CAUSE OF DEATH AMONG THOSE DIAGNOSED WITH HEPATITIS C IN WASHINGTON, DC, 2009-2017

ID 559

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BACKGROUND

There has been very limited research on mortality among people diagnosed with Hepatitis C (HCV) in the District of Columbia (DC). As the opioid use crisis continues to grow both nationally and locally, knowledge of how opiate use deaths has had an impact on residents, especially among those with HCV, may be useful in strategizing intervention programs. The purpose of this analysis is to describe the differentiating causes of death among those diagnosed with HCV in DC.

METHOD

Data from DC Health HCV surveillance system, Vital Statistics, and the National Death index records were matched to identify DC residents diagnosed with HCV who died between 2009 and 2017. Bivariate analysis was performed to identify differences between opiate overdose and non-opiate overdose deaths by demographics including gender identity, race/ethnicity age at death, HIV co-infection, year of death, HCV diagnosis class and last RNA results. Standardized mortality ratios for all causes of death were calculated and adjusted for age, sex, and death year.

RESULTS

Between 2009 and 2017, there were 4,633 deaths among DC residents diagnosed with HCV. The majority of people diagnosed with HCV who died were male (68.1%), Black (60.2%) and died between the ages of 50 and 69 (76.5%). Cardiovascular disease was the leading primary cause of death (30.6%) followed by non-AIDS defining malignancies (12.6%), opiate overdose (9.8%) and liver diseases (8.9%). Over the 9-year period, there was a 561% increase in opiate overdose deaths compared to a 69.1% decrease in liver-related deaths.

Over the 9-year period, there was a *561% increase* in opiate overdose deaths among DC residents diagnosed with HCV.

The greatest excess risk of death from opiate overdose was among men aged 50-69

RESULTS (cont.)

Compared to persons diagnosed with HCV who had a non-opiate related death between 2009 and 2017, HCV cases with a death due to opiate overdose were more likely to have a death age between the ages of 50-69 (84.1% vs 75.6%, p<.0001), have a year of death in 2017 (26.2% vs 13.6%, p<.0001), and have a positive/detectable result at their last RNA screening (62.1% vs 53.7%, p<.0001). There were no differences by gender identity, race/ethnicity and HIV-coinfection. Risk of dying from opiate-overdose was significantly greater than from liver-related causes (p=0.026), with the greatest excess risk in men aged 50-69 years (12.58, 5.91-26.78).

Proportion of Deaths among DC Residents Diagnosed with HCV, by Year and Cause, Washington DC, 2009-2017

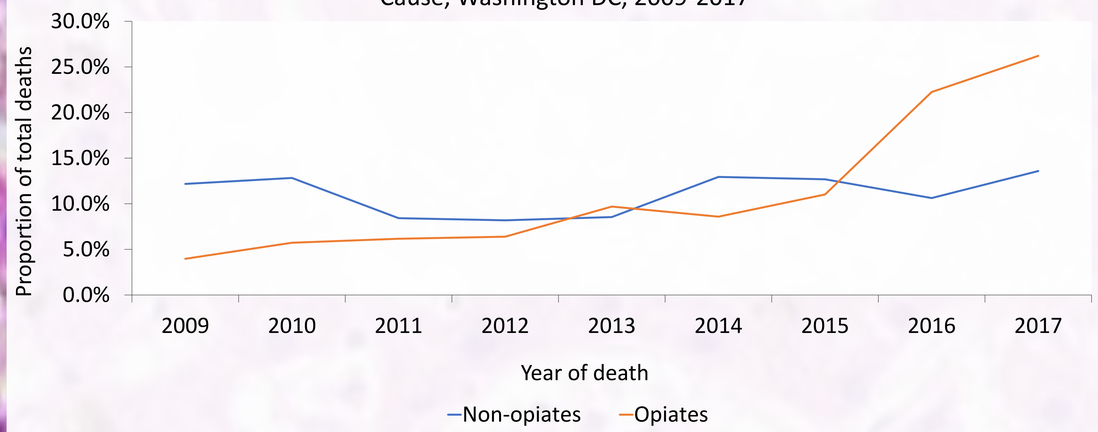
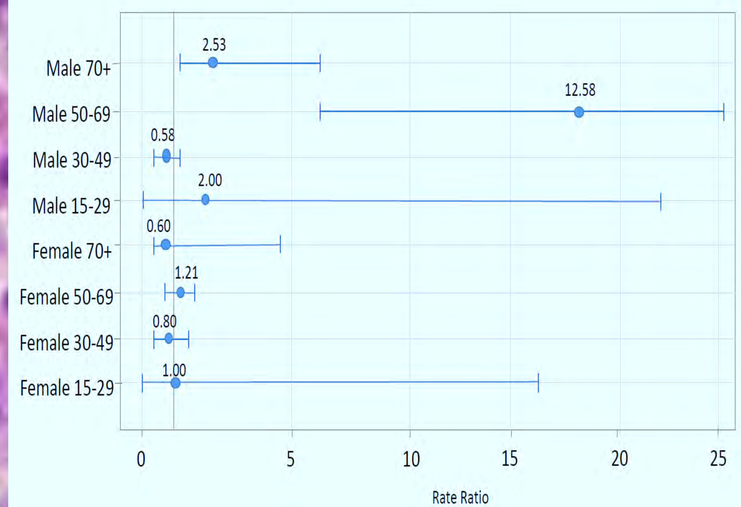


Figure 2. Standard Rate Ratios Comparing Opiate vs Liver-Related Deaths, by Gender Identity and Age at death



LIMITATIONS

Hepatitis C surveillance is passive and therefore is limited to what is reported to DC Health HAHSTA.
Death information from the SSDMF were not used as this source does not include cause of death.

CONCLUSIONS

This analysis highlights that older adult males with hepatitis C face a higher mortality risk from continued opiate drug use than from their hepatitis infection. As local governments continue to strategize interventions around opioid overdose, it will be important to include approaches around specific subpopulations affected by HCV.

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Background Image: Liver showing accumulation of bilirubin pigment.
Image credit: Department of Pathology, Calicut Medical College