Brief summary

NTDs in the skin; an entry for integrated care[1]

Key Messages

- Majority of the neglected tropical diseases (NTDs) have established skin manifestations.
- These manifestations have been proposed as an entry point for integrated NTD control by WHO and Ethiopian NTD program.
- This study showed a high proportion of skin NTDs in Boru Meda Hospital, one of the five dermatology referral centers in Ethiopia.
- The three common NTDs were cutaneous leishmaniasis (CL), leprosy and scabies; there were four mycetoma cases.
- Along with the routine NTD surveillance, hospital-level skin NTD data can be used to identify specific interventions.
- Interventions like contact tracing of leprosy and scabies mass drug administration should integrate screening for other NTDs.

What is the problem and why is it important?

The majority of neglected tropical diseases (NTDs) have skin manifestations. This often results in physical disfigurement, which can lead to disabilities, stigmatization, discrimination and psychological distress.

Skin manifestations have been proposed as an entry point for integrated NTD control by WHO and Ethiopian NTD program. As a first step towards this, research on the type and relative contribution of skin NTDs is required to know the ways of integration.

How did we measure it?

A retrospective study was done using medical records of dermatology patients seen between July 2017 and June 2018 in Boru Meda Hospital, a dermatology referral center located in Northeast Ethiopia. The hospital is one of the five dermatology referral hospitals with a cachment population of 10 million. A total of 661 patient records were randomly selected. Data were collected using a structured data extraction tool, containing questions on the type of skin

[1]Abdela SG, Diro E, Zewdu FT, Berhe FT, Yeshaneh WE, Tamirat KS, Tweya H, Timire C, Van Griensven J. Looking for NTDs in the skin; an entry door for offering patient centered holistic care. The Journal of Infection in Developing Countries. 2020 Jun 30;14(06.1):16S-21S.

disease. The clinical diagnosis was done by dermatologists and other trained professionals, complemented with laboratory tests for some diseases like leprosy and CL.

What did we find?

- Skin NTDs constituted 17 % of the overall skin diseases.
- Among the skin NTDS, CL (35.4%), leprosy (33.6%), and scabies (27.4%) were the most common.
- There were four mycetoma cases.
- Of the non-NTDs, poverty-related infections such as superficial fungal (21%) and bacterial infections (5%) were also frequent.

Implications and recommendations

The high prevalence of NTDs in dermatology practice demonstrates that skin changes could serve as a good entry point for integration care across NTDs. Since this study, the Ethiopian national NTD program began planning for skin NTD integration manuals. As a first step, the program called for research on the prevalence of skin NTDs.

Currently for most NTDs the dermatology referral centres data are not included in the vertical NTD programs.

To support the development of the national skin NTDs manuals, we recommend the following.

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- Dermatology referral hospitals should properly collect and analyse data on NTD.
- This data should be reported to the local NTD program to identify specific interventions including contact tracing and mass drug administrations.
- Such interventions should be used to look for other NTDs with skin manifestation.
- To diagnose skin NTDs early at primary health care level, training of front-line healthcare workers on how to recognize NTD through skin changes is required.
- Community-based studies to better quantify the skin NTD burden and studies on how to integrate interventions such as MDA, contact tracing and psychosocial support are needed.