

INJECTING RISK BEHAVIORS AND HCV GENOTYPES DISTRIBUTION AMONG PEOPLE WHO INJECT DRUGS ATTENDING A SYRINGE SERVICE PROGRAM IN TUNIS, TUNISIA

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BACKGROUND:

People who inject drugs (PWID) frequently engage in high risk behaviors exposing them to hepatitis C virus (HCV) infection. Research on HCV genotypes distribution among PWID is rare in the Middle East and North Africa region. This study investigates injecting risk behaviors and HCV genotypes distribution among PWID in Tunisia.

METHODS:

A cross-sectional sample of 159 active PWID attending a syringe service program (SSP) in Tunis was selected from September 2017 through May 2018. All consenting participants completed a questionnaire-based interview followed with rapid anti-HCV test. HCV-RNA testing was performed for 62 PWID and HCV genotype was determined for 38 PWID.

RESULTS:

Table 1: Socio-Demographic characteristics of PWID attending an SSP in Tunisia

	N	%	
Gender	Male	155	97.5
	Female	4	2.5
Age	≤ 35 years	48	30.2
	> 35 years	111	69.8
Education	Primary school	99	62.3
	Secondary school	57	35.8
	Higher education	3	1.9
Unemployed	108	67.9	
History of imprisonment	148	93.1	
History of non-sterile tattooing	99	62.3	
Injection drug use > 5 years	132	83.0	
Total	159	100	

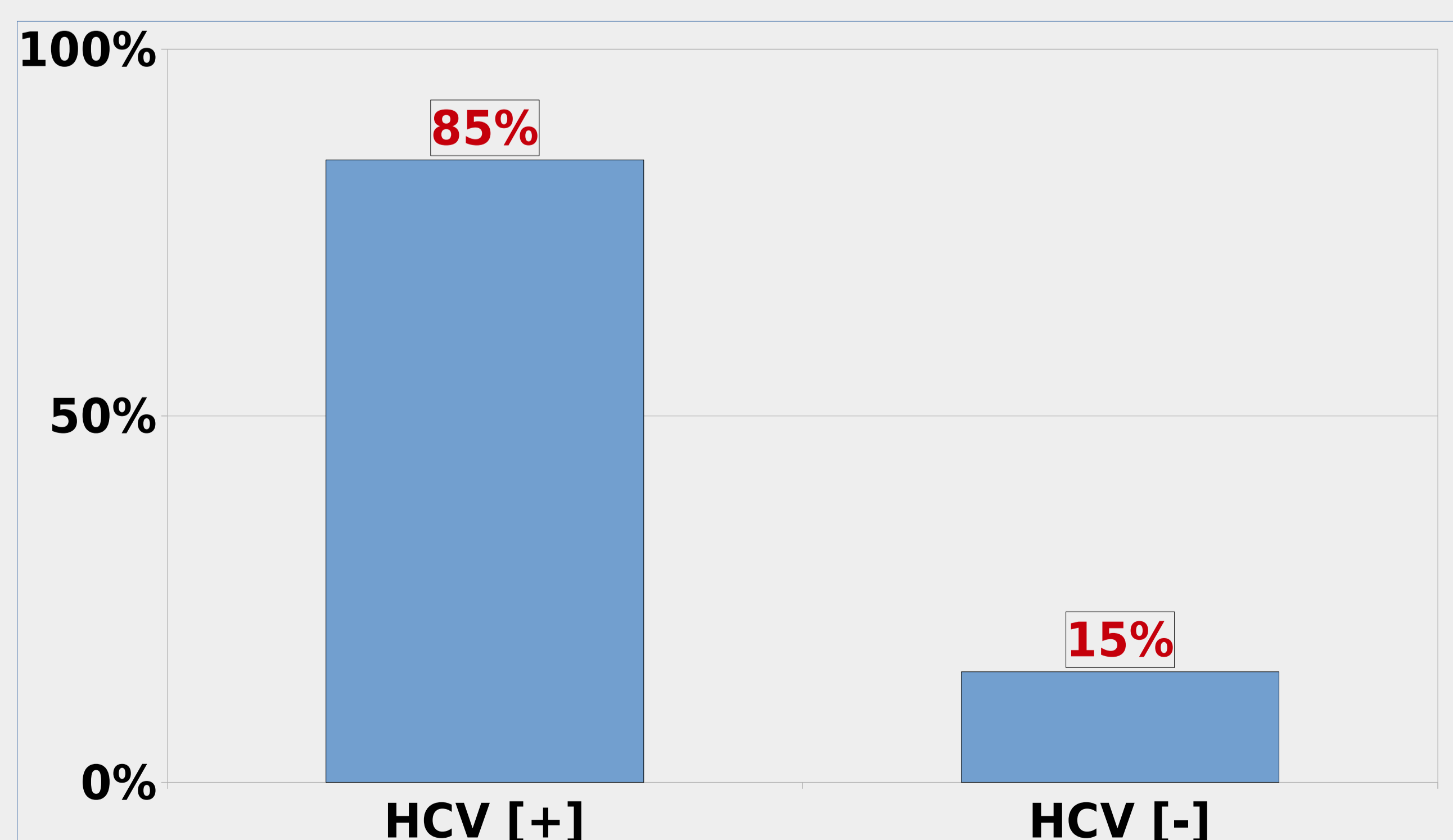


Figure 1: HCV infection status of PWID attending an SSP in Tunisia

Table 2: Injecting risk behaviors during the last 12 months among HCV-infected and HCV-uninfected PWID attending an SSP in Tunisia

	HCV [+] n (%)	HCV [-] n (%)	p
Injection drug use > 5 years	119 (88.1)	13 (54.2)	<0.001
Receptive syringe sharing	65 (48.1)	5 (20.8)	0.006
Syringe re-using	103 (76.9)	12 (50.0)	0.006
Total	135 (100)	24 (100)	-

Table 3: HCV-RNA PCR testing results among PWID attending an SSP in Tunisia

	N	%
Detectable HCV-RNA level	52	83.9
Undetectable HCV-RNA level	10	16.1
Total	62	100

Table 3: HCV Genotypes distribution among PWID attending an SSP in Tunisia

	N	%
Genotype 1a	16	42
Genotype 1b	1	3
Genotype 2	0	0
Genotype 3	15	39
Genotype 4	6	16
Genotype 5	0	0
Genotype 6	0	0
Total	38	100

CONCLUSIONS:

Injecting risk behaviors are very frequent among HCV-infected PWID attending SSP in Tunisia. The distribution of HCV genotypes in this high risk group was distinct from the Tunisian general population. These results highlight the need for improved HCV prevention strategies and increased access to HCV treatment for PWID in Tunisia.