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Editorial

Bridging the Gap in Elimination of Hepatitis C Virus among People Who Use Drugs in South Korea

Beom Kyung Kim[1,2,3]

[1]Department of Internal Medicine, Yonsei University College of Medicine, Seoul, Korea; [2]Institute of Gastroenterology, Yonsei University College of Medicine, Seoul, Korea; [3]Yonsei Liver Center, Severance Hospital, Seoul, Korea

Corresponding Author
Beom Kyung Kim
ORCID https://orcid.org/0000-0002-5363-2496
E-mail beomkkim@yuhs.ac

See "Prevalence, Clinical Characteristics, and Treatment Status of Hepatitis C Virus Infection among People Who Use Drugs in South Korea: A Prospective Multicenter Study" by Gwang Hyeon Choi, et al. on page 725, Vol. 19, No. 5, 2025

Chronic hepatitis C virus (HCV) remains a substantial contributor to liver-related disease and deaths, with 58 to 71 million people infected worldwide, among which approximately 1.2 million people who inject drugs (PWID) are included.[1-3] Given that direct-acting antivirals (DAAs) deliver cure rates of higher than 95% in terms of sustained virologic response,[4] the World Health Organization (WHO) has set a bold target to eliminate HCV by 2030.[5] On the other hands, people who use drugs (PWUD)/PWID are the key high-risk population, which accounts for 18% to 88% of HCV seroprevalence according to the geographic location.[6,7]

Herein, the study by Choi *et al.*[8] represents a critical milestone in understanding the epidemiology and treatment gaps of HCV infection among PWUD in South Korea—a population historically marginalized in both medical research and public health policy. As the first, prospective, multicenter study that includes 342 PWUD from institutions responsible for the majority of HCV-related care in South Korea, the prevalences of anti-HCV and HCV RNA among PWUD were 31.3% and 10.5%, respectively, which is consistent with the global prevalence range. Considering that the HCV seroprevalence in the general population in South Korea was 0.6% from 2015 to 2019,[9] the HCV seroprevalence in PWUD was more than 50 times higher than that in the general population, confirming that PWUD is a very high-risk population that should be targeted by HCV micro-elimination programs. Anti-HCV positivity was independently associated with age (odds ratio [OR], 1.074), duration of injection drug use (OR, 1.060), sharing of syringes (OR, 3.510), and very low monthly income (OR, 2.598). Furthermore, viremic HCV-PWUD showed significantly lower awareness and knowledge of HCV infection (63.9%), and a lower rate of treatment (16.7%) compared to non-viremic HCV-PWUD (80.3% and 71.8%, respectively).

Given that the sole factor significantly associated with treatment uptake in multivariate analysis was enrollment in Medical Aid, i.e., South Korea's safety-net insurance program that covers the entire cost of DAAs therapy, the comprehensive financial support systems should be urgently required. For instance, either expanding Medical Aid eligibility or introducing temporary DAA subsidy vouchers to support uninsured or underinsured PWUD should be considered. In addition, another fundamental factor for HCV elimination, along with appropriate HCV screening & diagnosis among PWUD, is a linkage to care in the real-world setting. So, the need for infrastructure that supports point-of-care (POC) testing and treatment initiation is equally important. In many global HCV micro-elimination programs, POC-based models—combining on-site rapid HCV antibody testing, reflex RNA confirmation, and immediate linkage to or initiation of therapy—have dramatically reduced loss to follow-up.[10] While this study delivered HCV education and referred patients externally, the lack of integrated, POC-based delivery mechanisms likely contributed to the poor treatment uptake, even among those who were aware of their infection. Last, one of the most glaring contextual deficits highlighted by this study is the near-total absence of harm-reduction infrastructure in South

Korea, i.e., syringe service programs, opioid substitution therapy, or supervised injection facilities. Although such efforts fall short of a root-cause solution, these measures will nevertheless help advance HCV elimination.

We should also recognize subgroups who require further investigation through future studies. Although injection drug use is the dominant transmission route, the study also identifies a noteworthy 18.5% anti-HCV prevalence among non-injection drug users. These individuals, often overlooked in HCV screening systems,[7] may share paraphernalia that poses risk for bloodborne virus transmission. Future studies should clarify the behavioral context and potential intervention points in this sub-population. Similarly, gender-specific barriers to HCV testing and treatment remain underexplored. POC-based care models, especially when embedded in women-centered services, could significantly enhance access for female PWUD.

In conclusion, Choi *et al.*[8] have offered a valuable epidemiologic snapshot that underscores the urgency of expanding both clinical and structural interventions for HCV elimination among PWUD in South Korea. In addition to expanding financial support, integrating POC diagnostics and treatment strategy into routine addiction care may be the most pragmatic and scalable strategy for closing South Korea's HCV treatment gap. With the 2030 WHO elimination target looming, now is the time to move beyond awareness toward action.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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ORCID

Beom Kyung Kim https://orcid.org/0000-0002-5363-2496

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