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Review Article

It's Everywhere: Fentanyl's rising use in Washington State

William James[1]*, Shelby Bellantonio[2], Kristy Nardozzi[3]

[1]*Substance Use Disorder Professional, Licensed Mental Health Counselor, Community Counseling Institute*
[2]*Substance Use Disorder Trainee, Community Counseling Institute*
[3]*Substance Use Disorder Professional, Community Counseling Institute*

***Corresponding Author:** William James, Substance Use Disorder Professional, Licensed Mental Health Counselor, Community Counseling Institute, USA.

Abstract

Background: Illicit fentanyl use by young adults has contributed to a significant increase in overdose drug deaths. Fentanyl has hit the drug use scene in the Northeast and Midwest, and has recently reached the West Coast and the Pacific Northwest, particularly Washington State. For this study, we explored the attitudes and beliefs of people who use drugs (PWUD) and changing drug use in Washington State and their response to fentanyl-involved overdose. We include recommendations from PWUD to reduce overdose risk within the context of illicit fentanyl use.

Methods: We conducted in-depth interviews with face-to-face sessions in September and October of 2024. We use thematic analysis to analyze transcripts and construct themes.

Results: PWUD knew about fentanyl and expressed concern about other illicit drugs containing fentanyl or other opioids. They were not willing to talk to professionals due to fear of arrest or referral to treatment. Some PWUD recommended legalizing and regulating the drug supply and reducing the stigma of substance use.

Conclusion: PWUD in Washington State were aware of the increase in fentanyl use and wanted access to easy tools to reduce the harm and the stigma of fentanyl use.

Keywords: Fentanyl, Drug Use, Overdose, Opioids, People who use drugs, Substance use.

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Background

Overdose deaths involving illicit fentanyl increased dramatically in the Western states between July 2019 and December 2020, the highest rise of any geographic area region. Local surveillance data from Washington, Oregon, Idaho and California confirm that fentanyl has entered the local drug supply. In the Western states it is increasingly being pressed into counterfeit pills that resemble and are often sold as Xanax, oxycodone or other prescription drugs (Washington State Department of Health,2024).

PWUD in Washington state are aware of the change in drug supply and the dangers of fentanyl and have made recommendations for reducing harm and the risk of overdose. These recommendations include non-law enforcement emergency response to overdose, availability of naloxone in medical agencies and community settings to ease withdrawal, empathy and understanding within the health care system, access to harm reduction, expansion of treatment centers, detoxification centers and housing shelters, and peer-delivered services and information.

PWUD welcome information and services to prevent and reverse overdose. However, there have been negative experiences with law enforcement and healthcare providers that impact the willingness of PWUD to call law enforcement. While Good Samaritan laws help, PWUD are still reluctant, unaware or untrusting of the laws.

Methods

We conducted semi-structured qualitative interviews with PWUD from three Washington counties, King, Pierce

and Snohomish. We selected counties with high rates of Overdose, High Intensity Drug Trafficking Area (HIDTA) and drug seizures involving fentanyl.

Participants and Procedures

We recruited participants (N=20) from September to October 2024. To recruit, we partnered with a local jail program that provided substance use treatment and recovery services. Program staff distributed flyers and recruited via word of mouth, providing potential participants with the research staff phone number to complete the screening questions and interview. Eligibility included (1) use of substances such as methamphetamine, cocaine, benzodiazepines, heroin, illicit fentanyl, or other opioids in the past 30 days and (2) age 16 or greater. Research staff screened participants and if participants were eligible, started the interview immediately following the screening questions. Interviews lasted about 30 minutes. Research staff obtained verbal consent before data collection.

