

# A Neglected Tropical Disease and Gender Disparity During Wartime

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I can never forget the desperate look of the young lady with a prominent skin lesion on her face who came to see me in 2017 when I was working as a physician in northern Iraq. She was suffering from a disease prominent in the 1940-50s. Although it remained an endemic in certain parts of the country, the trend of the disease had generally been on the decline until 2014, except for a steep rise in cases around the time of the Gulf War in 1991 [1]. However, as the government in Syria began its collapse in the years following 2012, with it came a disruption in the preventative public health measures, causing outbreak of the disease in the region [1]. As Iraq's next-door neighbor, the sandflies that began to appear in Syria soon made their way into Iraq, which also fell into a civil war turmoil soon after, causing an epidemic of an almost forgotten disease, Leishmaniasis –a disease known locally as “Baghdad boil” and in Syria as “Aleppo boil.” The case of this patient has since confirmed my belief in the importance of preventive public health measures and caused me to advocate for their return.

Leishmaniasis is a parasitic disease that is classified as a Neglected Tropical Disease (NTD) [2]. It is caused by infection with the *Leishmania* parasites through the spread by the bite of infected female sand flies, and is endemic in the tropics, subtropics, and southern Europe [2]. There are three forms of the disease, namely cutaneous, visceral, and mucocutaneous. Leishmaniasis largely affects the Global South and Low-Income countries, with profound effects on the populations it im-

pacts [3]. Although relatively controlled with public health measures, including those initially put to control Malaria, there has been a re-emergence of this disease in war-stricken Syria and neighbouring countries [4]. Cutaneous leishmaniasis (CL) is the most prevalent form in Syria and Iraq [4]. Although CL mostly tends to have a benign course compared to the other forms of Leishmaniasis as it often recovers on its own, it leaves prominent skin scars mostly on the exposed parts of the body such as the face. This could lead to significant psychosocial burden, especially among young women in those regions where sexual and gender-based disparities exist.

In stable and high-resource settings where functional public health systems exist, a vector-borne disease like CL could be controlled by implementing strict surveillance of cases, active vector-control measures, social mobilization and strengthening partnership, and constant provision of diagnostic and treatment tools [3]. However, in unstable and low-resource settings, a reversed picture could be seen. For instance, the war in Syria caused a dramatic backward shift in the fight against this disease due to the government collapse in certain parts of the country, which resulted in the collapse of the public health system, destruction of hospitals, and shortage of healthcare professionals who fled armed conflicts [4]. While the incidence rate of CL was estimated to be around 23,000 cases in 2010 in Syria, i.e., one year before the war, a significant rise in cases was noted in early 2013 with around 41,000 cases reported, that is just two years

after the start of the war [4].

In 2014, a civil war broke out in the neighboring country to Syria, Iraq, where I was working as a physician. As the war progressed in 2015 through 2017, millions of Iraqis left their homes and the healthcare system almost completely collapsed in certain parts of the country, especially those neighboring Syria in the northwestern region. Along with many other factors such as poverty, malnutrition, poor housing, and sanitation conditions, proper management of the disease in the vulnerable population of the northwestern region was either absent or significantly delayed due to lack of both pharmaceutical and human resources, which caused a further burden on the affected individuals in those settings who already struggled with lacking other basic life necessities.

While the role of the government in the northwestern region, where I joined an international humanitarian organization, was almost completely absent as their focus shifted to the ongoing conflict, most of humanitarian NGOs working in those areas have also fallen short in their response to this outbreak. Due to CL's supposedly "benign" course and "neglected" classification, little to no response was provided and affected individuals were left to face the physical and psychosocial burden of this disease by themselves. I was running a mobile clinic in remote rural areas in the northwestern region where primary health care services were severely disrupted due to the ongoing conflict. Our mobile clinic would mainly provide non-communicable disease care, mental health, and management to some general medical conditions. The team had to travel long distances to reach their target destinations. We started to have patients with classical Leishmaniasis skin lesions coming into

our clinics, however, due to lack of appropriate diagnostic and treatment tools, there was nothing we could provide apart from empathy and referral to available governmental healthcare facilities where nothing more could be done.

One day, I was at the clinic when a young woman accompanied by her mother came in. As I asked how I could help them, the mother referred to her daughter's skin lesion on the face. I could instantly recognize the lesion as being most likely Leishmaniasis given history and presentation. I was then ready to re-iterate our standard response when we would see patients with suspected Leishmaniasis. However, the mother had uncovered another reality behind that skin lesion on her daughter's face –the reality of vulnerable young women who could significantly suffer socially and psychologically from the prominent skin lesion. In the context where cultural and tribal habits are still dominant, young women have little say on their personal life choices, such as marriage. They usually get married through family arranged marriages early in their lives. They do not usually complete education or gain proper working opportunities. Therefore, marriage is a fundamental change in their lives. "I'm afraid this lesion is affecting her chances of marriage", the mother stated. The daughter was looking with eyes of weakness and vulnerability. In that moment, I realized that Leishmaniasis is not only a physical disease, but it goes far beyond that in some people's lives.

Ending the neglect to attain the Sustainable Development Goals (SDGs) is a road map announced by WHO in 2021 to end the suffering of around 1 billion people from 20 NTDs, including Leishmaniasis [5]. This is a global strategy that aims to address NTD and

accelerate progress towards the achievement of the United Nations' SDGs by 2030. This strategy aims to provide a thorough approach to deal with NTDs by focusing on four key pillars: prevention, treatment, disability, and cross-cutting enablers [5]. Because NTDs disproportionately affect women and girls [6], the Ending neglect to attain the SDGs recognizes the importance of collecting and reporting NTD data disaggregated by gender, age, and other relevant factors, with a gender-sensitive and equitable approaches [5]. That said, the adoption of gender-sensitive approaches in a global effort, such as the Ending the neglect to attain the SDGs represents a growing recognition and understanding of the importance of gender-equity and equality in global health efforts, and the need to tackle the specific health needs and challenges faced by women and girls.

## References

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