NTDs - The missing thread to reaching the unreached

Neglected tropical diseases (NTDs) are a group of treatable and preventable diseases that place a heavy burden on over a billion people around the world, many of whom live in poverty and low development settings. These diseases perpetuate cycles of poverty; people who become infected often face stigma and social isolation, increased medical costs and physical disability.

Poor communities affected by NTDs have specific public health needs that are not always covered by standard national packages of health and policies. People who live with NTDs are also at risk of other diseases and conditions, such as malaria and HIV/AIDS.

Throughout their lives women and girls are disproportionately affected by NTDs. They will battle intestinal worms, which affect their ability to learn and enjoy their childhood.

When NTDs afflict a household, it is most often girls that are unable to attend school, as they have to care for relatives with disabilities.

If children are not treated for bilharzia in childhood, they can be up to three times more at risk of contracting HIV. Furthermore, girls will have an increased risk of anaemia due to menstruation. They also may face issues after becoming pregnant. When pregnant, they may face childbirth anaemia – increasing their risk of death. The baby has an increased risk of low birth weight, a poor immune response to immunizations, and may not grow well.

Women living with NTDs often suffer social stigma and isolation due to disfigurement and disability. This can lead to depression and mental illness. In older age they face sight loss from blinding trachoma or river blindness and lymphoedema (swelling of the limbs) meaning that they are unable to work or care for their families.

All these hurdles are faced by women who are already part of the most vulnerable and poor communities. Addressing NTDs ensures that these women have the chance to be stronger, more productive and more able to enjoy their lives. Addressing NTDs will restore their dignity.

These insidious infections are frequently hidden, with symptoms appearing only after significant damage is done. Early treatment is essential and can frequently cure and even break transmission. NTD programs can help improve productivity, decrease blindness, decrease disability, decrease the risk of social stigma and subsequent mental health issues, improve nutritional status and birth outcomes. Proper management of lymphoedema is also key in ensuring that those affected lead a productive life.
A global movement has been underway since 2012 to eliminate, control and eradicate ten NTDs that globally affect 1.6 billion people. Many of the treatments to prevent and treat NTDs are provided free of cost by unprecedented pharmaceutical donations, making treating them incredibly cost effective. One billion people received treatment in 2017 through the NTD programs. While progress is being made, significant gaps need to be addressed in order to achieve the global NTD goals.

As the global community works toward the Sustainable Development Goals, addressing NTDs is crucial to the achievement of the goal to “leave no one behind”. Consequently, NTD programs can be empowering to communities and extremely cost effective due to the large supply of donated medicines.

The missing thread: NTD interventions provide the missing piece for better health of women and girls

The unprecedented reach of NTD programs provides invaluable access to healthcare opportunities for isolated individuals and groups. There is huge potential to build on existing NTD platforms — which have reached over a billion people per year for three years running — to ensure that these opportunities are available to all individuals, regardless of their geographic location and social positioning. A few examples include:

I. Progress on NTDs has been proposed as a tracer indicator for equity, helping to measure whether health care and development is effectively reaching the poorest communities.
II. NTD programs have been tested and successfully integrated, resulting in improved coverage for other interventions like bed nets, home-based malaria management, and vitamin A supplementation.
III. NTDs can be a critical link to access the hardest to reach communities more efficiently and effectively.
IV. In communities where NTD interventions have been implemented, there is a network of community volunteers that could be used for other health and social interventions.
V. NTD programs can be integrated with other programs at low cost. This integration into existing priority areas will fill important gaps, ensuring that women and girls are provided with holistic care throughout their lives in areas such as:
   i. Education: Providing deworming treatment through schooling means children can achieve their full potential.
   ii. Nutrition: Providing deworming treatment through nutrition programmes means that food is feeding children, not the worms.
   iii. Antenatal care: Providing deworming to women ensures that they have safer pregnancies with reduced risk of anaemia.
   iv. HIV/AIDS: Treating for bilharzia (schistosomiasis) in childhood as part of HIV prevention packages reduces the risk of female genital schistosomiasis, which can reduce the risk of new cases of HIV.
Life cycle of female life & Neglected Tropical Diseases (NTDs)

<table>
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<tr>
<th>Age</th>
<th>Consequences (Medical)</th>
<th>Consequences (Social)</th>
<th>Solution</th>
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| 0 - 14 years | Low birth weight, hampered growth and stunting  
Malnutrition  
Reduced School Attendance and attainment | Stigma  
Social isolation  
Poor outlook in life | Inclusion of NTD interventions in MCH, health programmes targeting PSAC, school health and nutritional programmes |
| 15 - 24 years | Early lymphoedema  
FGS – Ectopic Pregnancy  
Triple HIV Risk  
Poor Foetal Growth & Still birth  
Mother-to-child transmission (Chagas)  
Anaemia | Stigma  
Misdiagnosis as a STI and social isolation. | Inclusion of NTD interventions in programmes such as RMNCH, SRHR, HIV screening and prevention, family planning, … |
| 25+ years | Blindness  
Pain and disfigurement  
Disability  
Death | Inability to work  
Unproductive  
Stigma and social isolation  
Need their children to take care of them (meaning children can’t go to school). | Large scale preventive treatment in affected communities and provision of chronic care and counselling |

Guinea Worm – HAT – Chagas – Leprosy – VL

Inclusion of NTD interventions in programmes such as MCH, SRHR, HIV screening and prevention, family planning.

Inability to work or care for family,  
Depression,  
Stigma, isolation

Continues to next generation

Intestinal Worms & Bilharzia

Low birth weight, hampered growth and stunting  
Malnutrition  
Reduced School Attendance and attainment

0-14 years

Inability to work or care for family,  
Depression,  
Stigma, isolation

Large-scale preventive treatment in affected communities and provision of chronic care and counselling

25+ years

ALL  
Pain  
Disfigurement  
Disability  
Death

15-24 years

LF, STH, SCH & Chagas

Early lymphoedema, FGD - triple risk of HIV/Ectopic Pregnancy, Poor foetal growth & still birth  
Mother-to-child transmission (Chagas)  
Anaemia

Stigma, social isolation & poor outlook on life