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HEPATITIS C AMONGST THE ROHINGYA REFUGEES IN COX'S BAZAR

Magnitude, Challenges, and Recommendations

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Overview

Refugees, like most disadvantaged populations, are at a higher risk of Hepatitis C infection.

A Hepatitis C infection may be asymptomatic initially but if unchecked, can progress to liver cirrhosis and cancer, decades from the initial infection.

The Rohingya refugees in Cox's Bazar, have been reported to have a high endemicity of this disease, with pregnant and young women particularly at risk.

Recommendations to address this would include:

- *Generating accurate evidence on burden of disease and risk factors in this population*
- *Increasing uptake of reproductive health services*
- *Providing access to specialised care for those diagnosed with this disease*
- *Reinforcing existing behavioural change interventions*
- *Establishing partnerships to address logistics in implementation and ensure an even spread of specialized services across the affected region.*



Kutupalong Refugee Camp, Cox's Bazar (1).

Background

The Rohingya population, rendered stateless by their exclusion from Myanmar citizenship laws since 1982, have been referred to by the United Nations High Commissioner on Refugees (UNHCR) as the most persecuted minority in the world (2). The actions of the Government of Myanmar against the Rohingya population has been qualified as genocide and in the recent January 2020 ruling, the International Court of Justice has called upon the government of Myanmar to take concrete steps to address this issue (3). The forced migration of the Rohingya population dates back to 1942, when approximately 20,000 of them were displaced to then pre-partition India. Current estimates put the figure at about 910,600 people in Cox's Bazar, Bangladesh, which is now considered to be the largest concentration of refugees in the world (4).

In 2017, there was a sudden surge of Rohingya refugees in Cox's Bazar, following an escalation of military activities in Rakhine state in Myanmar, where these refugees are from. They presently outnumber the local population by threefold, putting a substantial strain on pre-existing suboptimal resources and services like WASH, education, security, environmental protection, food, and health care (4).

Health care services across the camps are mainly offered in health posts and primary health centres, and their coverage remains suboptimal due to unavailable supplies, overcrowded facilities, and long distances to medical facilities (2). The prevalence of sexually transmitted infections within this population is also of concern due to the fact that the population in Myanmar as a whole have the second highest rate of HIV/AIDS in South East Asia at 0.8% (5). This is further compounded by poor utilisation rates of sexual and reproductive health services as reported by the UNHCR (4). UNICEF has implemented Prevention of Mother-to-Child Transmission (PMTCT) at two of the district health centres and at nine health facilities within the camp (6). However, these facilities are inadequate and coupled with the 30% skilled birth attendance coverage, have

resulted in an increased risk of vertical HIV transmission within the camp. Cox's Bazar is also notorious for drug trafficking and intravenous drug abuse which further magnifies population risk for diseases like HIV, Hepatitis B, and Hepatitis C (7).

Analysis of Issues

Local Burden of Hepatitis C Infection

There have been recent reports of alarmingly high rates of Hepatitis C (HCV) among the Rohingya population in Cox's Bazar. Hepatitis C is a viral infection mainly transmitted through infected blood and blood products from either mother to child (vertical transmission), unsafe blood transfusions, intravenous drug use, or tattooing. Vertical transmission of Hepatitis C viruses usually account for less than 5% of all cases.

This risk increases considerably in the presence of HIV (8). In Cox's Bazar, an 8% prevalence of Hepatitis C virus has been reported among pregnant Rohingya women (9).

Hepatitis C Prevalence

Global prevalence of Hepatitis C virus is reported to be about 1.6% (8) and can range from 0.5 to 6.5% (9).

A pilot study in which 53 blood samples were collected from Rohingya refugees reported a prevalence of about 13.2% (8). This is ten times higher than that of the host population in Bangladesh and almost three times higher than the 4.1% reported in immigrant populations in general (9).

In Myanmar, a 2017 publication put prevalence rates at 2.7% (12). The figures were very much higher in intravenous drug users in Myanmar with a prevalence of about 70%. The prevalence in a population-based study done in Rakhine State (where the refugees in Cox's Bazaar originate from) in 2017 was 1% (12).

Failed repatriation negotiations to Myanmar and the environmental threats from the effects of climate change on this region, already prone to cyclones and monsoons, create uncertainties and barriers that undermine sustainable health interventions (9). These underlying factors necessitate an urgent review of Hepatitis C prevention, diagnosis, and treatment services available for this community.

