

HCV PREVALENCE AMONG PEOPLE WHO INJECT DRUGS IN GEORGIA (DATA FROM INTEGRATED BIO-BEHAVIORAL SURVEY, 2022)

Lasha Gulbiani¹, Maia Kajaia¹, Marika Kochlamazashvili¹, Tinatin Kamkamidze¹, Ketevan Stvilia², Ekaterine Ruadze², Maia Butashvili¹

¹Department of Epidemiology, Health Research Union, Tbilisi, Georgia

²Global Fund Programs Implementation Unit, National Center for Disease Control and Public Health, Tbilisi, Georgia

Background

Georgia has the high number of injecting drug users. Prevalence of hepatitis C virus antibody (anti-HCV) among people who inject drugs (PWID) is high in the country. Since 2015 Hepatitis C Elimination Program has been carried out in the country, which in addition to HCV infection diagnosis and antiviral treatment also includes specific preventive activities for the key population of HCV elimination like PWID.

Purpose

This study aimed to evaluate the prevalence of HCV infection and associated risk factors among PWID participating in Integrated Bio-Behavioral Surveillance Survey (IBSS) conducted in 2022.

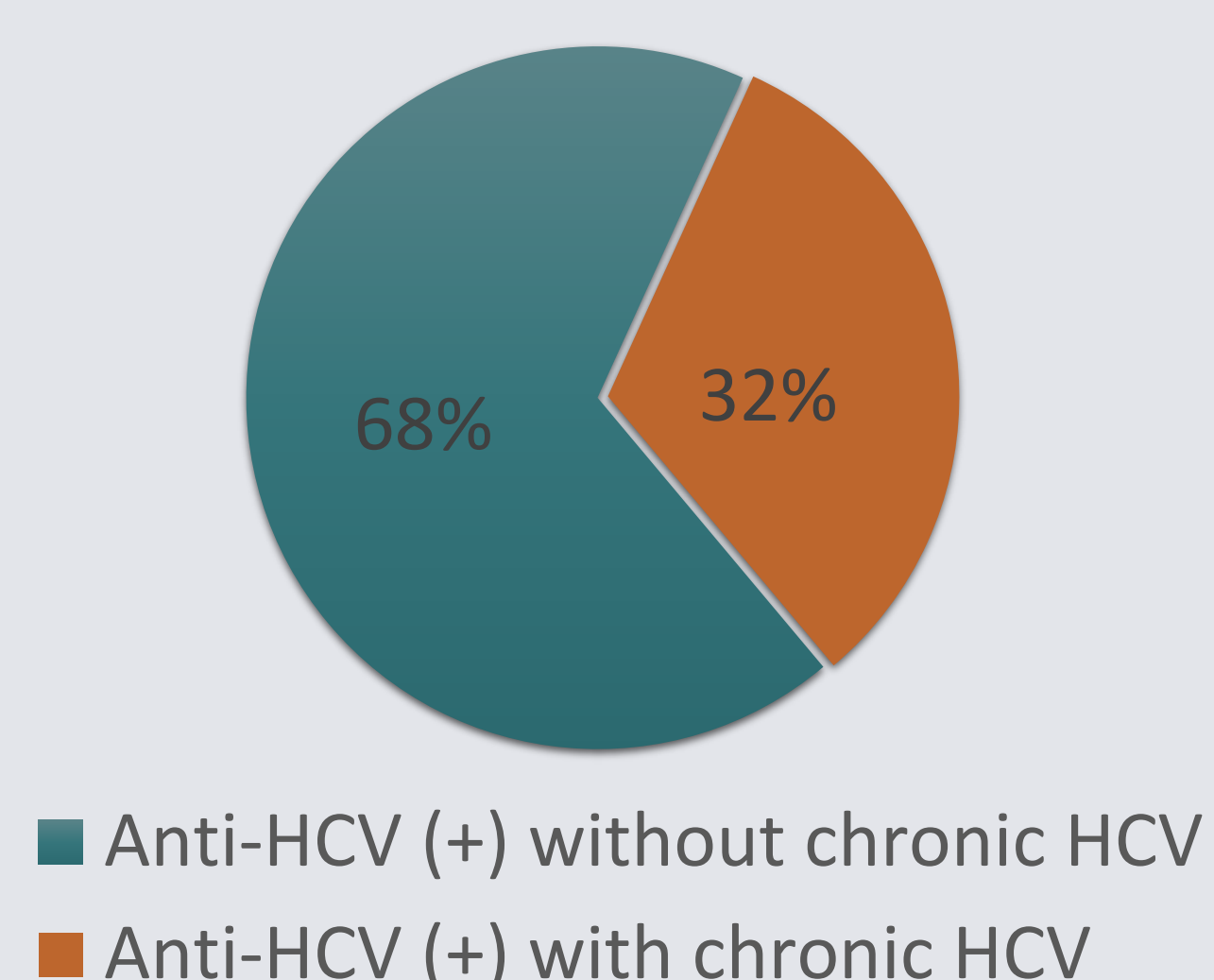
Methods

The inclusion criteria were being ≥ 18 years and injecting illicit drugs during the last month. Respondent-driven sampling (RDS) was used to conduct a cross-sectional IBBS among PWID in seven cities of Georgia. Blood samples were collected to assess anti-HCV and HCV RNA prevalence. Socio-demographic data, history of drug use, drug use related risky behaviors, sexual practice, knowledge, attitude and practice regarding HCV, participating in preventive programs and social impact were studied using survey tool. Chi-square test was performed to find associations between HCV seroprevalence and associated risk factors. Binary logistic regression was performed to understand the independent predictors of HCV seropositivity.

Results

