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Title

Identifying Bright Spot Communities: Socioecological, workforce, and healthcare delivery factors influencing opioid mortality

Priority 1 (Research Category)

Behavioral, psychosocial, and mental illness

Presenters

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Abstract

Context: There were 50,000 U.S. opioid overdose deaths in 2019. Millions suffer from opioid addiction. Identifying protective factors for low community opioid mortality may have important implications for addressing the opioid epidemic. This study was funded through the Virginia (VA) Department of Medical Assistance Services (DMAS) through a SUPPORT Act Grant. Objective: To identify "Bright Spot" communities in Virginia with protective factors associated with reduced opioid mortality and morbidity. Study Design: Ecologic study. Dataset: Virginia All Payer Claims Database (APCD), Virginia Department of Health (VDH) statewide medical examiner registry, and American Community Survey (ACS). Time period: 2016-2019; 2019 data cited here. Population Studied: APCD includes VA residents with medical claims through commercial, Medicaid, and Medicare coverage. VDH data includes fatal drug overdoses. ACS surveys all VA residents. Outcome Measures: Primary outcome: fatal opioid overdoses. Secondary outcomes: emergency room visits for overdoses and opioid-related diagnoses, outpatient diagnoses for opioid-related disorder, prescription rate for opioids, and prescription rate for buprenorphine. Results: Opioid mortality was associated with higher rates of community poverty ($r=.38$, $p<.0001$) and disability ($r=.52$, $r<.0001$). Opioid mortality was associated with inequality, with higher Gini index associated with higher opioid mortality ($r=.23$, $p<.0001$). A higher percentage of black residents was associated with increased fatal opioid overdoses ($r=.37$, $p<.0001$) and ED visits for overdoses ($r=.30$, $p<.0001$). A higher percentage of white residents correlated with increased outpatient visits for opioid use disorder ($r=.24$, $p<.0001$) and higher rates of buprenorphine ($r=.34$, $p<.0001$) and opioid prescriptions ($r=.31$, $p <.0001$). Conclusions: These findings suggest significant racial disparities in opioid outcomes. Communities with a higher percentage of black residents are more likely to have higher opioid mortality and a lower rate of outpatient treatment. This association may be affected by the time period used in the analysis (2015-2019), as nationally there has been an increasing rate of synthetic opioid deaths in Black communities.

These measures have been incorporated into a multivariate analysis to identify Bright Spot communities, which will be discussed during the presentation.