The nature of Hepatitis C infection is insidious and may be asymptomatic in its initial course. If unchecked, Hepatitis C infection can progress to a chronic disease state with long term complications of liver cirrhosis and cancer, decades from the initial infection (10). For a disadvantaged population facing multiple hazards and uncertainties, this is an added threat to their resilience that must be addressed. The course of this disease is also a lesson to reflect on when planning interventions in humanitarian situations which often are prioritized to focus on the acute crisis and glaring needs while the silent, lurking threats become unintentionally ignored.

As of February 2018, it is reported that the Government of Bangladesh works with 130 NGOs (13 local, 45 national, and 69 international), the Red Cross/Red Crescent Movement, and 12 UN agencies to provide relief in the refugee camps. The United Kingdom Government, via the Department for International Development (DFID), has also played a pivotal role in the humanitarian response to the Rohingya crisis, working with multiple United Nation Agencies including UNICEF, UNHCR, UNFPA, WFP, and IOM, and alongside non-governmental organisations such as the Red Cross and Action Against Hunger, to ensure that the Rohingya community have access to food, clean water, and medication (11). They have helped to establish ten health centres in the Cox's Bazar area through which have supported 50,000 women by giving them safe midwifery care (11). They have also provided safe spaces and psychological aid to victims of sexual and gender-based violence, infrastructure to replace the current makeshift shelters, and are at the forefront of a cholera vaccination campaign (11).

Drivers of High Prevalence

A recent study reported that "the positivity of HBV among the apparently healthy population is almost the same as that of Bangladeshi people. However, the prevalence of HCV seems to be 10 folds higher compared to Bangladesh population" (12). Hepatitis B is vaccine preventable but there are no available vaccines for Hepatitis C. Other factors may also be responsible for this discordance. While sexual intercourse and mother to child transmission carry lower rates of transmission in Hepatitis C infection, they may become significant when considered in the light of the experiences of the Rohingya.

Refugees, prior to arriving at these camps, were already subject to poor health care services due to the fragmented health system in their home state. Women were exposed to physical and sexual violence while fleeing. In Cox's Bazar, gender-based violence is rampant within the squalor and insecurity of the camp environments, and victims of sexual abuse are at a higher risk of contracting Hepatitis C and other sexually transmitted infections.

Mother to child transmission of HCV infection has become a significant risk in the camps. Few health posts offer round-the-clock reproductive and other health services, and more than half the deliveries occur in homes attended by traditional midwives in unsanitary conditions. This risk is magnified as delivery rates are high and represents a missed opportunity for screening in health facilities.

Living conditions in the refugee camps, which are crowded with poor hygiene and sanitation practices further worsen transmission of infectious and contagious conditions (13). According to Medicines Sans Frontier research, one of the main morbidities in the Rohingya population in Bangladesh is skin diseases (14). Since they typically live in close quarters in the camps, if refugees with Hepatitis C have breaks in their skin due to skin diseases or other comorbidities there is yet another open transmission route for Hepatitis C infection.

Availability and Access to HCV Infection Care

There are limited specialised health services currently available for the Rohingya population. This is also the case for Hepatitis C as there are no systematic or coordinated screening, treatment, and surveillance services available for the Rohingya population across the 41 camps in Cox's Bazar.

While there is an active hepatology community in Bangladesh doing research and training, these benefits are not shared with the Rohingya refugee population (14). A targeted hepatitis screening programme was carried out by the National Liver Foundation of Bangladesh for pregnant Rohingya women, but no definitive therapy was planned for cases who screened positive for Hepatitis C, other than providing general health education and counselling.

Other challenges may include a lack of funding and infrastructure to support testing and treating of patients with Hepatitis C. Effective treatment for HCV infection exists with a 90% success rate in the form of the newer Direct Acting Antivirals (DAA). Bangladesh has special access to a World Trade Organisation (WTO) waiver that exempts its industry from the Agreement on Trade-Related Aspects of International Property Rights (TRIPS) (12). WHO treatment guidelines advocate a "treat all" policy for everyone already diagnosed with HCV (over the age of 12 years excluding pregnant women) with therapy ranging from 12 to 24 weeks (16). A full course of treatment for three months would cost USD 84,000 in the United States and only USD 600 in Bangladesh where these generic medications for Hepatitis C are approved and currently available (17).

