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Naloxone Decriminalization and Opioid Overdose Trends: A Comparative Study of Lucas County, Ohio and the U.S.

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Background: Opioid overdose deaths have been on the rise for many years, despite the declaration of an opioid epidemic in the United States in 2017 and an increase in efforts to reduce deaths. Harm reduction aims to reduce opioid overdose deaths through education of the opioid epidemic and distribution of Naloxone, an emergency medication that reverses opioid overdoses. Although Naloxone has been used for the treatment of opioid overdoses since the 1970s, Naloxone was considered drug paraphernalia in Ohio until 2020, limiting its availability.

Objective and Aim: This study aims to determine the effect of Ohio's 2020 Naloxone decriminalization on opioid overdose trends in Ohio and Lucas County in lieu of U.S. trends.

Methods: Opioid overdose death data from 2017-2023 for U.S., Ohio, and Lucas County was collected via the appropriate health departments. Relative change was determined between the 2017-2020 and 2021-2023 overdose deaths across the three regions.

Results: In the US overall, opioid overdose deaths have relatively increased by 14.28% from 2017-2020 to 2021-2023. However, in Ohio opioid overdose deaths have relatively decreased by 17.68% from 2017-2020 to 2021-2023, and in Lucas County there has been a relative decrease by 20.99% from 2017-2020 to 2021-2023.

Conclusion: The decrease in opioid overdose deaths, from 2017-2020 to 2021-2023, in Ohio and Lucas County can be partially attributed to the local legalization of Naloxone in 2020. Further widespread Naloxone distribution and access across the U.S. can help decrease opioid overdose deaths amidst the national rise.

Keywords: Naloxone, Overdose, Opioid Overdose

