Global Health and Gender Equality: Advancing Women, Peace and Security by Preventing Neglected Tropical Diseases

Chelsea B. Payne

As of January 2019, 79 countries have Women, Peace and Security (WPS) national action plans (NAPs) aligned with the October 2000 United Nations Security Council Resolution 1325. International cooperation efforts have since expanded to include the development of 11 regional action plans for WPS, including by the African Union and European Union. In 2017, the United States passed legislation mandating the government increase women’s participation in security processes and peacekeeping operations. Improved measurement tools, such as the Women, Peace and Security Index, have allowed for comprehensive analysis by country as many nations continue to update and expand their action plans. Through such strategic initiatives, gender inclusion is a pathway for countries to promote peace and enhance political stability; yet full participation of women remains to be seen, as they are often excluded from decision-making processes. Within the WPS paradigm, advocacy and promotion of women’s health are vital to achieving strategic objectives. Furthermore, gender equality and the inclusion of women should be prioritised to promote meaningful participation of all citizens.

An under-recognised source of global disabilities stems from a subset of infectious diseases, known as neglected tropical diseases (NTDs). NTDs infect more than one billion people in 149 countries. NTDs are communicable diseases that include lymphatic filariasis, trachoma, onchocerciasis, schistosomiasis, and soil-transmitted helminths. They predominately affect people in low- and middle-income countries and are associated with inadequate work and living conditions. These infections can lead to long-term disabilities and, in severe cases, premature death. NTDs significantly and disproportionately impact the health of women and their ability to reach milestones in education and employment.

This paper proceeds from the premise that a woman’s health is a core component of her ability to participate in community development, assume leadership roles, and make meaningful contributions to security cooperation. Global health, while historically fraught with challenges, has advanced to include quality control measures that allow for improvements in gender equality through intersecting domains of the UN Sustainable Development Goals (SDGs). This article discusses the WPS agenda in the context of global health and humanitarian crisis, reviews predominant threats posed by NTDs, and presents key recommendations to expand women’s participation in the WPS agenda by addressing NTDs through sustainable global health.

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“I am a business woman,” states a smiling Kagiso, who wades in fresh water where schistosomiasis is endemic, collecting reeds on the banks of the Chobe River in Kasane, Botswana. Like many women living near Chobe National Park, Kagiso weaves reed baskets and sells them to tourists. In Botswana approximately 12 per cent of the population requires periodic medication to prevent schistosomiasis, a water-borne infection that can lead to genital infections, infertility, and cancer.7

GLOBAL HEALTH AND HUMANITARIAN RESPONSE

The economy of humanitarian assistance has burgeoned over time, with the Global Humanitarian Overview estimating that in 2018 there were 135.3 million people in need, 97.9 million receiving aid, and financial requirements of approximately $25.2 billion.8 Conflict is the main driver of severe humanitarian crises are of major concern, with women and girls being among the most vulnerable populations. Women and children accounted for two-thirds of civilian casualties in 2017.10 In north-eastern Nigeria, six out of ten women are reported to have experienced gender-based violence (GBV).11 The UN Office for the Coordination of Humanitarian Affairs (OCHA) notes that of their 21 humanitarian response plans, 19 have been running for more than five years.12 The humanitarian industry has become the default source of aid in countries with fractioned political systems and regional instability. Globally, greater multilateral investments in political agendas, such as WPS, that emphasise conflict prevention, resolution and peacebuilding are needed to mitigate pressing transregional threats and humanitarian crises.