WHO, in 2017, also published recommendations on which populations to test and the different approaches to testing. They have suggested utilising existing facility-based (such as antenatal clinics, HIV or TB services) or community-based testing opportunities and programmes. HCV testing is recommended in pregnant women even though there are no treatment options as it will allow the avoidance of procedures that cause mixing of maternal-foetal bloods like amniocentesis and the use of scalp electrodes which will in turn reduce transmission. It will also facilitate testing for the baby later on with the option of early treatment once available (16).

Testing and treatment protocols require diagnostic and treatment infrastructures that are not available in the camp clinics. Specialized services are provided only by a few secondary hospitals in the region and accessing these facilities by the refugee populations may be difficult, since they are often restricted financially and legislatively. The long latency before a symptomatic infection will mean that even when detected, Hepatitis C infection may be given a low priority for treatment. With only 4.1% of the national budget going to health, the Government of Bangladesh cannot be expected to attend to the health needs of over one million refugees on their shores without further support.

Recommendations

The International Court at Hague is presently seeking a lasting solution to the Rohingya resettlement crisis. The Government of Bangladesh has been largely collaborating with international agencies to provide

health and support services. However, gaps still exist with respect to providing definitive, specialized, and coordinated health care services to the Rohingya people.

We propose the following courses of action:

1. Generate further evidence on the burden, relevant risk factors, and barriers to health care for Hepatitis C among the Rohingya population.

Most of this analysis is speculative and generalized from few independent observations. There is, therefore, a need to research the magnitude of this problem on a larger scale to take more sustainable and effective approaches and decisions. Part of the evidence should include ways to establish a harmonized sero-surveillance network across the camps hosting the Rohingya.

2. Address barriers to uptake of reproductive health services.

Pregnant women should deliver in safe and sanitary conditions to reduce the risk of Hepatitis C transmission from mother to child. Linkages to care should be established and followed up in cases of Hepatitis C infection to ensure appropriate care for the mothers and their newborns. Safe delivery services including efficient referral services to specialised facilities should always be accessible and available for pregnant women. Barriers preventing access to these services should be effectively addressed.

3. Provide and strengthen access to specialized care.

Mass HCV screenings should be made available to identify cases and institute appropriate therapy. Testing kits can be made affordable by mass purchasing and by collaborating with institutes like the Foundation for Innovative New Diagnostics (FIND). Social, financial, and legislative restrictions that hinder specialized care should be addressed to facilitate treatment of already infected people and mitigate further transmission among the refugee and local populations.

4. Reinforce existing behavioural change interventions.

Actions should be taken to promote positive care seeking behaviour, build community resilience against gender-based violence, and curb harmful practices like home delivery, intravenous drug use, and unsafe needle practices and disposal.

5. Establish partnerships with the Government of Bangladesh and international organizations to

address logistics in implementation and ensure an even spread of specialized services across the affected region. It is vital to avoid hostilities or fear among the host community that may lead to prejudice or discrimination against Rohingya refugees. The cooperation of relevant local stakeholders must be sought to create inclusiveness and mitigate resentment. Any specialized treatment made available to the refugees should also include the host community.



Increasing uptake of sexual and reproductive health services (18).

Conclusion

A high prevalence of Hepatitis C among the Rohingya refugees is an unfair threat to a population that has been serially persecuted. Diseases like Hepatitis C, which pose an insidious threat that looms in refugee camps, can have long term repercussions that have to be addressed alongside more acute problems.

Since the onset of the Rohingya crisis in 2017, the UK Government, acting through its agency DFID, has been at the forefront of international support for the Rohingya population, providing financial and technical assistance, ensuring improved and safe living environments, and providing access to essential health care services for the refugees. Yet, as succinctly noted by DFID, “there is a need for long-term planning to secure a safer and sustainable living environment for the Rohingya refugees” (11). We recommend that part of this process include addressing indolent threats such as an epidemic of Hepatitis C infection.

A definitive solution for the dilemma of the Rohingya crises in Cox's Bazar remains elusive. The existing collaboration between the UK Government and the Government of Bangladesh, and the UK's international influence can be leveraged on to ensure that international assistance to Rohingya is robust and responsive to their immediate and anticipated needs.

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