Two researchers (KN, SB) conducted all eligibility screenings and interviews All staff had previous experience and training in qualitative data collection and experience Interviewing PWUD, Interviewer were trained to follow a protocol if a participant expressed thoughts of suicide, including providing the Suicide Lifeline number, offering to connect the participant to an on-call clinician for crisis counseling, and offering to connect the participant to a peer recovery support specialist for support. Study leadership reviewed audio interview recordings regularly to provide feedback and ensure interview quality and completeness. The interview team met weekly during data collection to discuss interview content. Audio-recorded interviews were transcribed by a professional transcriptionist and uploaded into NVivo software (Version 12) for analysis.

Analysis

We used thematic analysis with a deductive coding structure to analyze the interviews. We used the interview guide to create the initial codes and an iterative process to refine the codebook and achieve acceptable interrater reliability. The two team members (KN, SB) coded the same transcript and ran a coding comparison query. The first test yielded a low kappa coefficient, so coders (KN, SB) reviewed discrepant codes and added clarity to codebook definitions. Coders then coded a second transcript and ran a coding comparison query, achieving a kappa coefficient of >0.80, which was deemed sufficient. Coders added additional clarity to codebook definitions and coded the remaining transcripts independently, coding simultaneously and checking in regularly to discuss processes and resolve any coding discrepancies. Coded data were then used to construct themes through an iterative inductive process by four team members (KN, SB, BM, WJ). Within themes, subthemes were identified, and relationships between and across themes were examined, such as experiences of fentanyl-involved overdose and engagement with emergency services. These themes were further refined during investigator team discussions.

Results

Of the 20 participants, 45% identified as female and 55% identified as male. 15% were age 16-18, 40% were age 19-20, and 45% were age 21-25. 55% were from the largest County in the area, 40% from the second largest County and 5% were from the smallest County in the area. 20% identified as Black or African American, 20% identified as White, 10% as Hawaiian/Pacific Islander, 10% as Native American, 5% as Hispanic and 35% as Mixed Racial. In the past 30 days, all of the participants reported using fentanyl and/or other opioids. We constructed three themes from this data: (1) participant reports of impaired driving, (2) participant experiences with stopping a friend from impaired driving, participant recommendations for preventing substance use and impaired driving.

Participant reports of changes in the Washington drug supply and demographics who use fentanyl

Participants described an increased presence of fentanyl in the Washington drug supply, expansion of drug types that contain fentanyl, and a changing demographics of people using fentanyl. Participants became aware of the shifting drug supply from personal experiences such as unintentional exposure to fentanyl and conversations with others.

Participants reported fentanyl entering the drug supply in two main ways: (1) being mixed into drugs such as heroin or methamphetamine and (2) counterfeit pressed pills containing fentanyl. While known identification of fentanyl varied (e.g., urinalysis testing, fentanyl test strips, dealer disclosure, self-identification) participants overwhelmingly reported that the presence of fentanyl is increasing in Washington's drug supply. Many believed that there was fentanyl in the drugs they purchased.

Participants reported that counterfeit pills containing fentanyl were widely available and marketed by drug dealers as prescription drugs like Vicodin, Xanax, or Oxycodone. One of the commonly available fentanyl pressed pills was described to be small, blue and round often referred to as "30 blues" or "fetties" or "Oxy 30".

Participants were Aware of the Seriousness of the Fentanyl Problem

Participants were asked how much of a problem do you

think opioid and fentanyl use is among people your age. They shared:

"Not too bad, getting worse than it was"

"It seems like more and more people are using it"

"In downtown, real bad"

"It is getting worse"

"Pretty bad and more people are starting to use"

"People use but not a big issue"

"Most people I know use it or have tried it"

"Pretty bad, a lot of people use it"

"Big"

"Many use fentanyl"

"Big among homeless especially"

"Large problem" (2 people)

"For people I know it's a big issue"

"Big problem, everyone I know uses"

"Not sure"

"Big problem"

"Big issue"

"Huge"

"Pretty large issue"

Operating Motor Vehicles

Participants were divided on operating a motor vehicle as 11 people reported "yes" and 9 people reported "no". They all reported knowing other people who have used. Participants reported that they thought it was very dangerous, a total of 7 people, and 13 people thought it was somewhat dangerous to drive under the influence of opioids or fentanyl.

