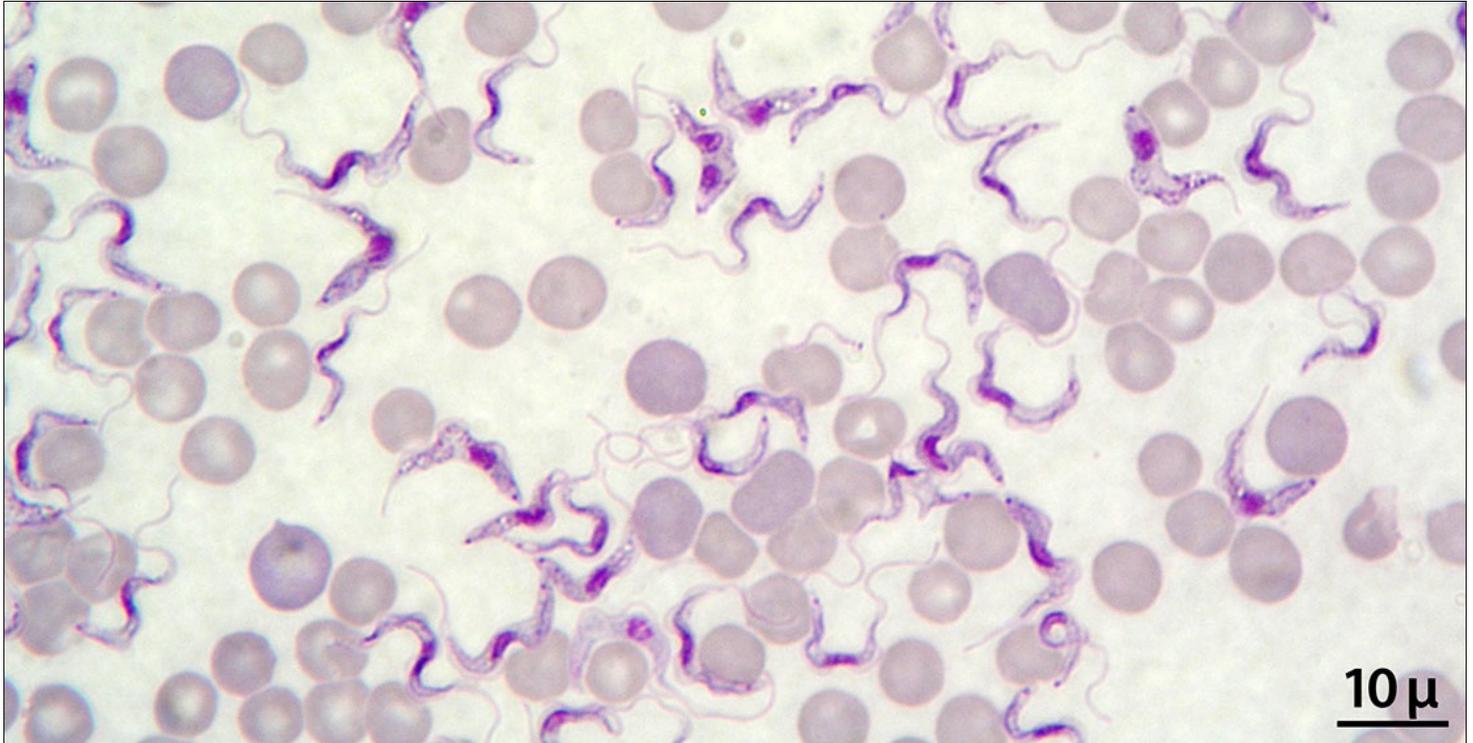


Hidden parasite hampers elimination of sleeping sickness

28 international experts warn in the journal *Trends in Parasitology* that attempts to eliminate the disease could be hampered by our lack of knowledge about the transmission of the parasite from cryptic reservoirs.

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Dit is de omschrijving

A group of international experts, led by Prof. Philippe Büscher from the Institute of Tropical Medicine (ITM), describes in the journal *Trends in Parasitology* that the hidden presence of the sleeping sickness parasite in humans and animals could hamper attempts to eliminate the disease.

The World Health Organization has set itself the target of stopping the transmission of Human African Trypanosomiasis - or sleeping sickness - by 2030. This deadly disease is caused by a single-celled parasite, which is transmitted by tsetse flies and occurs primarily in the Democratic Republic of Congo (DRC) and some other Sub-Saharan African countries. In Spring 2017, Belgium, the Bill and Melinda Gates Foundation and the Institute of Tropical Medicine joined hands to eliminate sleeping sickness with new strategies in the field of diagnosis, treatment, digitalisation and combating the tsetse fly.

However, a group of 28 international experts warns in the journal *Trends in Parasitology* that attempts to eliminate the disease could be hampered by our lack of knowledge about the transmission of the parasite from cryptic reservoirs. "We know very little about how the parasite behaves in humans and animals, whilst this does have an effect on how sleeping sickness is transmitted. These gaps in our scientific knowledge need to be filled urgently in order to beat this disease," according to ITM's Prof. Philippe Büscher.

Firstly, not all cases of sleeping sickness are reported. Fewer than 2,000 new cases were reported in the DRC in 2016, approximately 85% of the total number worldwide. The actual number may be higher, because it is not easy to track new cases in the most remote areas of the Congo. Only a limited number of people who are at risk are regularly tested for sleeping sickness. In addition, the process of confirming the diagnosis is complex and time-consuming. With Belgium's "HAT+" initiative, launched in 2017 and led by ITM, it is now possible to enlarge the scope of the detection. Research into better diagnostics is also supported.

A second problem are latent infections in people who do not show any symptoms. People can be infected for years without realising it, but it remains unclear to what extent they contribute to the spread of the disease. In theory they can pass on the parasite that causes sleeping sickness if they are stung again by a tsetse fly.

Finally, not enough is known about the role of domesticated and wild animals in the transmission of sleeping sickness in humans although they could play a key role in preventing disease elimination.

In order to eliminate sleeping sickness effectively by 2030, the experts state that better tools are urgently required to identify latent infections in humans. More accurate tests to monitor the sleeping sickness parasite in animals are also essential, as are improved mathematical models to investigate epidemiological hypotheses.

Link

The paper '[Do cryptic reservoirs threaten gambiense-sleeping sickness elimination?](#)'

