





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 Ashakin^{1,2}, Md Hadiuzzaman¹, Wasim Firuz¹, Anisur Rahman¹, Jihane Ben-Farhat³, Pradip Sen Gupta⁴, Abu Toha Rezuanul Haque Bhuiyan⁵, Marve Duke¹, Suna Balkan¹, Farah Hossain¹, Birgit Schramm³

¹ Médecins Sans Frontières (Paris) ² Training on Field Epidemiology in Humanitarian Contexts (FETCH) ³ Epicentre (Paris) ⁴ Bangladesh University of Health Sciences (BUHS) ⁵ 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 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 concerning 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 (\geq 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.
- Survey measures:
- Rapid HCV antibody test (SD Bioline)
- Xpert[®] HCV Viral Load test (Cepheid) if seropositive
- Participant questionnaire (characteristics, risk factors)
- Ethics:
 - Protocol approved by MSF ERB and Bangladesh University of Health Sciences (BUHS)
- Verbal consent head of household, written informed consent study participant



• Sample size: 680 Households (HH), one adult participant randomly selected per HH from geo-point

26,619 Bhasan Chai 41,397 Camp 26 16,475 Camp 27

RESULTS

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

Camp	Survey sample		Adult camp population (UNHCR Sept 2023)	
	N included	% of total	Ν	% of total
8W	101	15.8	15808	16.1
12	90	14.0	13931	14.2
13	134	20.9	21700	22.1
16	72	11.2	10716	10.9



Among HCV seropositive:

- 66.6% (58.9-73.6) with active infection, 33.4% (26.4-41.2) non-viremic
 - 35% (0.3-43.5) reported previous HCV diagnosis (3.1% (1.7-5.6) among seronegative)
 - 9.8% (6.2-15.5) reported previous HCV treatment (3.2% (1.8-5.9) among seronegative)
 - Extrapolation of survey estimates to total adult camp population: approx. 85,000 adults undiagnosed with active HCV infection (estimate based on UNHCR adult population data, Sept 2023)
- Limited HCV awareness:
 - 51.0% of participants reported to have heard of HCV
 - 61.6% (53.8 68.8) among seropositive • 60.4% (50.8 – 69.4) of those with active infection



- 12% of 114 who said they have seen shaved at the barber using unclean razor (few are RDT-pos).
- 5 participants used injections for non-medical purposes (the camp, and Myanmar), 2/5 RDT-pos.

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.