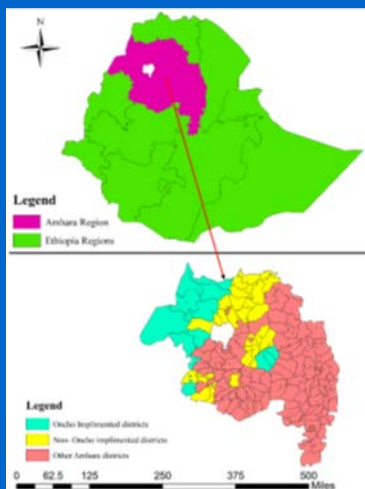


An opportunity to integrate scabies control in onchocerciasis elimination program.

The study areas in Amhara region:
intervention districts in blue

control districts in yellow



Key Messages

- To improve control of scabies, Neglected Tropical Diseases (NTD) experts recommend integrating it into the onchocerciasis elimination programme since they are both treated with ivermectin.
- We evaluated whether one dose ivermectin Mass Drug Administration (MDA) in the onchocerciasis elimination program has affect scabies prevalence.
- We used scabies survey data of Amhara region, 2018 and compared scabies prevalence in 14 onchocerciasis endemic districts and 28 onchocerciasis free districts.
- We found a 6% scabies prevalence in both intervention and control districts, indicating that one dose ivermectin given during an onchocerciasis elimination MDA campaign did not affect scabies prevalence.
- Based on this study together with the evidence that two doses of ivermectin MDA reduced scabies prevalence from 33.5% to 2% in the 2016 outbreak, we propose to add a second dose of ivermectin to onchocerciasis MDA campaign in the form of self-administration to control scabies.

What is the problem and why is it important?

Scabies is a highly transmissible skin disease caused by infestation of a mite. The disease causes severe itching, social stigmatization and can lead to secondary bacterial infection with severe complications. In Ethiopia the scabies control program is still under preparation. It is recommended to implement an MDA of two dose ivermectin to all population above one year to control a scabies outbreak. In Ethiopia, a scabies outbreak was reported in 2015/2016, with 1.2 million cases and such an MDA campaign reduced scabies prevalence from 33.5% to 2%. In 2018, in response to a reported resurgence in all districts of Amhara region, a survey was conducted to estimate the prevalence of scabies. NTD experts recommend integration of NTD programs to increase efficient control. In our case we evaluated whether one dose ivermectin based MDA for onchocerciasis elimination program in the population of above five years had an effect on scabies prevalence.

How did we measure it?

We used survey data in which all individuals were screened for scabies in Amhara region, 2018. We compared 14 intervention districts, where onchocerciasis elimination MDA campaign is implemented and 28 control districts free of onchocerciasis (Figure 1).

¹Reference:

e-mail:

amsalutsi@gmail.com

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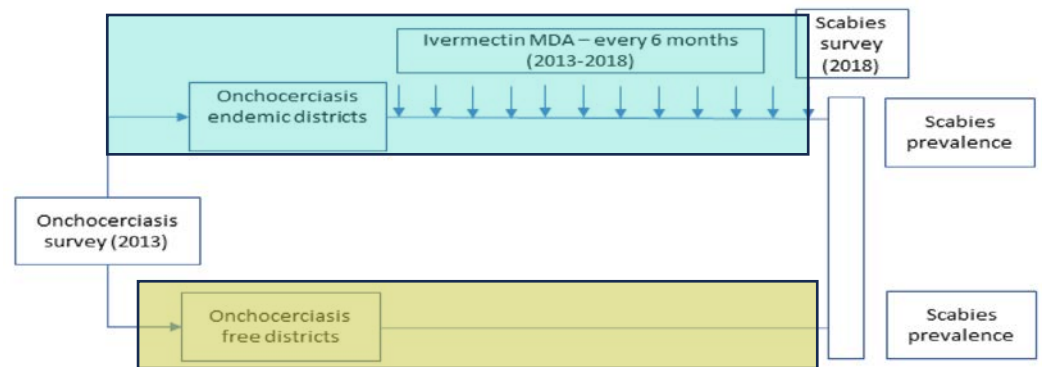


Figure 1: The study design for evaluation of onchocerciasis MDA on scabies in Amhara region.

Scabies prevalence was estimated for each district and association with risk factor evaluated.

What did we find?

- In the 2018 survey, **371,780** scabies cases were found in both intervention and control districts. The district scabies prevalence ranged from 0.01% to **35%**, with a median of 6%.
- The scabies prevalence was comparable in the intervention and control districts and was not dependent on gender, population density, availability of health service delivery and environmental factors. Under five years had a median prevalence of 7.6% against 4.4% in age group 5-14 and 6.6% in age group above 15 years old.
- Onchocerciasis elimination MDA campaign did not result in a different scabies prevalence between intervention and control districts.

Implications

Based on the findings of this study together with the fact that the 2016 two-ivermectin-dose scabies control campaign reduced scabies from 33.5% to 2%, we identified the following implications:

- Adding the second dose of ivermectin to onchocerciasis MDA campaign in the form of self-administration could control both diseases and improve the individual wellbeing with no additional operational cost. Onchocerciasis is endemic in 239 districts of Ethiopia; the integration of both programs could control scabies in about 25% of the districts.
- The impact on scabies prevalence would be significantly increased if the integrated program targets all populations above two years old in line with the current recommendation for scabies control.
- We support the launching of national scabies control program

Based on the above implications, having a regular scabies control program will have major benefits on the burden of disease and more importantly will improve individual wellbeing of the Ethiopian population