In terms of humanitarian response, the need for sexual and reproductive health services is identified as unmet.13 This is largely due to a lack of essential health services, with women and girls being at risk for sexually transmitted infections, unplanned pregnancy, and maternal morbidity and mortality. Women in conflict-affected areas and refugee camps are particularly vulnerable as they often lack basic rights, access to necessary resources, and healthcare.14 As described by Sara Davies, Jacqui True and Maria Tanyag, sexual and gender-based violence (SGBV) can be further compounded by factors such as religion, ethnicity, or cultural norms.15 A case study in Mindanao, Philippines, demonstrated that among internally displaced persons (IDPs), women and girls were targeted for SGBV “not because of any inherent vulnerability, but because they are largely disenfranchised from their right to report human rights violations.”16 A lack of basic infrastructure and healthcare services often further exacerbates this issue.17 Humanitarian medicine in developing nations has historically been fraught with these and other challenges. The Seven Sins of Humanitarian Medicine highlight common areas of concern when offering humanitarian assistance.18 These include: “complications; failing to match technology to local needs and abilities; failure of Nongovernmental Organizations (NGOs) to cooperate with one another and to accept help from military organizations; failure to have a follow-up plan; allowing politics, training or other distracting goals to trump service; going where we are not wanted, or needed… and doing the right thing for the wrong reason.”19 Healthcare personnel engaged in humanitarian work are frequently guided by well-meaning intentions. However, the potential to have little impact with episodic health interventions – or worse to do harm – in a comparably fragile medical system, must be carefully considered.

2 Ibid.
9 Ibid.
10 Ibid, 28.
11 Ibid, 36.
12 Ibid, 1.
13 Joanne Neenan, “Closing the Protection
NAPs can be a strategic tool for embedding the WPS agenda into global health and humanitarian response. The UK’s 2018-2022 NAP identifies the goal of preventing physical violence against women and girls, including SGBV.20 Health in this NAP is also addressed in the context of protection, specifically the safety, physical, and mental health of women and girls.21 Based on experience and evidence, the UK NAP outlines WPS plans for the UK and its international operations in nine countries. This includes monitoring and evaluation guidelines to improve emergency preparedness and response, and integration of sexual and reproductive health risk reduction plans across international operations.22 By increasing accountability, NAPs can better ensure that women’s health, and the need for enhanced health services in vulnerable populations, are fully integrated into the strategic planning process to achieve desired WPS outcomes.

NEGLECTED TROPICAL DISEASES

Globally, women are disadvantaged compared to men in terms of poverty, opportunities for education, land ownership, and political voice.23 These factors can impede access to healthcare and ultimately put women at increased risk for NTDs and their complications.24 Historically, programmes to treat and prevent NTD infections have been underfunded and underprioritised in research and global health. However, in 2012 the World Health Organisation (WHO) outlined the “Roadmap for Implementation” strategy to combat NTDs,25 which was endorsed by the World Health Assembly Resolution of 2013.26 This plan calls for equitable access to care for patients with NTDs, integration into existing programmes, and ensuring that essential services reach those who need them. Further international prioritisation of NTDs was formally declared by the UN on 15 September 2015, when it outlined the 17 Sustainable Development Goals (SDGs) and 169 targets. These goals focus on the pillars of social progress, economic growth, and environmental protection to identify common, measurable developmental health priorities.27 The UN’s 2030 Agenda for Sustainable Development reaffirms commitment to these seventeen goals to address global inequities, all of which are interconnected and impact women’s wellbeing.28 For example, SDG 3 focuses on health and includes subcomponents such as reducing maternal mortality (SDG 3.1), ending infectious disease epidemics to include NTDs (SDG 3.3), and reducing illness and death from water contamination (SDG 3.9).29 Meanwhile, SDG 5 seeks to realise gender equality and empower girls and women.30 Committing to SDG 3 and 5 while practising evidence-based medicine in humanitarian work supports the control, eradication and elimination of NTDs.

NTDs can lead to long-term physical and mental disabilities and premature death. These infections are caused by a variety of organisms, including bacteria, viruses, single-celled protozoa, and helminths (parasitic worms). The twenty unique NTDs predominately affect people living in poverty and without adequate access to water, sanitation and hygiene (WASH), with the largest burden in Sub-Saharan Africa and South Asia. In Sub-Saharan Africa, it is estimated that over one-third of pregnant women are infected with

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32 Ibid.