Discussion

Participants described how PWUD in Washington state are impacted by the increased availability of fentanyl in the drug supply. Participants indicated that the "little blue pill" are hard to avoid and are widely available from dealers and in the drug supply. Participants reported they were reluctant to contact law enforcement due to their fear of the legal system. They did express support for getting more information about fentanyl out to the general public, improving services, increasing supplies (naloxone, fentanyl test strips) and increasing overdose sites.

The experience of these participants suggest that the Washington state drug supply is following an East to West trend and a regional delay of a couple of years. This delay provides an opportunity for education and prevention and treatment based on what was learned from other regions. As PWUD are dealing with a rapidly changing drug supply and increased fentanyl availability, drug checking devices should be made more accessible for PWUD (fentanyl test strips, spectrometer). This information gathered may assist harm reduction efforts, improve drug supply information, especially fentanyl analogs.

Conclusion

Literature Review

Arendt (2020) indicated that opioid abuse is a severe public health threat as recent evidence shows a disturbing increase in the use of fentanyl with opioids mixed with heroin. Barry (2018) advocates specific strategies that should be considered as part of efforts to combat the opioid crisis include safe drug consumption sites, anonymous drug-checking services, updated naloxone distribution policies, harm reduction-oriented policing, expansion of evidence-based pharmacological treatments in criminal justice and emergency departments settings, and stigma-reduction messaging emphasizing the risks of fentanyl. Cance and others (2023) examined why the prevalence of death involving synthetic opioids has historically been lower in Texas that most US states but has more than quadrupled from January 2020 to January 2022. This increase was due to the emergence of fentanyl in black tar heroin. Chan-Hosokawa and Bierly (2022) in an 11-year study found that fentanyl has become the most frequently identified opioid not only in postmortem cases but also in DUID cases. Its prevalence was 11% in drivers evaluated from 2018 to 2020. Conversely, 6-MAM was identified in less than 4% of cases in this study. Polypharmacy was common with 87% of blood samples confirmed positive for fentanyl and at least one other compound. Stimulant was the most identified drug class in fentanyl combinations. The number of fentanyl/xylazine combinations has increased in recent years, with additive effects expected from this combination. Fentanyl alone and in combination with other drugs poses a significant public safety risk to drivers due to its CNS depressant effects capable of impairing driving. Ciccarole (2021) provided an update on the rise of illicit fentanyl's, risk for overdose, and combinations with other drugs and the need for treatment. The study found that overdose due to illicit synthetic opioids continues to rise is the US both preceding and during the COVID-19 pandemic. Fentanyl-related overdose is rising in the western USA. Stimulant-related overdose is also increasing nationwide. Polysubstance use (the use of a stimulant along with an opioid is driving stimulant-related overdose. The researcher found that other medical consequences of injection drug use are rising including

HIV and hepatitis C infections. Medication approaches to treating opioid use disorder remain the standard of care and there are promising pharmacological approaches to treating methamphetamine use disorder. Cottler and others (2020) recommended that a national system to detect dangerous trends as they emerge is needed. They reviewed the National Drug Early Warning System (NDEWS) that was first funded by the National Institute on Drug Abuse (NIDA) in 2014. The second iteration of NDEWS was awarded to a team from the University of Florida, New York University, and Florida Atlantic University. NDEWS continues to examine early signals of potential drug epidemics with an expanded Early Warning Network. A Scientific Advisory Group of 12 scientists from across the USA and 5 experts from the DEA, CDC, and the ONDCP guide the new NDEWS. Daniulaityte and others (2019) examined trends in fentanyl and fentanyl analogue-related overdose deaths in Montgomery County, Ohio and found that from 2015-2017 fentanyl/analogues-related deaths increased by 377%, the proportion of fentanyl-only OD death cases declined, carfentanil was the most commonly identified fentanyl analogue.

