

# Drug Misuse and Hepatitis C Virus Infection Profiles for Three Generations of Patients Being Monitored for Prescription Drug Adherence

## Background

- Hepatitis C virus (HCV) infection is the most common blood-borne infectious disease in the United States, with at least 3.5 million people estimated as currently infected.<sup>1</sup>
- Another related epidemic in the United States is the illicit use of injected opioid drugs, the primary means of HCV transmission.<sup>2</sup>
- **Objective:** The investigators conducted a retrospective study in which the relationship of illicit/prescription drug misuse and HCV infection was examined in 3 generational populations.

## Methods

- De-identified test results of patients who underwent urine drug screening at Quest Diagnostics between March and December 2015 were examined for drug misuse (ie, non-prescribed/illicit drug use, drug use inconsistent with prescribing information).
- For all patients with drug testing results, HCV results of tests performed at Quest Diagnostics from 2011 through 2015 were examined for positivity.
- In addition to reporting on the overall population, the investigators also stratified results into 3 generational age groups: baby boomers (born 1945-1965); post-baby boomers (born after 1965); and pre-baby boomers (born before 1945).

## Results

- The study included 18,410 individual patients with 39,231 sets of urine drug screening and HCV screening results.
- Among the overall study population, 25.1% had a positive HCV test result. HCV positivity was highest among baby boomers (28.4%), followed by post-baby boomers (22.2%) and pre-baby boomers (13.3%).
- Drug misuse was identified in 57.3% of the overall population: 59.5% of post-baby boomers, 55.4% of baby boomers, and 50.0% of pre-baby boomers.
- HCV-positive patients were more likely than HCV-negative patients to test positive for non-prescribed drugs ( $P<0.01$ ):
  - For 7 drug classes in the post-baby boomer group
  - For 7 drug classes in the baby boomer group
  - For cocaine metabolite and marijuana metabolite in the pre-baby boomer group

## Conclusions

- In the context of prescription drug monitoring, this study found that patients who are HCV-positive exhibit drug misuse more often than those who are HCV-negative.
- The findings of this study underscore the differences in drug misuse patterns among 3 different generational populations, which may inform healthcare professionals; they also emphasize the importance of appropriate and individualized prescribing/monitoring of drugs.

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### Webpage

<https://www.ncbi.nlm.nih.gov/pubmed/?term=30334927>

### References

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