33 Ibid.

34 Ibid.


36 Ibid.


38 Ibid.


40 Ibid.


one or more NTDs.31 Soil-transmitted helminths, particularly hookworms, make the greatest contribution to the number of years people spend living with a disability (YLD).32 YLD can be added to the years of life lost to calculate disability-adjusted life years (DALYs), combining morbidity and mortality into one metric. One DALY represents a year of healthy life lost. NTDs are estimated to cause 26 million disability-adjusted life year (DALYs) globally with worm infections accounting for the majority of this burden.33

Hookworms can lead to moderate to severe anaemia. In pregnancy, anaemia can worsen the effects of excessive blood loss during childbirth; and contributes to a higher risk for maternal death.34 According to the WHO, obstetric haemorrhage is the leading direct cause of maternal death worldwide, accounting for 27 per cent of maternal deaths.35 The majority of these deaths are preventable and occur in developing nations.36

Anaemia during pregnancy can also contribute to low birth weight in infants, which is associated with cognitive impairment and stunted growth. In one study of a helminth endemic area, women treated during the second or third trimester with anthelmintic medication demonstrated a statistically significant infant birthweight rise of 59 grams.37 Also, infant mortality at six months decreased by a statistically significant 41 per cent as compared to infants of mothers who were not treated for helminth infection.38

Helminth infections in children can also negatively impact growth and cognitive development, and lead to recurrent school absenteeism.39 School-based deworming programmes in Kenya have shown a reduction in school absenteeism by 25 per cent and added a year to the average duration of childhood education.40 Another long-term study in Kenya demonstrated that after 10 years, females who were dewormed during primary education were 25 per cent more likely to pass the secondary school entrance exam and over one third more likely to enrol in secondary education than females who were not, thereby decreasing the gender- education gap.41 These results were statistically significant.

It is becoming increasingly recognised that certain NTDs are more likely to impact girls and women. For instance, in communities where women and girls predominately perform household tasks, such as washing clothes and water collection, they are more likely to be exposed to water-borne illnesses, including schistosomiasis.42 Urogenital schistosomiasis is a common NTD in Sub-Saharan Africa and causes urinary and renal tract infections.43 Chronic infection can lead to an increased risk of infertility, pregnancy complications, and bladder cancer.44 Urogenital schistosomiasis is also associated with an increased risk of HIV. In rural areas of Zimbabwe, female genital schistosomiasis was associated with a statistically significant three-fold increased risk of vertical (mother-to-child) transmission of HIV/AIDS.45

Lymphatic filariasis lymphedema, which causes pain and swelling in the arms, legs, breasts, and genital area, occurs more often in women compared to men.46 Cultural restrictions on examining women can lead to these complications being underdiagnosed and untreated. A qualitative study in Sri Lanka demonstrated that lymphatic filariasis can also lead to significant social stigma,
Trachoma and onchocerciasis both affect vision and are the first and second most common causes of preventable blindness. Limited vision and blindness significantly impact a woman’s mental and physical wellness, ability to maintain employment, care for her family, and contribute to her community at large. Trachoma is associated with insufficient access to clean water, poor sanitation, and overcrowding. Children are also reservoirs of this infection. In Sub-Saharan Africa, women as compared to men are two to four times more likely to become infected with trachoma due to their close contact with young children. A longitudinal study in Sierra Leone showed that women in rural areas, who spend considerable time pregnant or lactating, were at additional risk of being continually excluded from treatment programmes. The true burden of disease from trachoma has been estimated in DALYs and falls between 2.2–3.6 million annual DALYs occurring in women.

Many other NTDs affect women and their ability to engage as key leaders. For instance, Chagas disease is associated with severe organ damage and congenital infections. Another significant NTD is cutaneous leishmaniasis, which causes disfiguring facial scars and is associated with depression, anxiety, and decreased quality of life. Incidences of NTDs often rise during conflicts, which compounds the cycle of disease and poverty. As civil war broke out in Syria, the incidence of cutaneous leishmaniasis rose to over 55,000 known cases in 2011 from an estimated 17,000 in 1995. Women are at increased risk of becoming internally displaced or refugees during conflicts; and populations which become displaced are often excluded from the host nation’s NTD control programmes. This facilitates pockets of disease propagation and reintroduction of previously eliminated infections.