Dempsey and others (2022) found that blood test results can be extremely valuable for forensic toxicologists in evaluating potential impairment due to drugs other than ethanol in impaired driving casework. The found that although a blood concentration alone cannot determine the degree of impairment, it can assist in determining if a level can be classified as lethal, subtherapeutic or therapeutic (which is typically seen with recreational use). However, interpretation of blood drug test results can be further complicated when concentrations typically viewed as toxic overlap with those found in impaired driving cases. The presented DWI/DUID cases by HFCS and HCIFS had blood concentrations of drugs higher than those reported in the literature for impaired driving cases and were consistent with postmortem ranges determined by HCIFS, except for THC. These cases demonstrate challenges in interpretation of extremely high drug concentrations in DWI/DUID casework and that case and individual history should be considered. D'Orazio and Mohr (2021) concluded that efforts to promote standardization of scope and threshold cutoffs for drug testing in DUID and motor vehicle fatality cases demonstrate progress by laboratories willing to implement these recommendations. However, challenges faced by laboratories in meeting the recommendations have not changed year to year, where lack of budget, time, staffing and instrumentation continue to hinder laboratories from full implementation of standardization efforts. Friedman and others (2022) examined the data gaps in surveillance infrastructure to understand fentanyl prevalence in Mexico. The researchers employed intensive ethnographic participant-observation among people who use drugs (PWUD) as well as key informants including harm reduction professionals, EMTs, and physicians on the front lines in Tijuana, Mexico. They triangulated interview data and direct observations of consumption practices with fentanyl tests of drug paraphernalia from mobile harm reduction clinics in various points throughout the city. Key informants confirm numerous increased public health risks from fentanyl and the absence of a systematic or evidence-based governmental response. Naloxone remained difficult to access and recent austerity measures have cut funding for harm reduction in Mexico. Hall and other researchers (2021) examined street-drug lethality and found that changes in the lethality of the drug supply preceded unintentional overdose trends; law enforcement drug seizures sample the composition of local drug markets; and seizure data can be input into methodology to predict deaths with low lag time. These finding contribute to a growing body of evidence that changes the composition of the drug supply may predict trends in unintentional overdose mortality. The proposed methodology might serve to inform future overdose prevention and response efforts as well as future research. Havro and others (2022) conducted a two-year study of fentanyl cases in Orange County, California reviewing DUID and postmortem (PM) cases. Any non-urine sample with fentanyl detected above the limit of detection of 0.5 ng/mL was reviewed in DUID and postmortem (PM) cases The overlap of fentanyl concentrations highlights the importance of evaluating case circumstances when providing an interpretation of cases.

Irving and others (2022) examined the need for naloxone and found that the need differed by epidemic type, with fentanyl epidemics having the highest probability of naloxone use and prescription opioid-dominated epidemics having the lowest range. To achieve a target of naloxone, use in 80% of witnessed overdoses, need varied from no additional kits to 1270 kits needed per 100,000 population across the 12 modelled states annually. In 2017, only one state had sufficient kits to meet this target. Kiely and Juhascik (2021) did a retrospective study of 270 impaired driving cases between 2017 and 2019 and found that fentanyl was the predominate drug found in these 270 cases (65.5%) and carfentanyl was found alone in 6.6% cases. Toxicology results showed impaired drivers using multiple drugs with a wide range of observed behaviors. The inclusion of these drugs in routine impaired driver toxicology testing is extremely important when attempting to determine their overall prevalence. Lorvick and others (2023) looked at the unintentional consumption of fentanyl in an ongoing community-based study regarding polysubstance use among people who had consumed fentanyl unintentionally. Consistent with other studies. They found that people

