PREVALENCE ESTIMATION OF HCV AMONG PEOPLE WHO INJECT DRUGS IN BELGIUM THROUGH RESPONDENT DRIVEN SAMPLING, CAPTURE-RECAPTURE AND MULTIPLIER METHOD

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Background: In Belgium, people who inject drugs (PWID) are at a high-risk of being infected by hepatitis C (HCV). Estimates about the number of people living with HCV in Belgium are rare and even less is known about the prevalence of HCV among PWID.

Methods: Between February and April 2019, PWID were recruited in Brussels through respondent driven sampling (RDS). They were considered PWID when they had injected in the last 12 months. Every respondent was invited to a questionnaire and underwent a rapid HCV-test. For the same time period we also obtained pseudo-anonymized identifier information from treatment and harm reduction service providers. We estimated the total number of PWID in Brussels using capture-recapture (CRC). To obtain national HCV estimates, we scaled the proportion of PWID in Brussels to the total number of this population in Belgium in two existing drug treatment registers, which were then multiplied with the result of the CRC.

Results: Approximately 43.4% (95%CI 28.9% – 58.0%) of the PWID tested positive for HCV antibodies in Brussels. This corresponds to 304 (95%CI 160 – 547) PWID in Brussels and respectively between 2,863 (95%CI 1,504 – 5,146) and 3,012 (95%CI 1,582 – 5,415) PWID in Belgium, depending on the drug treatment register. 37.5% of PWID in Brussels said they had never been tested on HCV before.

Conclusions: The results clearly indicate the need to maximize the efforts to achieve the targets set by WHO for 2030 of a 90% reduction of new HCV infections and a 65% reduction of liver-related mortality. Furthermore RDS can be considered a promising way to reach PWID who have not been tested for HCV yet. PWID not in contact with treatment settings or other existing structures are the real target for HCV screening.

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