PREDICTORS OF SUSTAINED VIROLOGICAL RESPONSE IN HEPATITIS C TREATMENT AMONG PEOPLE WHO USE OR INJECT DRUGS IN NORTHERN MYANMAR: ANALYSIS OF ROUTINE PROGRAM DATA

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Background:
Hepatitis C Virus (HCV) infection remains a significant public health concern in Myanmar, particularly among people who use or inject drugs (PWID/PWUD). This study analyzes routine data from HCV treatment programs to identify predictors of achieving sustained virological response at 12 weeks post-treatment (SVR12) in this population.

Methods:
Data from the HCV treatment programs of AHRN and Best Shelter (2020–2024) were extracted and analyzed. Predictor variables included sociodemographic characteristics, Hepatitis B and HIV status, cirrhosis status, and drug use status at enrollment. SVR12 was the primary outcome. Logistic regression was performed to assess associations between predictor variables and treatment outcome, reporting adjusted odds ratios (AORs) with 95% confidence intervals (CIs) and p-values.

Results:
Among 1,455 clients, 105 (7%) received the preferred regimen (Sofosbuvir + Velpatasvir), while 1,350 (93%) received the alternative regimen (Sofosbuvir + Daclatasvir). After adjusting for covariates, clients receiving the alternative regimen were nearly twice as likely to achieve SVR12 (AOR = 1.91, 95%CI = 1.02–3.53) compared to those on the preferred regimen. Compared to clients engaged in injecting drug use, the likelihood of achieving SVR12 was higher among clients on methadone maintenance therapy (AOR = 2.73, 95%CI = 1.86–4.05), Ex-users (AOR = 2.66, 95%CI = 1.07–8.12), clients engaged in non-injecting drug use (AOR = 4.98, 95%CI = 1.38–32.06). Additionally, clients aged 45–54 years were nearly three times more likely to achieve SVR12 (AOR = 2.92, 95%CI = 1.16–7.26) compared to those aged 24 years and below.

Forest Plot of Logistic Regression
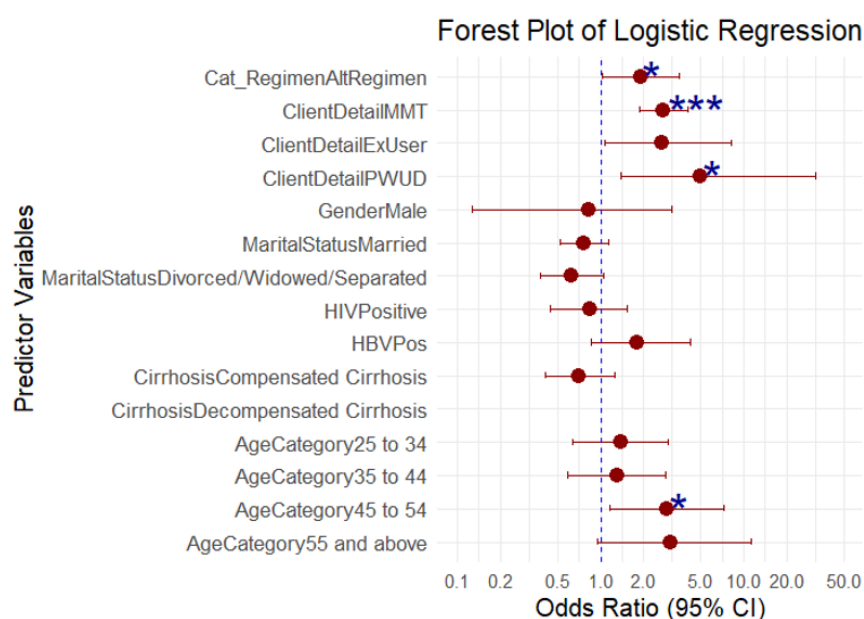
***p.value < 0.001, **p.value < 0.01, *p.value < 0.049

Conclusion:
These findings identify key predictors of achieving SVR12 among PWID/PWUD in Myanmar. This study highlights the need to refine treatment strategies to improve outcomes, particularly for people

who inject drugs, by enhancing adherence to antiviral therapy, strengthening linkage with drug treatment, reducing reinfection risk, and improving overall HCV care in this subgroup.