Helping to *OEND* the Opioid Crisis: Naloxone Co-Prescriptions in a Military Primary Care Setting

Alysa Edwards, Steve Mudroch, MD
University of Colorado School of Medicine, Colorado Springs Branch

School of Medicine
UNIVERSITY OF COLORADO
COLORADO SPRINGS BRANCH

Background

•Opioid misuse, including the use of prescription pain relievers, is a public health crisis in the United States with 14,139 deaths from overdose involving prescription opioids in 2019[1].

- The opioid crisis extends to US military servicemembers; opioid misuse affects 1-3% of active-duty service members and 46% of combat wounded veterans [2-4].
- Although the rate of opioid overdose death among active-duty service members is 2.7 out of 100,000, half of the national rate, this number has been increasing [2].

•Naloxone is a short-acting mu opioid receptor antagonist that can effectively reverse opioid effects in the event of an overdose.

- The success rate of naloxone administration in opioid overdose in the pre-hospital setting is 83% with naloxone prescription and education associated with reductions in opioid-related ED visits [5,6].
- The risk of naloxone side effects is <1% with minimal side effects [5].

•In 2019, the Opioid Overdose Education and Naloxone Distribution Program (OEND) was established to increase prescription of naloxone and reduce opioid related deaths throughout the Military Health System; implementation and results across military installations has varied.

Objectives

•Determine how primary care providers at the 10th Medical Group - US Air Force Academy (USAFA) view opioid and naloxone co-prescriptions
•Increase naloxone co-prescriptions through provider trainings on naloxone and the OEND program

Methodology

•Existing military and civilian approaches to naloxone co-prescription, including the OEND program, were reviewed to understand the climate and resources associated with naloxone
•Before and after intervention surveys were distributed to primary care providers at the 10th Medical Group - USAFA to gauge provider comfort in and barriers to co-prescribing naloxone.
•A PowerPoint-based presentation was created and delivered in-person to these providers providing information on naloxone co-prescription use, availability, and efficacy.

Results

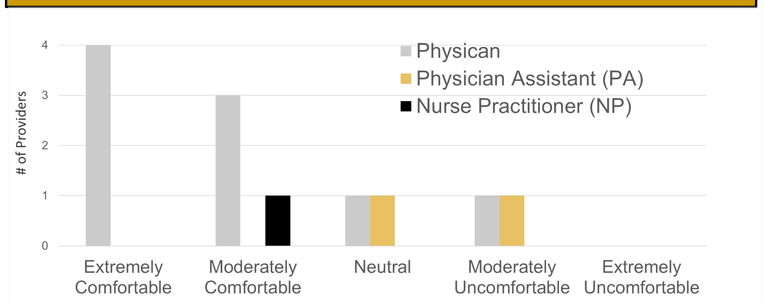
Provider and Patient Characteristics
(n = 15 providers)

Respondents included physicians (11), physician assistants (2), nurse practitioners (1), and clinical pharmacists (1); 86% identified as active-duty.

Respondents reported seeing between 50 and 350 patients monthly; 38% of respondents saw 6-10 patients prescribed chronic opioids monthly. One respondent reported seeing more than 20 patients prescribed chronic opioids monthly.

When naloxone prescriptions were given, 50% were prescribed to retirees, 36% to family members, and 7% (1) to an Active-Duty service member.

Provider Attitudes about Co-Prescribing Naloxone (n = 14 providers)



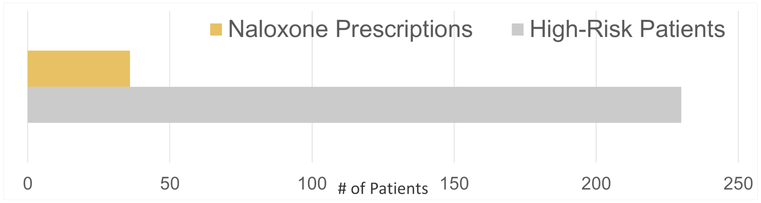
86% of all respondents reported being extremely or moderately likely to prescribe naloxone in the future.

