THE ROLE OF ADHERENCE SUPPORT IN ACHIEVING HCV CURE AMONG PEOPLE WHO INJECT DRUGS ACCESSING HARM REDUCTIONS SETTINGS IN KENYA

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Background: Data are limited on factors associated with sustained virologic response (SVR) among people who inject drugs (PWID) in lower-middle-income countries (LMICs). The objective of this study was to evaluate factors associated with SVR in a cohort of PWID treated with direct-acting antivirals in Kenya.

Methods: We recruited PWID accessing medication-assisted treatment (MAT) and needle and syringe programs (NSP) in Nairobi and Coastal Kenya. All participants were treated with ledipasvir/sofosbuvir under directly observed therapy (DOT). For those on MAT, DAAs were dispensed with daily methadone. For those treated in NSPs, peer case mangers (PCMs) supported onsite DOT and field-based outreach if clients did not attend. We defined treatment completion as taking all 84 doses regardless of the number of days. We used bivariate and multivariate logistic regression to examine the impact of sociodemographic, behavioral, and clinical factors on SVR.

Results: Among 95 PWID evaluated for treatment, 87 (91.6%) reported injecting drugs in the last 30 days, 81 (85.3%) were male, 69 (72.6%) were on MAT, 38 (40%) were HIV-positive, 12 (12.6%) were cirrhotic, and the mean age was 36.5 years (SD=±6.5). Among 92 who initiated treatment. Overall, 85 (92.4%) completed treatment and 79 (85.9%) achieved SVR (intent-to-treat). The average number of doses taken was 80.0 (SD=±15.3) and maximum days taken for treatment completion was 125. SVR was associated with neither sociodemographic nor behavioral factors (including recent injection drug use); however, it was associated with number of doses taken (p=0.01) and treatment completion (p= 0.001).

Conclusions: Adherence was the most important driver of SVR suggesting DOT in MAT and PCM-supported DOT in NSP settings can overcome other factors that might limit adherence. Further research is necessary to evaluate other HCV treatment settings and models of HCV treatment given NSP and MAT access is variable in LMICs, and DOT may not be sustainable with limited resources.

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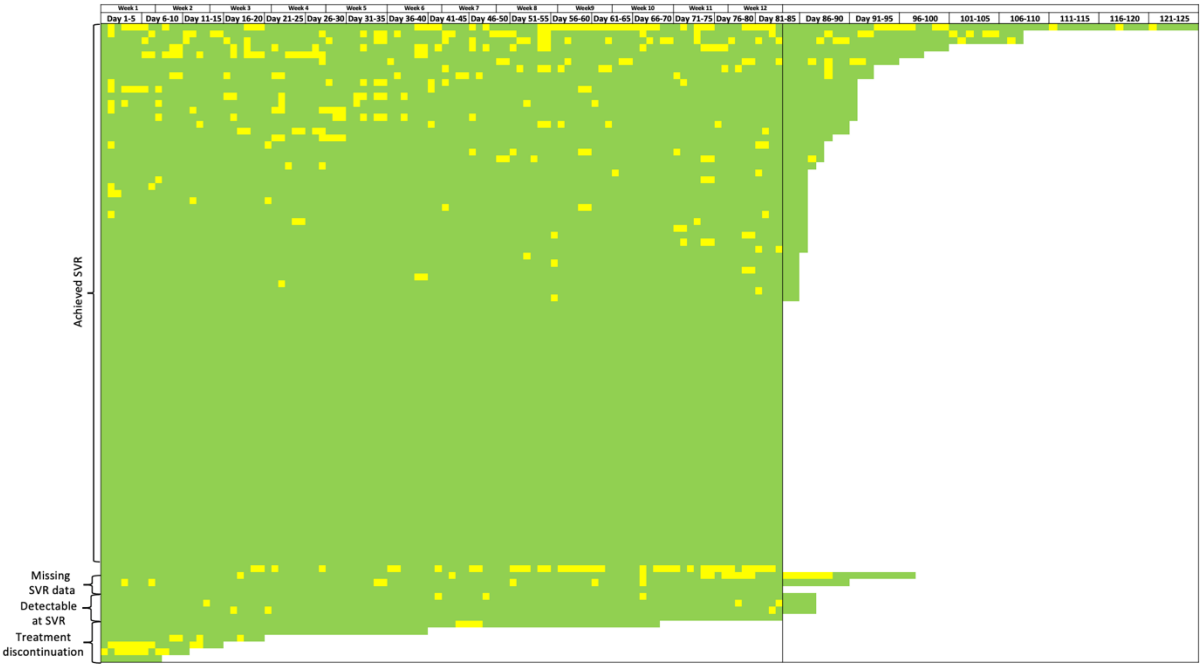
Figure. Adherence patterns among participants initiated on DAA therapy (n=92)



Each line represents a single participant; green shading represents doses taken; yellow shading represents doses not taken.