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Increasing Hepatitis C Infection Related to Growing Opioid Epidemic

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PICOT Statement

Population – Patients admitted for substance use disorder treatments from injection drug use (IDU) with positive Hepatitis C

Intervention – The states must prevent opioid misuse and addiction, reduce overdose deaths and other harmful consequences, improve opioid addiction treatment, and improve addiction care in the criminal justice system.

Comparison – Patients who report positive Hepatitis C without abusing opioids through IDU

Outcome – Reducing HCV infections by ending the opioid epidemic

Time – Now!! Prevent and help people who abuse opioids through IDU (injection drug use)

Abstract

Hepatitis C (HCV) is rapidly growing and has become the most common blood-borne infection throughout the United States. The objective of this study was to compare trends in rates of injection drug use (IDU), specifically opioid injection, with national trends in the incidence of acute HCV infection to assess whether these events correlated over time. The methodology was a literature review. To test for trends researchers calculated the annual incidence rate, demographics, and risk characteristics of reported cases of acute HCV infection using surveillance data from 2004 to 2014. They also analyzed the annual percentage of admissions to substance use disorder treatment facilities reporting injection drug use for the same time period by type of drug injected and demographic characteristics. Using the six sources, the results showed that significant increases in opioid injection mirrored those for reported cases of acute HCV infection among demographic subgroups. Injection drug use was the primary risk factor for HCV transmission and the leading cause of incidence in the U.S. Interventions were identified to help end the “opioid epidemic”, which then in return would reduce positive cases of HCV infections.

Interventions

- More awareness from the states of the opioid epidemic and risks that come with it.
- Integrated health services that include syringe service programs, medication-assisted treatment, and comprehensive HCV testing and linkage to care and treatment of HCV-infected PWID are essential to reduce prevalence and incidence among the population.
- Population based screening of young adults may be a reasonable strategy for identifying infected people and connecting them to treatment, as has been done among baby boomers.
- Development of new virologic-detection assays, available as point-of-care tests, will improve detection of new infections while simplifying clinical monitoring.
- Effective HCV vaccine

Background Information

- Drug overdose is now the leading cause of death in the United States among people under age 50. Opioid related death rates keep rising over the U.S. and in nearly almost every state.
- A significant portion of opioid related addiction, overdose, and death is now related to the use of heroin and deadly synthetic opioids like fentanyl and carfentanil, which are not being prescribed by physicians nor monitored through PDMPs. Rather, these illicit drugs often are cheaper and more accessible than prescription opioids and the more potent and deadly versions of them are increasingly mixed into heroin, cocaine, and other drugs, most of the time without the knowledge or awareness of those who use them.
- Approximately 15.7 percent of total state spending goes toward substance use and addiction; 94 percent of that amount is spent on addressing the consequences of substance use and addiction rather than on prevention, treatment, or research.



The opioid epidemic is a stark reminder of the consequences of a societal problem that was not brought into attention for years. Most of the reason the problem was never addressed was because of the stigma associated with drug use and the reluctance to confront it as a public health problem.

From 2013 on, the number of HCV-related deaths in the U.S. has exceeded the number of deaths associated with HIV and 59 other infectious diseases combined.

Hepatitis C is rapidly growing throughout the U.S. and is the most common blood-borne infection now. Injection drug use (IDU) is the primary risk factor for HCV transmission and is the leading cause of incidence in the United States.



Summary of Studies

Significant increases in opioid injection mirrored those for reported cases of acute HCV infection among demographic subgroups.

Outcomes

- Theoretical models suggest that combining HCV treatment with risk-reduction measures is the most effective way to prevent transmission among injection-drug users.
- An effective vaccine could reduce the risk of HCV transmission if it were routinely provided to people before the onset of high-risk behaviors.
- To make significant and meaningful progress in ending the opioid crisis, the states need to assume the role of adopting a public health approach to the opioid crisis, and to addiction more generally. States can build on the momentum at the federal level to implement a public health approach to the problem, using the funds that have been made available to them through recent landmark pieces of legislation.

Gaps in the Literature

- Underreporting of cases of acute HCV infection is common.
- The case definition for acute infection only describes people with signs and symptoms of illness, yet most acute HCV infections are asymptomatic.
- The TEDS (Treatment Episode Data Set) data that was used has limitations because treatment is provided to only a fraction of persons with SUD in the United States. It is likely that there is a larger number of persons with SUD who inject drugs than what is reported. The TEDS analysis also could have counted the same person for multiple readmissions. Reporting varies in each state to TEDS, so the state-specific trends and state-by-state comparisons should be interpreted with caution.

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