Prevalence of active Hepatitis C Virus (HCV) infection and associated factors among Forcibly Displaced Myanmar Nationals residing in camps, Cox’s Bazar, Bangladesh

Khondaker Ahsanul Ashakin1,2, Md Hadiuzzaman, Wasim Firuz3, Anisur Rahman1, Jihane Ben-Farhat4, Pradip Sen Gupta5, Abu Toha Rezuanul Haque Bhuiyan6, Marve Duke7, Suna Balkan8, Farah Hossain5, Birgit Schramm9

1 Medicine Sans Frontières (Paris) * Training on Field Epidemiology in Humanitarian Contexts (FETCH) * Epicentre (Paris) * Bangladesh University of Health Sciences (BUHS) * Office of The Refugee Relief and Repatriation Commission, Cox’s Bazar, Bangladesh

NOTE: This is a work of the FETCH fellow that was completed on December 2023, when only study preliminary results were available. Final results are presented at the Epicentre Scientific day in 2024 as oral presentation. (Results may slightly differ)

BACKGROUND

- HCV is a bloodborne virus that commonly spreads through unsafe injection practices and medical procedures. Most infections are asymptomatic initially but can develop into chronic liver infection or cancer without treatment.
- WHO aims to eliminate HCV as a public health threat by 2030 but access to diagnosis and treatment is limited globally, especially in low-income countries where most infections occur.
- Studies in Rohingya refugee camps show considering levels of HCV infection, with 8-11% seroprevalence found among various groups. However, representative data is lacking on active infections and risks.
- MSF currently provides the only HCV services in Cox Bazar camps housing nearly 1 million people.

OBJECTIVES

Primary objective
To estimate the prevalence of active HCV infection (seropositive and viremic) in the general adult FDMN population residing within camps.

Secondary objectives
1. To estimate the proportion of undiagnosed active HCV infections (individuals not aware of their HCV infection).
2. To estimate the prevalence of past/cleared HCV infection (individuals HCV seropositive but non-viremic).
3. To describe the sociodemographic characteristics of participants with past/cleared HCV infection and current active HCV infection.
4. To assess factors associated with HCV exposure in the FDMN population.

METHODS

- Survey design: Cross-sectional, point prevalence survey
- Population: Adult (≥ 18 years) FDMN (Forcibly Displaced Myanmar National) population.
- Sites: OCP-supported camps (8W, 12, 13, 16, 17, 18, 19) in Cox’s Bazar District, Bangladesh.
- Sampling: Simple probability sampling, using geospatial sampling methods.
- Sample size: 680 Households (HH), one adult participant randomly selected per HH from geo-point.
- Sampling: Simple probability sampling, using geospatial sampling methods.
- Sample size: 680 Households (HH), one adult participant randomly selected per HH from geo-point.

RESULTS

Participants | HCV seroprevalence | Active HCV infection |
-------------|---------------------|----------------------|
| (95% CI)    | (95% CI)            |

N = 641

29.7% (26.9 – 33.8) | 19.6% (16.4 – 23.2)

Survey sample distribution by camp compared with the camp population distribution by UNHCR

<table>
<thead>
<tr>
<th>Camp</th>
<th>Survey sample</th>
<th>Adult camp population (UNHCR Sept 2023)</th>
<th>N included</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>8W</td>
<td>101</td>
<td>15.8</td>
<td>15808</td>
<td>16.1</td>
</tr>
<tr>
<td>12</td>
<td>90</td>
<td>14.0</td>
<td>13930</td>
<td>14.2</td>
</tr>
<tr>
<td>13</td>
<td>124</td>
<td>20.9</td>
<td>21700</td>
<td>22.1</td>
</tr>
<tr>
<td>16</td>
<td>72</td>
<td>11.2</td>
<td>10716</td>
<td>10.9</td>
</tr>
<tr>
<td>17</td>
<td>60</td>
<td>9.4</td>
<td>8928</td>
<td>9.1</td>
</tr>
<tr>
<td>18</td>
<td>100</td>
<td>15.6</td>
<td>14210</td>
<td>14.5</td>
</tr>
<tr>
<td>19</td>
<td>84</td>
<td>13.1</td>
<td>12941</td>
<td>13.2</td>
</tr>
<tr>
<td>Total</td>
<td>641</td>
<td>100</td>
<td>98234</td>
<td>100</td>
</tr>
</tbody>
</table>

CONCLUSIONS

This survey revealed a high burden of active HCV infection among the general adult FDMN population in the camps, along with a low coverage of HCV diagnosis and care -> HCV activities need to be scaled-up urgently.

The findings of this survey will directly inform tailored interventions for prevention, diagnosis, and treatment in the FDMN community, urge other actors present in the camps to take up HCV care, and advocate for integration of HCV prevention, diagnosis, and care into the general health care package for the entire Cox’s Bazar camp community, as well as in any IDP or Refugee camp where the population is at risk.