THE RELATIONSHIP BETWEEN OPIOID AGONIST THERAPY AND HEPATITIS C VIRUS SEROPREVALENCE AMONG PEOPLE WHO INJECT DRUGS IN SOUTHERN APPALACHIAN OHIO IN 2019

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Background

The United States is experiencing a hepatitis C virus (HCV) epidemic among people who inject drugs (PWID), especially in rural Appalachia. Opioid agonist therapy (OAT), including maintenance therapy with buprenorphine (BMT) or methadone (MMT), may prevent HCV infection by reducing injection drug use. Syringe service programs (SSP) in conjunction with OAT may enhance HCV prevention. We assessed the relationship between OAT use and HCV antibody seroprevalence among rural PWID.

Methods

We conducted a cross-sectional respondent-driven sampling survey of 186 PWID in Appalachian Ohio from March to October 2019. HCV prevalence was determined with the OraQuick rapid antibody test. We defined current OAT as self-reported OAT in the past 30 days; we defined prior OAT as self-reported OAT any time before the past 30 days. We fit three adjusted modified negative binomial regression models to assess the relationship between HCV antibody seroprevalence and 1) recency of BMT use; 2) recency of MMT use; and 3) any BMT versus any MMT use. We examined effect measure modification between OAT and HCV seroprevalence by participants' use of an SSP.

Results

Eighty-two percent of participants were HCV antibody positive (n=153). Nearly 2/3 (64%; n=119) of participants had a history of BMT, while only 19% (n=36) had a history of MMT. Among participants who did not primarily use an SSP, those currently using BMT had a higher adjusted prevalence of HCV antibody positivity than those with no BMT history (adjusted prevalence ratio=1.5 [95% confidence interval=1.1, 2.0]; Figure 1). We found no differences in the prevalence of HCV antibody seroprevalence by type of OAT or by the recency of MMT.

Conclusions

Rural PWID who are not retained in OAT and do not use SSPs may represent a particularly high-risk group for HCV. PWID in OAT should be counseled on accessing SSPs.

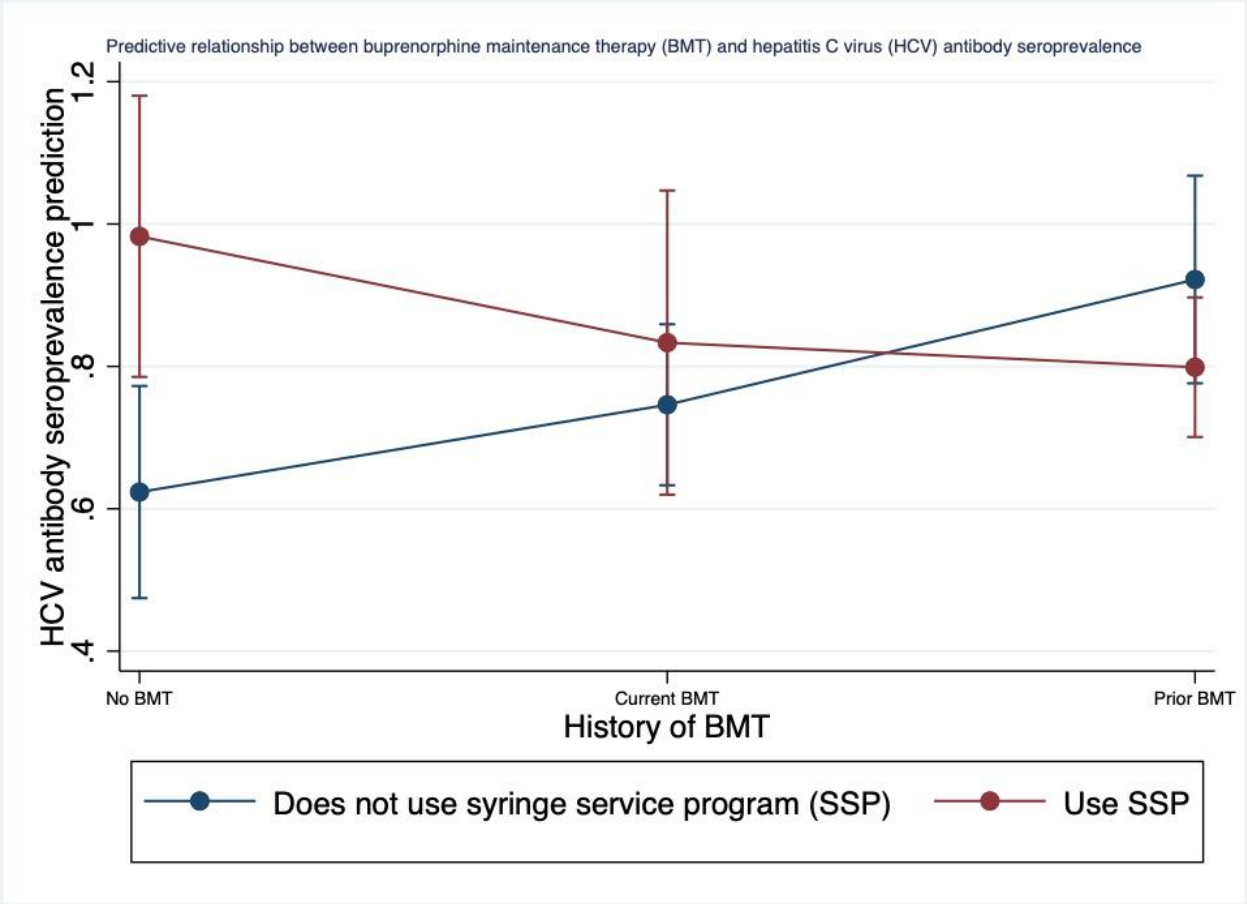

Figure 1. The predictive relationship between buprenorphine maintenance therapy (BMT) and hepatitis C virus (HCV) antibody seroprevalence in southern Appalachian Ohio in 2019 by use of a syringe service program (SSP).

All authors have no conflicts of interest to disclose.