**RECOMMENDATIONS**

The five most prevalent NTDs – lymphatic filariasis, trachoma, onchocerciasis, schistosomiasis, and soil-transmitted helminths – can all be controlled or eliminated through programmes of mass drug administration (MDA). Safe and cost-effective interventions are projected to drive significant economic and productivity gains. For every US dollar invested in MDA between 2011–2020 the net benefit is expected to be $27, rising to $42 from 2021–2030.

Furthermore, addressing NTDs is an integral part of meeting the goals set forth in SDG 3 and SDG 5. Women play a key role in surpassing socio-behavioural and structural barriers to medical treatment within communities, as evidenced by a study of community health workers in Uganda exploring the role of gender in treatment programmes for NTDs. This study demonstrated that when Community Directed Distribution (CDD) of treatment for NTDs was started, women became actively involved as community programme implementers.

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43 Ibid.
45 Ibid.
47 Ibid.
48 Hotez, “Empowering Women and Improving Female Reproductive Health”.
49 Ibid, 6.
50 Ibid.
56 Ibid.
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Leadership in CDD programmes can be a pathway to empowerment for women. However, caution should be taken against utilising them only as volunteers to take care of the distribution of NTD medications. Women should be paid for their work, or participation may reinforce traditional gender roles and add to the time poverty that can result from unpaid labour. Internationally, women spend two to ten times more time participating in unpaid work than men. Gender inequality in unpaid work, such as cooking, cleaning, and childcare, contributes to gender gaps in labour outcomes such as labour force participation, quality of jobs, and wages. Addressing unpaid care and domestic work, as well as promoting shared household responsibilities, is also targeted in SDG 5.4.

As progress is made toward eliminating NTDs, gender inequality, and other important SDG targets, determining how best to measure and evaluate this transformation is imperative. For instance, the 2019-2020 WPS Index comprehensively measures inclusion, justice, and security through eleven specific indicators. Designed under the framework of the 2030 Agenda for Sustainable Development, it is described as encompassing the fundamental dimensions of women’s wellbeing. However, this index does not include indicators for health beyond intimate partner violence. Similarly, the Global Indicators are twenty-six metrics organised by the four pillars of the WPS agenda also used to measure and compare change over time toward the WPS agenda. Yet, the Global Indicators only include two health indicators: specifically, maternal mortality rates and reports of SGBV. Maternal mortality is a significant issue, causing an estimated 303,000 lost lives in 2015. Women from low income countries accounted for 99 per cent of these deaths worldwide. Causes of mortality for women from middle- and high-income countries are not captured in this metric. The leading causes of death for women globally are ischemic heart disease, stroke and lower respiratory tract infections. The WPS Index and the Global Indicators provide invaluable information for evaluating change within a nation and comparing progress between countries. However, to measure women’s wellness comprehensively, physical and mental health should also be assessed and incorporated into monitoring indices. A multidimensional model that includes critical health data and leverages collective intelligence should be sought to achieve strategic objectives that further the WPS agenda.

THE WAY FORWARD

Expansion of women in security and peace operations begins with addressing the prime factors that impede meaningful participation. If women like Kagiso, living in northern Botswana, are to escape cycles of poverty and disease, they must have better access to preventive and curative medicine. NTDs have a significant negative impact on the lives of women and girls by impairing reproductive health, increasing the risk of acquiring sexually transmitted infections (STIs), and contributing to stigma, gender inequality, and disability. Women empowered with good health throughout their lives are positioned to enhance their own welfare and contribute to the betterment of society at large.
KEY POINTS

• NTDs disproportionately impact women and are a significant source of disability in many developing nations. Greater participation in the WPS agenda can be achieved by preventing NTDs and fostering greater inclusion of women with disabilities.

• Global health is evolving with new professionalisation and accountability. Data should be collected and utilised that is disaggregated by gender and includes multidimensional health metrics to best support the WPS agenda.

• Sustainable development founded on basic human rights can address inequalities in gender and health. The SDGs provide a common framework to overcome political, economic and cultural barriers, thereby supporting meaningful change.

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