Brief summary

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Re-emergence of Human African Trypanosomiasis (Sleeping Sickness) in Ethiopia

This is a policy breif to create awareness about the emergence of sleeping sickness in Ethiopia and the need for preparedness.

[1]Reference: Abera A, Mamecha T, Abose E, Bokicho B, Ashole A, Bishaw T, et al., (in press). Re-emergence of Human African Trypanosomiasis caused by Trypanosoma brucei rhodesiense in Gamo Zone, Ethiopia.

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Key Messages

- After 30 years of the last case of Human African Trypanosomiasis (HAT) also known as sleeping sickness in Gambela region, Ethiopia, four cases were reported from Kucha Alpha district of Gamo Zone, South Nationa Nationalities People Region (SNPPR) during the period of 15 April 2022 to 29 October 2022.
- Collaboration between Ethiopian Public Health Institute (EPHI), MoH, WHO country office and Institute of Tropical Medicine (ITM), Antwerp helped to facilitate diagnosis, case management and initiate surviellance system.
- One of the two patients who were initiated with treatment died with treatment complication.
- Sleeping sickness needs to be recognized as one of the potentially fatal endemic Neglected Tropical Diseases (NTDs) in Ethiopia and should be integrated into National NTD roadmap.
- Disease surveillance, reporting, diagnostic and treatment guidelines need to be in place, and health workers in potential endemic regions need to be trained about the disease.

What is the problem and why is it important?

Sleeping Sickness is caused by *Trypanosoma brucei rhodesiense* that mainly affects animals (livestock and wildlife) with sporadic spillover to humans, and causing acute disease that progresses quickly and resulting in death. The disease is transmitted by tsetse flies (Glossina spp). The first case of this disease in Ethiopia was recorded in 1967 in the Gambella region. Since then, sporadic cases were reported until 1991. Recently, cases of sleeping sickness were reported from Kucha Alpha districts of SNNPR. As it has been more than three decades since the last reported case in Ethiopia, there was no surveillance and reporting system. There were no resources in place for case management.

How did we measure it?

Hospital based case record analysis was done on the first four sleeping sickness cases treated at Selam Ber Primary hospital in Gamozone, SNNPR. Clinical and laboratroy data

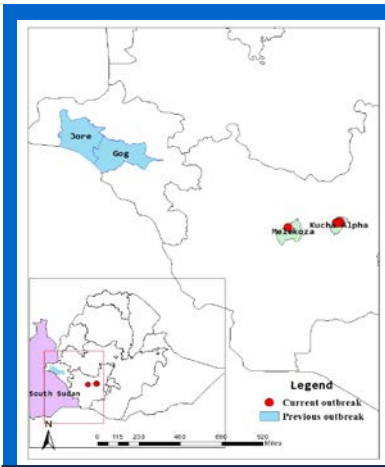

Figure 1. geographical location of historical and current sleeping sickness cases in Ethiopia

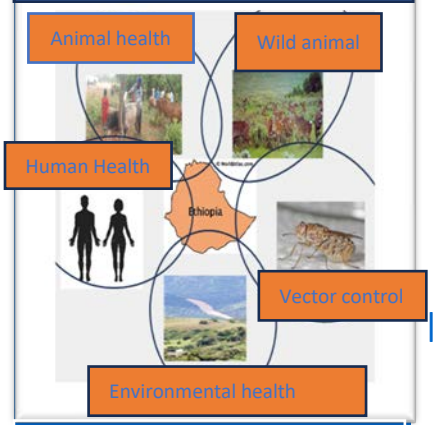

Figure 2. One health approach for the control of sleeping sickness in Ethiopia

were extracted from the case records. The process and activity history starting from the first diagnosed case was explained.

What did we find?

- All the first four cases diagnosed had fever, headache, insomnia and reduced level of consciousness, and were from near Omo river area in Kucha Alfa district of Gamo Zone, SNNPR. (Fig 1).
- The first two cases were diagnosed at Selam Ber hospital with blood film that was done to ruleout malaria. These patients were referred for higher level care but died before getting treatment as there was no medicine for sleeping sickness in the country.
- Report to Ethiopian Public Health Institute was made after the second case when immediate working group with ministry of health and WHO country office was made to put in place resources for case management and reporting system.
- Collaboration with ITM, Antwep helped to establish the cause as *Trypanosoma brucei rhodesiense.*
- By the time the third case was diagnosed, medicine was made available; however, patient died of drug toxicity. The fourth patient was successfully treated.

Implications and recommendations

- Sleeping sickness has re-emerged in Ethiopia in a new geographic region than where it was reported last 30 years ago.
- If left untreated, the disease is fatal, and generally has poor prognosis even with treatment.
- There is an urgent need to mobilize resources and put in place case detection, surviellance, reporting, diagnostic and treatment strategies.
- It is important to include sleeping sickness into the national list of NTDs.
- Collaborative partnership including with onehealth programs is important to design control strategies. (Fig 2).