpensive, easily sourced materials.

Remote areas usually suffer from poor health services—disease samples are sent to capital cities or even other countries for testing, hours or days after they are collected. This time causes delays in treatment and recovery, and results in an annual economic burden (of more than USD\$250 billion) that sustains a continuous cycle of poverty.

Especially affecting children, these diseases cause severe disability and malnutrition and hinder growth, productivity and cognitive development; often ending in death.

Ms Aula's new [test](#) gives [health workers](#) a result nearly immediately using simple equipment such as candle wax, filter paper, and a heat source.

"The test enables programs for parasite control to help treat people with infections with drugs, and to get crucial insights into how these pathogens are transmitted. We'll also be able to estimate the true health burden caused by these [parasitic diseases](#)," says Ms Aula.

"Extra benefits include finding infected people earlier, reduced drug costs, better acceptance of treatment and substantially reducing the specter of drug resistance developing," she explains.

Provided by Freshscience

Citation: First ever rapid, cheap, bedside DNA test developed for parasitic diseases (2021,

December 20) retrieved 4 May 2024 from <https://medicalxpress.com/news/2021-12-rapid-cheap-bedside-dna-parasitic.html>

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