



World Health
Organization

Diagnostic methods for the control of strongyloidiasis

Virtual meeting, 29 September 2020

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ISBN 978-92-4-001653-8 (electronic version)

ISBN 978-92-4-001654-5 (print version)

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This publication contains the report of the meeting on the diagnostic methods for the control of strongyloidiasis and does not necessarily represent the decisions or policies of WHO.

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1 Background

A meeting on diagnostic methods for the control of strongyloidiasis was organized by the World Health Organization (WHO) Department of Control of Neglected Tropical Diseases (Geneva, Switzerland) in collaboration with the WHO Collaborating Center on strongyloidiasis and other neglected tropical diseases (Negrar, Italy) and the Federation University (Melbourne, Australia). Children Without Worms (Decatur (GA), USA) provided logistic support. The agenda is attached as *Annex 1* and the list of participants as *Annex 2*.

Dr Zeno Bisoffi and Dr Antonio Montresor welcomed the participants and reported that there were no conflicts of interest to be declared by participants.

In his opening presentation, Dr Montresor shared the good progress in preventive chemotherapy coverage for *Ascaris lumbricoides*, *Trichuris trichiura* and hookworms. The main reason why no specific activities for *Strongyloides stercoralis* had been implemented so far was because of the poor availability of ivermectin outside the context of elimination programmes for lymphatic filariasis and onchocerciasis. He expects this to change soon, as two generic formulations of ivermectin are in the prequalification process with WHO. Moreover, strongyloidiasis is now included in the WHO road map for neglected tropical diseases for 2021–2030 as an additional soil-transmitted helminth parasite targeted for control.

WHO hopes to enable rapid expansion of strongyloidiasis control programmes using the existing infrastructure for other neglected tropical disease (NTD) control or elimination programmes, as was done to add schistosomiasis.

The preliminary steps for implementing a strongyloidiasis control programme were shared, namely:

- gain knowledge of the epidemiology of *S. stercoralis*;
- conduct a field evaluation of the proposed intervention. Pilot interventions should evaluate the impact and feasibility of the proposed strategy (a pilot study is planned in Ethiopia); and
- find a standard diagnostic tool to enable assessment of the public health burden of the disease and exchange of information among different research and control groups; for many countries there is no epidemiological information at all, so we need recommendations for assessment of baseline prevalence.

2 Objective of the meeting

The meeting addressed the last key area, that is, determining the best method or combination of diagnostic methods for a control programme for *S. stercoralis* infections in humans.

Dr Montesor's presentation highlighted that while there is currently no "gold standard" for the diagnosis of *S. stercoralis*, there is a felt urgency to optimize diagnostic regimens that are currently available, and in the context of population-based testing (as opposed to individual focused diagnostics in clinical settings). In other words, the diagnostic test(s) should have good accuracy, but we should remember that in public health we do not aim at individual diagnosis: rather, we need a tool that should help to estimate the prevalence in a population (see *Annex 3: presentation 1*).

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