

CHAGAS DISEASE

PROGRESS TOWARDS SHORTER, BETTER TREATMENTS TO STOP A SILENT KILLER

Chagas is a parasitic disease that affects over 6 million people in the world. As the disease typically remains asymptomatic for years, new cases often go unnoticed and unreported, and most people with the disease are unaware of their condition. Less than 10% of people affected are diagnosed and the vast majority do not receive the treatment they need. If not treated, Chagas may cause irreversible, life-threatening damage to the heart and other vital organs.

CHAGAS DISEASE STATISTICS



6 OVER MILLION people estimated to have Chagas in the world



21 COUNTRIES The disease is endemic in 21 countries in Latin America



14,000 DEATHS Chagas causes an estimated 14,000 deaths per year

TREATMENT CHALLENGE

Currently, there are only two drugs available to treat Chagas disease – nifurtimox and benznidazole – both discovered half a century ago, underlining the persistent lack of investment in R&D.

Treatment is effective during the acute phase of infection, as well as in children and young people. But for about 20% of adults, treatment is not successful in killing the parasites.

Treatment is long and has many potential side effects: 15–20% of those who start the treatment do not complete it. These factors act as barriers discouraging health workers and patients alike, and hampering efforts to scale up diagnosis and treatment.

DND*i* is working with partners to find safer, shorter, and more effective treatments and better tools to measure the response to treatment. DND*i* is also helping scale up diagnosis and treatment and hopes to eventually contribute to eliminating Chagas as a public health problem.



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 I found out I had Chagas during my prenatal tests. Shortly after Gustavo was born, an infection appeared on his arm. I found out he also had Chagas; he got it from me. 99

> **Maria Valdirene**, from Goiás Brazil, has chronic Chagas disease. Access to diagnosis and treatment is critical for the prevention of mother-tochild transmission.

Towards a shorter and safer treatment for Chagas disease

The BENDITA study (Benznidazole New Doses Improved Treatment and Associations) was launched in 2016 in order to identify regimens that were at least as effective as today's standard eight-week treatment, but with fewer side effects, making it easier for patients to complete treatment.

The study was carried out in sites of the Bolivian Chagas Platform coordinated by CEADES and ISGlobal. Six benznidazole treatments of differing lengths and dosages, both in monotherapy and in combination with fosravuconazole, were tested against a placebo.

Study results available in 2019 showed that dramatically shorter treatment could be just as effective, and significantly safer: the trial's two-week treatment arm was particularly promising, as none of the patients interrupted treatment due to side effects.

DND*i* is now working with partners to confirm these results, which could help remove one of the barriers to treatment scale-up and bring new hope for people with Chagas disease.

Breaking down the barriers to diagnosis and treatment

DND*i* is also working to support Ministries of Health across Latin America to expand access to diagnosis and treatment

with the existing tools. The pilot approaches include a simplified model of care delivered through clinics close to affected communities. In two municipalities of Colombia, the number of people screened increased from 25 in 2017 to 400 in 2019. The success of the Colombian experience has led to similar access programmes being initiated in the USA, Guatemala, and Brazil. In 2019, a first seminar to identify the barriers to access was also held in Mexico.

Much-needed visibility

2019 brought some good news for people affected by Chagas disease around the world. Following advocacy efforts led by the International Federation of Associations of People Affected by Chagas disease, the 72nd World Health Assembly declared 14 April official World Chagas Day, an important step to increase visibility of people living with this silent and neglected disease.