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Opioid overdose death toll has risen more than 5-fold among Indigenous Americans over past decade

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The opioid overdose death toll has risen more than 5-fold among American Indian and Alaska Native communities over the past decade,

finds one of the first studies of its kind published in the open access journal *BMJ Open*.

The type of opioid involved might have changed over the years, but many of the underlying social factors driving these patterns have remained the same, point out the researchers.

Drug overdose deaths have more than tripled in the US since the turn of the century, with American Indian and Alaska Native peoples disproportionately affected.

But it's not clear what the overall trends have been in overdose deaths from opioids alone or in combination with other substances in these groups, say the researchers.

To plug this knowledge gap, they drew on US death records data from the Centers for Disease Control and Prevention spanning the period 1999 to 2019.

They looked specifically at overdose deaths for opioids alone, when combined with any other drug, and those related to opioids; for combinations of opioids and alcohol or methamphetamine or cocaine or benzodiazepines; and for specific types of opioids among American Indians and Alaska Natives aged 12 and older.

Analysis of the data showed that between 1999 and 2019, overdose deaths from opioids alone more than quintupled from 2.8 to 15.8 per 100,000 of the women and from 4.6 to 25.6 per 100,000 of the men.

Overdose deaths in which opioids were involved increased steeply from 5.2 to 33.9 per 100,000 in total, and from 3.9 to 26.1 among the women and from 6.5 to 42.1 among the men.

Overdose deaths due to opioids plus alcohol or benzodiazepines or methamphetamine also rose sharply among both the men and the women (respectively, 1.1 to 4.2, 1.1 to 2.6, and 0.6 to 6.7) while those for opioids plus cocaine rose substantially only among the men (1.2 to 3.2).

Analysis of death rates attributable to specific types of opioid showed that those caused by heroin, natural and semi-synthetic (prescription) opioids (oxycodone, hydrocodone), and synthetic opioids (fentanyl, tramadol) other than methadone increased significantly as well.

Death rates due to synthetic opioids other than methadone, in particular, have soared in recent years, rising from 1.5 per 100,000 in total in 2013 to 12.5/100,000 in 2019, with rates in the men rocketing from 1.5 to 16.5 during this period.

Overdose deaths peaked among 25 to 44 year olds for opioids alone and when combined with any other drug. These rates were as high, or even higher, than those among other ethnic groups, although most recently there are signs that these patterns might be changing.

Aside from increasing the risk of an overdose, using opioids plus other substances is associated with higher rates of relapse, emphasizing the need to tackle the root causes of such polysubstance use, say the researchers.

"These findings highlight existing inequities in drug related deaths and may point to broader systemic factors that disproportionately affect members of [American Indian and Alaska Native] communities," who continue to grapple with poorer prospects, racism, and the legacy of colonization, while still facing significant challenges in access to good quality treatment, they point out.

"While the type of opioid driving these trends has changed over the

years, many underlying social factors that drive these patterns have not," write the researchers.

"Interventions for [American Indian and Alaskan Native] populations with substance use disorders will be more impactful if they are comprehensive, culturally centered, and address social determinants of health, including socioeconomic factors and racial and ethnic discrimination," they conclude.

More information: Epidemiological trends in opioid-only and opioid/polysubstance-related death rates among American Indian/Alaska Native populations from 1999 to 2019: a retrospective longitudinal ecological study, *BMJ Open* (2022). DOI: 10.1136/bmjopen-2021-053686

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