THREE-ARMED, CLUSTER INTERVENTION STUDY OF HEPATITIS C VIREMIA TESTING FOR PEOPLE WHO INJECT DRUGS IN GEORGIA

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Background:
With a hepatitis C virus (HCV) prevalence of 7.7% in 2015, Georgia embarked on an elimination programme; however significant gaps remain in HCV care. Although screening programs have largely been decentralized for high risk groups, viremia testing remains a limiting factor for persons who inject drugs (PWID). We describe two models of viremia testing that aim to address these challenges.

Description of model of care/intervention:
In a cluster, non-randomized intervention study, 8 harm reduction sites (HRS) were assigned to one of three arms. Arm1: GeneXpert on-site, Arm 2: blood draw on site for centralized HCV core antigen testing, Arm 3: standard of care with HCV antibody-positive patients referred to treatment centers for HCV RNA testing. The proportion of participants completed each step in the cascade were compared.

Effectiveness:
Between May 2018 and September 2019, 1671 HCV-seropositive participants were enrolled (Arm 1; n=620 Arm 2; n=486 Arm 3; n=565). Participants were predominantly male (95.4%), with a median age of 43 years (interquartile range: 37,50), and 77.2% were currently injecting drugs. Greater proportions of participants received viremia testing in both Arm 1 (100.0%) and Arm 2 (99.8%) compared to Arm 3 (91.3%) (1 versus 3 P<0.001, 2 versus 3 P<0.001). Among those confirmed positive, treatment was initiated less frequently in Arm 1 (84.0%) and Arm 2 (79.5%; P=0.08) compared to Arm 3 (88.4%), 1 versus 3 P=0.06, 2 versus 3 P=0.001). Overall retention of patients in the entire cascade was not significantly different across study arms.

Conclusion and next steps:
Testing and/or blood draw on site improved retention of patients for viremia testing, though referral of viremic patients to another site for treatment led to comparable overall loss in the cascade. These findings underscore the benefits of fully decentralized HCV care at a single site for PWID in Georgia and globally.