

Untapped potential: Integrating neglected tropical diseases into primary healthcare

- Mass drug administration for neglected tropical diseases (NTDs) should be accompanied by cross-sectoral complementary interventions.
- Integrating NTDs with primary healthcare structures offers a sustainable approach.
- This integration must be government-owned and engage a wide range of stakeholders.

Background

NTDs are a diverse group of 20 diseases that affect more than a billion people in low and middle-income countries^[1] and disproportionately impact the most vulnerable: women, children, refugees and those living in poverty. Collectively, they are thought to account for 26.06 million disability-adjusted life years.^[2] Their social and economic impacts are also significant. Many NTDs cause suffering, disability and disfigurement, which can lead to social stigma,^[3] exclusion and discrimination,^[4] marginalisation of women and girls^[5] and lack of opportunities such as employment.^[6]

In recent years, NTDs have received more attention from the global development community. The 2012 London Declaration saw decision makers endorse the World Health Organization's (WHO) ambitious NTD roadmap^[7] that sought to enhance the control, prevention, and elimination of NTDs and to eradicate at least two by 2020. Meanwhile, the Sustainable Development Goals (SDGs),

adopted by 193 countries, call for an 'end to the epidemic' of NTDs by $2030.^{[8]}$

To date, global efforts to reduce the prevalence of NTDs have largely focused on providing chemoprevention to at-risk populations in endemic areas through mass drug administration (MDA). While this has achieved impressive results in breaking some disease transmission cycles^[9] and will remain key to prevention and control programmes, there is a need for other complementary interventions as MDA:

- is only available and recommended for five NTDs^[10]
- will cease to be as cost-effective as testing and treating affected individuals as the prevalence of NTDs decreases
- may, unintentionally, contribute to the spread of antimicrobial resistance.

With increased focus on meeting SDG 3 – health and wellbeing – and achieving universal health coverageⁱ, WHO recommends the following cross-sectoral, complementary approaches are adopted in addition to preventive chemotherapy to tackle NTDs holistically.^[11]

- 1. **Vector ecology and management** to minimise people's exposure to the animal hosts that carry and transmit pathogens causing disease.
- 2. **Veterinary public health** to interrupt the animal-related transmission pathways (as part of an intgrated One Health[®] approach).
- Improved water, sanitation and hygiene to address the environmental causes.
- 4. **Innovative and intensified disease management** to provide specialised care for NTDs that are difficult to diagnose and treat and that may lead to severe clinical complications.

Integration

The fourth WHO report on NTDs noted that, to date, most programmes have not been closely aligned with national health systems. To ensure that health services meet the needs of those living with NTDs by 2030, countries will need to transition from providing 'vertical', dedicated control programmes to integrating the detection, treatment and management of NTDs within primary healthcare (PHC). This can help to improve prevention and control of those diseases, thereby contributing to the realisation of NTD, universal health coverage and broader SDG targets.

Our view

Malaria Consortium believes that a strong health system – and PHC in particular – is integral to the management and ultimate elimination of NTDs. For NTDs to be successfully integrated into PHC, systems must have sufficient technical, human and financial resources to undertake case finding and confirmation, record disease incidence^[15] and provide appropriate treatment. Recognising and formalising the role that community-based, often volunteer health workers play in NTD management will be crucial to this undertaking.

Our experience in Ethiopia

In 2017–18, Malaria Consortium developed and evaluated an intervention to integrate the detection, management, recording and reporting of five NTDs into Ethiopia's PHC system. The intervention provided case definitions for trachoma, schistosomiasis, soil-transmitted helminth infections, podoconiosis and lymphatic filariasis and defined appropriate roles and responsibilities at different levels of the PHC system. It embedded relevant guidance within existing documents, equipped facilities with drugs and equipment and trained health providers to detect and manage NTDs.

On average, health workers' knowledge of NTDs increased. However, evaluation of the intervention found no significant difference between the practical skills of participants who had attended training and those who had not. [16] This indicates that health workers would require ongoing training, supervision and support to deliver quality care for NTD patients. The evaluation also found that communities and health workers generally supported the integration of NTDs into PHC, but that knowledge and gender/stigma-related barriers to uptake of NTD services endured. Focus group discussions and interviews revealed a widespread belief that there is no cure for NTDs and a reluctance to discuss symptoms affecting genitals or 'hidden' body parts with health workers of a different sex.

This small-scale study was regarded as a starting point for developing the general principles upon which case definitions, roles and responsibilities, training, tools and procedures should be built. If implemented at scale in Ethiopia, we believe that the intervention would not only improve care for NTDs, but could also facilitate appropriate case reporting, which would enable health providers to use facility-level data to spot disease trends and take appropriate action.

i Universal health coverage would see all people, including the poorest and most marginalised, able to access quality health services without suffering financial hardship.

ii One Health refers to a coordinated, collaborative, multidisciplinary and cross-sectoral approach to improving animal and human health and wellbeing. iii From a health systems perspective, integration refers to the provision of curative, preventive and health promotion services through a single multipurpose operational unit, such as a PHC level facility. This differs from the meaning of integration in the context of MDA, where several drugs for treating different NTDs are delivered at once.

Recommendations

With United Nations member states due to approve a political declaration on universal health coverage at a High-Level Meeting in September 2019, we urge health sector stakeholders to prioritise NTD integration into PHC. We recommend that:

- 1. **National governments adopt cross-sectoral approaches and develop strategic plans for NTDs.** Integrated NTD strategies should seek to strengthen countries' PHC systems and be implemented with the support of multi-sectoral (e.g. veterinary and public health) stakeholders.
- 2. **Donors fund NTD interventions beyond MDA, as well as operational research to improve and contextualise these.** Adopting cross-sectoral approaches should produce comprehensive interventions, enhance sustainability and strengthen health systems. Results from funded operational research should guide this decision-making.
- 3. **Donors work with national governments to agree a timeline for NTD programme funding.** A structured and planned transition of funding from donors to national governments is essential to expand the latter's ownership of programmes. Including NTD programming in broader health sector budgets should also increase sustainability.
- 4. Pharmaceutical companies support governments to provide quality-assured, affordable drugs, diagnostics laboratory equipment and other infrastructure at the point of care. Where appropriate, donations of drugs for routine NTD treatment and management would strengthen PHC, particularly for countries with under-funded health systems.
- 5. Development partners support governments to establish national guidelines, strategies and policies; build the capacity of PHC workers to prevent and control NTDs; and ensure gender, stigma and equity issues are addressed.
- 6. **Researchers assess which interventions are most effective for integrating NTDs into PHC systems.** Few studies have explored how NTD integration into PHC works in practice, and this is likely to be country and context-specific. Further evidence is needed to drive decision-making.
- 7. WHO develops guidance and standard operating procedures for detecting, managing and recording NTDs at the PHC level. This would encourage best practice.
- 8. **Programme implementers actively engage communities in endemic countries in NTD prevention and control.** This will help to ensure that interventions are locally acceptable and meet communities' needs.
- 9. Governments strengthen the monitoring of NTD prevention and control at the PHC level and integrate this data into their national health management information systems. Strong monitoring systems are integral to evidence-informed decision making. National NTD programmes should also strengthen their staff's capacity to use this data to take locally appropriate action (carrying out active case finding or investigating potential outbreaks).

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