

HCV GENOTYPES AMONG INJECTING DRUG USERS ENROLLED IN HARM REDUCTION PROGRAMS IN TUNISIA

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Background :

Limited research has investigated the distribution of Hepatitis C Virus (HCV) genotypes among people who inject drugs (PWID) in North Africa region. This study aims to characterize the distribution of HCV genotypes among PWID in Tunisia.

Methods:

The 128 HCV-positive PWID were recruited within a harm reduction program managed by a local community-based organization (ATIOST) in Tunisia during the period 2018-2019. Socio-demographic characteristics and risk behaviors were collected using an interviewer-based questionnaire. Serological and molecular testing for HCV were conducted at the Laboratory of Clinical Virology of the Institut Pasteur de Tunis.

Results:

The majority of included PWID were men (96.1%), previously incarcerated (93.0%), unemployed (65.6%), had a low education level (56.3%), and had migrated once to a foreign country (50.8%). In the last 12 months, 82.0% reported having reused syringes, 43.8% shared syringes, while 56.2% had at least one unprotected sexual relation, and 28.1% had more than two different sexual partners. About 10.2% had HIV/HCV co-infection, whereas 3.9% were positive for HBsAg, and 83.6% were positive for anti-HBc. Out of 102 blood samples with detectable viral HCV RNA, the predominant genotype was G1 (52%) followed by G3 (34%) and G4 (10%). Four participants (4%) had an intergenotype mixed infection with G1 and G3. The HCV subtype distribution was as follows: subtypes 1a in 50 (53.2%), 1b in 6 (6.4%), 3a in 31 (33.0%), 4a in 3 (3.2%), and 4d in 4 (4.3%).

Conclusion:

The predominance of G1a and G3a among PWID highlights significant disparities in the distribution of HCV genotypes with the general population in Tunisia. Given the important socio-economic vulnerabilities and the high uptake of risky behaviors, national strategies aiming to eliminate HCV should be tailored to PWID groups to ensure more effective and equitable access to HCV prevention and treatment services.

Disclosure of Interest Statement:

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