Preventing Opioid Overdose in the Clinic and Hospital

Analgesia and Opioid Antagonists

Stephanie Lee Peglow, DO, MPH[a,*],
Ingrid A. Binswanger, MD, MPH, MS[b,c]

KEYWORDS

• Opioid overdose • Naloxone • Overdose education • Harm reduction
• Opioid prescribing • Prevention of overdose

KEY POINTS

- Tailor opioid overdose preventive efforts to patients' individual stage of opioid therapy or involvement; not all interventions are universally appropriate.
- Consider risk stratification when treating pain with opioids.
- Apply appropriate harm-reduction strategies, such as prescribing naloxone, to patients as risk for overdose.
- Consider treatment of opioid use disorders with pharmacotherapy in your own practice.

INTRODUCTION

North America has experienced an overdose epidemic linked across countries related to increased opioid pharmaceutical marketing, opioid prescribing, prescribed and illicit opioid use, and opioid trafficking.[1] As a result, greater than 2 million United States inhabitants met criteria for opioid use disorder (OUD) and nearly 5% of US adults reported nonmedical use of opioids in 2013.[2] US opioid advertising campaigns and prescribing patterns have spread to Canada.[3] In 2012 it was estimated 75,000 to 125,000

Disclosure Statement: Dr S.L. Peglow was supported by the Veterans Administration Mental Illness, Research, Education and Clinical Center and by Research in Addiction Medicine Scholars Program-R25DA033211. Dr I.A. Binswanger is supported by the National Institute On Drug Abuse of the National Institutes of Health under Award Number R01DA042059. The content is solely the responsibilities of the authors and does not necessarily represent the official views of the National Institutes of Health. Dr I.A. Binswanger is currently employed by the Colorado Permanente Medical Group.

[a] Department of Psychiatry and Behavioral Sciences, Eastern Virginia Medical School, 825 Fairfax Avenue Suite 710, Norfolk, VA 23507, USA; [b] Institute for Health Research, Kaiser Permanente Colorado, 2550 South Parker Road, Suite 200, Aurora, CO 80014, USA; [c] Division of General Internal Medicine, Department of Medicine, University of Colorado, 12631 East 17th Avenue, Academic Office One, Campus Box B180, Aurora, CO 80045, USA
* Corresponding author.
E-mail address: Peglowsl@evms.edu

Med Clin N Am 102 (2018) 621–634
https://doi.org/10.1016/j.mcna.2018.02.005
medical.theclinics.com

Canadians injected drugs, and another 200,000 had OUDs because of pharmaceutical opioids.[4] In Mexico, estimates suggest that 100,000 people use illicit opioids and an increasing number of those use heroin.[1]

In the United States, a large proportion of individuals who use illicit pharmaceutical opioids (68%) report they received the prescription drug from a friend or family member who was prescribed it by their doctor.[5] Those that reported heavy, nonmedical opioid use reported that their primary source was direct physician prescribing.[6] Thus, physicians have the responsibility to prevent the potential harms of opioids by using sound preventive strategies.

This article describes opioid overdose preventive strategies for medical providers (**Fig. 1**), with a particular focus on special populations, such as youth and pregnant women. Opioid overdose can occur in any point along the continuum of use, from opioid naivety to long-term opioid use for pain to OUD (**Box 1**). Furthermore, overdose is caused by a range of factors, including drug interactions, use via injection route, and intentional overdose. We summarize current preventive strategies medical providers in primary care may use to reduce risk throughout the continuum of opioid use and across a range of contributing factors.

We highlight opioid prescribing guidelines from the Veterans Affairs/Department of Defense, Centers for Disease Control and Prevention (CDC), and Canadian Guidelines, last updated February 2017, March 2016, and 2017, respectively.[7–9] The recommendations within these guidelines are largely based on observational data; hence the quality of the evidence supporting many recommendations is still moderately weak.[10] In addition, overdose prevention research is evolving and recommendations may change based on results from ongoing and new studies. Importantly, existing guidelines focus heavily on limiting prescribing, but a one-size-fits-all approach may not be appropriate or feasible, nor address other facets of the opioid epidemic, such as increasing heroin and nonprescribed fentanyl use. Furthermore, we acknowledge that counseling patients about overdose risk and meeting all opioid prescribing guidelines may be difficult in busy primary care practices, particularly in the face of other competing demands.[11]

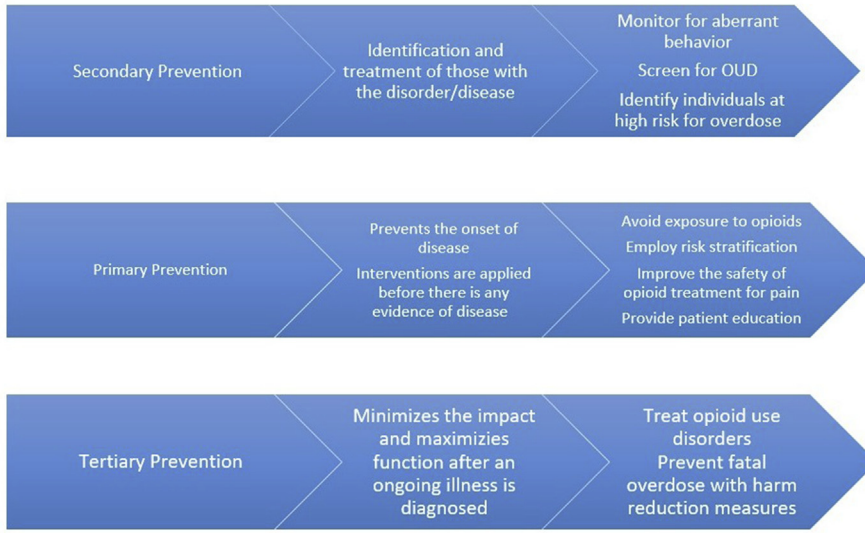

Fig. 1. Levels of overdose prevention.