

Opioid Overdose Risk Among Military Veterans

INTRODUCTION

In the midst of the ongoing opioid overdose epidemic in the United States, military veterans are at increased risk for overdose mortality,¹ with some studies demonstrating higher drug-related mortality among younger veterans.² Estimates of non-fatal overdose are more difficult to ascertain, but an estimated 18.2–36.5% veterans had an overdose event in one New York City (NYC) study.³

CDUHR researchers have been working to understand overdose risk among veterans in New York City, most of whom were discharged after September 11, 2001, and served in the Middle East as a part of Operations Enduring Freedom, Iraqi Freedom, and/or New Dawn. This research is essential to the development of tailored interventions for overdose prevention so that we may effectively serve the men and women who have served their country.

Study participants were military veterans recruited from veterans-specific housing, opioid treatment facilities, and participant referrals. Entry criteria included at least 1 year of military service, discharge after September 11, 2001, and opioid use (i.e., prescription opioid [POs] and/or heroin) within the previous 30 days.

SCALES TO MEASURE OVERDOSE EXPERIENCES AND RISK

IDENTIFYING OPIOID OVERDOSE EXPERIENCES

The Recent Overdose Experiences Scale (RODES) was developed for the assessment of nonfatal opioid-related overdose experiences. A person is considered to have overdosed if they endorsed any of the seven RODES items, and the scale detected overdose events in a significantly higher proportion of participants (36.5%) than using any single item. The scale asks about the following responses after the use of opioids: overdose self-perception, others' perceptions of overdose, difficulty breathing, collapsed, lost consciousness, medical assistance called, and use of naloxone.³

IDENTIFYING THOSE AT RISK OF OVERDOSING

The research team also developed the Overdose Risk Behavior Scale (ORBS) a comprehensive tool for assessing opioid-related overdose risks among the veteran population under study.⁴ Drawing items from existing scales, a literature review, and interviews with veterans and scientific advisors, a scale of 25 items was developed. The ORBS assesses overdose risk in five subscales:

- non-adherence to opioid dose and purpose
- alternative methods of opioid administration
- solitary opioid use
- use of non-prescribed overdose-associated drugs
- polysubstance use.

CORRELATES OF OPIOID OVERDOSE AMONG VETERANS

In a qualitative study with 36 male veterans, Bennett et al.⁵ found that many participants were initially prescribed opioids for pain. Self-medication was a common theme among participants, with veterans referring to physical pain, mental distress, social alienation, and civilian apathy towards veterans as motivations for use in the months and years after they return from deployment. Other findings regarding overdose were:

- Many overdose experiences were related to heroin use. Some veterans transition to heroin use after prescription drug monitoring programs reduced access to POs or through heroin-using social networks.
- A lack of knowledge about the dangers of opioids, including drug interactions and dangers in transitioning to other routes of administration, were common in overdose experiences.
- Suicidal intent was a reason for overdose among some veterans. While mental health conditions undoubtedly contribute to suicidality, unstable housing and unemployment are also important determinants

OPIOID OVERDOSE RISK GROUPS

Using the ORBS scale, Bennett et al. developed a typology of opioid overdose risk behaviors based on 218 veterans.⁶ Five risk groups were identified: lower risk, occasional non-medical PO users (non-adherents to prescribed use), frequent non-medical PO users, occasional heroin users, and frequent heroin users. As shown in the Table, half of the sample (50%) were seen as lower risk. Of the four higher risk groups- the main distinction was between those who primarily used non-medical PO and those who used opioids non-medically and also used heroin.

The opioid overdose risk groups had different demographic and psychosocial profiles. Females and blacks were less likely to be in the heroin user groups, while those who were employed or in school were more likely to be in the lower risk group. In addition, those with lower resilience and life satisfaction were more likely to be in the higher risk groups, as were those who reported higher pain severity.

	Lower risk	Occasional non-medical PO users	Frequent non-medical PO users	Occasional heroin users	Frequent heroin users
Percent of sample	50.0%	20.5%	7.4%	15.2%	6.9%
Non-medical PO use in past 30 days	39%	49%	100%	65%	93%
Non-medical PO use in ≥15 of past 30 days	6%	9%	69%	12%	80%
Heroin use in past 30 days	11%	8%	0%	91%	93%
Heroin in ≥15 of past 30 days	1%	4%	0%	39%	67%
Mean score on ORBS scale (range 0-44)	2.4	9.0	15.2	11.6	23.3

RECOMMENDATIONS

Several recommendations follow from this research:

- The two scales developed to assess whether an overdose event was experienced (RODES) and to identify those at high risk for overdosing (ORBS) should be utilized by researchers and clinicians working with veterans
- Overdose education, including training in the use of naloxone, should be provided to veterans
- Harm reduction and drug treatment programs should be tailored to the particular needs of veterans (especially addressing mental health issues) and develop strategies that leverage their strengths

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