A total of 2005 PWID were surveyed and blood samples were collected. Majority of participants were male (98.6%) and >35 years old (78.3%). 58.7% were unemployed and 49.1% were married. More than half of respondents (58.1%, $n=1164$) were HCV seropositive. Chronic HCV was documented among 32.1% of anti-HCV positive PWID. Anti-HCV (+) was higher among male (58.4% vs 35.7%; $p<0.05$) and older (68.4% vs 20.7%; $p<0.001$) PWID. Daily injection of opioids during the last 12 months was associated with anti-HCV prevalence (OR=1.72; 95% CI: 1.43-2.07). HCV seropositivity was 1.4 times higher among PWID having experience of using needles/syringes pre-used by others (75.9% vs 52.3%; OR=2.87; 95% CI: 2.28-3.61).

Figure 1. Proportion of HCV RNA (+) among anti-HCV positive PWID



HCV antibodies were found among 85.3% ($n=198$) of PWID who had injected drugs in prison versus 66.2% ($n=229$) of those who didn't (OR=2.97; 95% CI: 1.94-4.55). By multivariate analysis age (>35), daily injection of drugs during the last 12 months, using pre-used syringes and injecting drugs in prison were independent predictors of anti-HCV positivity.

Table 1. Anti-HCV prevalence by different characteristics among PWID

| Characteristic | Anti-HCV positive (%) | OR; 95% CI | P-value |
|--|-----------------------|-----------------|----------|
| Daily injection of opioids during the last 12 months | | | |
| Yes | 65.5 | 1.72; 1.43-2.07 | <0.001 |
| No | 52.4 | | |
| Having experience of using needles/syringes pre-used by others | | | |
| Yes | 75.9 | 2.87; 2.28-3.61 | <0.001 |
| No | 52.3 | | |

Conclusions

HCV seroprevalence among PWID in Georgia is high. Despite the fact that Georgia is implementing HCV elimination program since 2015 one third of PWID are still HCV RNA positive. Using pre-used syringes and injecting drug use in prisons are the major risk factors of HCV infection.

Acknowledgements

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