When asked about barriers to naloxone co-prescription, 50% (6) moderately agreed or were neutral on the statement: “I am unaware of which of my patients are on chronic opiates or may otherwise benefit from naloxone”.

A majority of respondents disagreed that prescription took too much time, they were unaware they could prescribe naloxone, the delivery device was too complicated, and that teaching patients was the responsibility of other staff.

Although 85% of respondents (11) reported seeing at least one patient prescribed chronic opioids monthly (mode: 6-10 patients monthly), only 64% reported prescribing naloxone to any patient.

Naloxone Prescription Rates



Discussion

•Military primary care providers may experience distinct barriers to co-prescription compared to civilian providers who traditionally identify cost and time as the largest barriers to prescription[7,8].
•Respondents identified not knowing which patients were using chronic opioids or would otherwise benefit from a naloxone co-prescription as the largest barrier during the project; this may result from unfamiliarity with the OEND criteria for co-prescription and/or difficulty accessing this information via the electronic medical record (EMR).
•The number of high-risk patients at the 10th Medical Group may be artificially inflated by the EMR inclusion of patients who do not actually meet high-risk criteria such as Active-Duty patients who received short-term opioid therapies following surgical procedures.
•Post-intervention prescription rates and provider attitude data were not available due to difficulty accessing the EMR and poor response, respectively.

Conclusions

- Further increasing naloxone co-prescription in the military setting may require altering the EMR so that providers may more easily access patient opioid use data. Thorough chart review and/or refining search criteria may ensure that high-risk patients are appropriately identified.
- Military-wide implementation of the OEND program may be enhanced by efforts that focus on increasing provider comfort with naloxone co-prescription, particularly for advanced practice providers.
- Involvement of additional personnel, particularly pharmacists with access to patient opioid use data, may also increase naloxone co-prescription.

References

1. National Institute of Health. Overdose Death Rates. https://www.drugabuse.gov/drug-topics/trends-statistics/overdose-death-rates. Updated January 29, 2021. Accessed February 17, 2021.
2. Ferdinando L. Defense Health Agency Director: Progress in Preventing Opioid Abuse, More Needs to Be Done. U.S. Department of Defense. Published June 21, 2018. Accessed November 19, 2020. https://www.defense.gov/Explore/News/Article/Article/1556690/defense-health-agency-director-progress-in-preventing-opioid-abuse-more-needs-t/
3. Kelley ML, et al. Opioid and sedative misuse among veterans wounded in combat. Addictive Behaviors. 2019;92:168-172. https://doi.org/10.1016/j.addbeh.2018.12.007
4. Meadows SO, et al. 2015 Health Related Behaviors Survey Substance Use Among U.S. Active-Duty Service Members. RAND Corporation. 2018. https://www.rand.org/pubs/research_briefs/RB9955z7.html
5. Yousefifard M, Vazirizadeh-Mahabadi MH, Neishaboori AM, et al. Intranasal versus Intramuscular/Intravenous Naloxone for Pre-hospital Opioid Overdose: A Systematic Review and Meta-analysis. Adv J Emerg Med. 2019;4(2):e27. Published 2019 Nov 16. doi:10.22114/ajem.v0i0.279
6. Coffin PO, Behar E, Rowe C, Santos GM, Coffa D, Bald M, Vittinghoff E. Nonrandomized Intervention Study of Naloxone Coprescription for Primary Care Patients Receiving Long-Term Opioid Therapy for Pain. Ann Intern Med. 2016 Aug 16;165(4):245-52. doi: 10.7326/M15-2771. Epub 2016 Jun 28. PMID: 27366987; PMCID: PMC5783639.
7. Freise J et al. Increasing Naloxone Co-prescription for Patients on Chronic Opioids: a Student-Led Initiative. J Gen Intern Med. 2018; 33(6):797-798. DOI: 10.1007/s11606-018-4397-7
8. Behar, E., Rowe, C., Santos, G. et al. Acceptability of Naloxone Co-Prescription Among Primary Care Providers Treating Patients on Long-Term Opioid Therapy for Pain. J GEN INTERN MED 32, 291–295 (2017). https://doi.org/10.1007/s11606-016-3911-z