learning of unintentional fentanyl use expressed strong concerns about accidental overdose. It was common for participants to reflect on recent substance use experiences that were atypical and might have involved fentanyl, as well to examine sources of recent drug purchases. While not all participants were surprised that they had unintentionally consumed fentanyl, all felt that learning their positive results was important due to risk of overdose. In addition to the widely promoted harm reduction strategy of testing drugs with fentanyl test strips, self-administrated point-of-care UA, particularly after an unexpected reaction to using a drug, could provide useful information for people buying and using illicit drugs. O'Donnell and others (2020) reported on rapid changes in opioid involved overdose deaths with fentanyl and fentanyl analogs detected during July 2016-December 2018 among 10 states with available data and provides a description of the most recent data on deaths with fentanyl and fentanyl analogs detected among 28 states and DC. Tracking specific drugs involved in overdose deaths is critical because the risk for overdose for fentanyl and fentanyl analogs varies substantially. They found that there are considerable differences in potency, dose, purity, and co-use patterns among drug products. O'Donnell (2018) reviewed data from the CDC. In 2015, the CDC released a public health advisory about increases in fentanyl-related overdose deaths in multiple states and in 2016 issued an update to warn about fentanyl and fentanyl related substances being pressed into counterfeit pills and the potential for broad distribution across the United States. Oglivie and others (2013) reviewed that investigators found that the number of illicit drug overdose deaths in Rhode Island was significantly higher in March of 2013 compared with the monthly average during March 2012-February 2013. Evidence suggested that acetyl fentanyl was administered intravenously in some of the deaths.

Marks and others (2021) used a predictive statistical modelling study among 3106 counties between 2013 and 2018. The observed average county-level overdose death rate increased from 11.8 per 100,000 people to 15.4 in 2017 before declining to 14.6 in 2018. The model indicated that a regression approach can effective predict county-level overdose death rates and serve as a risk assessment tool to identify high mortality counties during an emerging drug use epidemic. Morales (2019) conducted a cross-sectional survey of people who use illicit opioids in three United States cities with high overdose mortality: Baltimore, Boston and Providence. A quarter of surveyed street-based people who use drugs reported a preference for fentanyl, users were younger, non-Hispanic white, and daily users. Preference for nonmedical use of fentanyl was reported by 27% (n=83) of the sample. The study concluded that there is a need to consider preferences for fentanyl when targeting services and interventions. Palamar and others (2024) examined national and regional trends in fentanyl seizures to determine shifts in availability. They found that the plurality of seizures were in the West, especially pills. They found that most powder seizures were in the South, but increases were steepest in the West. They found that seizures of pills sharply increased and determined that the results can help inform localized overdose prevention and harm reduction efforts. Rohig and others (2021) examined fentanyl and driving impairment and reviewed case data from 2014 to 2019. They found that the vast majority of fentanyl cases involved polydrug use. The top three observations in common among the cases were the driver was found unresponsive behind the wheel, the vehicle left the travel lane or roadway, and the driver was involved in a crash. Shin and other researchers (2022) examined fentanyl's rising presence in Oregon's drug supply by conducting in-depth interviews by phone with 34 PWUD in Oregon from May to June of 2021. The individuals knew about fentanyl, expressed concern about pills, and were aware of illicit drugs containing fentanyl, but remained reluctant to engage with professional first responders due to fear of arrest. They recommended increasing access to information, harm reduction supplies (naloxone, test strips) and medications. Wallace and others (2022) looked at carfentanil (a potent opioid with no medical use in humans) blood concentrations and found that it presents a serious threat to public health and road safety because of its presence in the illicit drug supply, the potency of the drug and instances of use prior to the operation of a motor vehicle. Driving behaviors frequently came to the attention of the Centre of Forensic Sciences in Ontario, Canada. Decreased levels of consciousness were commonly reported and a variety of medical interventions were needed, in some cases, to preserve life due to opioid toxicity. Wilson and others (2020) examined drug and opioid-involved overdose deaths in the United States from 2017-2018 and found that of the 70,237 drug overdose deaths in the United States in 2017, approximately two thirds (47,600) involved an opioid. During 2018 a total of 67,367 drug overdose deaths occurred in the United States, a 4.1% decline from 2017.

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