The Evidence Supports Police Use of Naloxone

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The man was unresponsive, his breathing shallow. The Marin County, CA, police officer first at the scene located a pulse while the man’s companion reported that he had been using heroin.

The officer performed a sternum rub with no response. The man’s eyes were slightly open, though, and he could see that his pupils were pinpoint, almost not visible. Assuming heroin overdose, the officer removed naloxone from his AED bag and administered one 4 mg dose in the man’s left nostril. He continued to monitor the man, confirming that he still had a pulse, until EMS arrived a minute later. The man then responded to a sternum rub by EMS by blinking his eyes and gasping shallowly.

This report represents the sentinel Narcan administration in the county by law enforcement under a new program that stocks naloxone and trains police in its use. We were concerned about the potential for unintended consequences when we first heard about such programs.

What if the patient wakes up and becomes combative with law enforcement? What if professional addicts flee the scene or otherwise refuse EMS evaluation? What if such programs serve only to enable users, discouraging them from seeking addiction treatment? We turned to the comfort of our old friend, the warm and reassuring embrace of evidence-based literature, to assess the validity of our worries.

The Evidence

This topic breaks out into three important questions: Is law enforcement supportive of these programs? Is it safe to release opioid overdose patients at the scene after reversal? And what about synthetic fentanyl?

Law enforcement is not universally adopting these programs. Sheriff Richard K. Jones in Butler County, OH, made news this summer by publicly stating his line-in-the-sand refusal to have his officers carry naloxone, telling the Huffington Post: “This Narcan, all it does is save people’s lives for another day... You enable these people when you give them this Narcan.” (Huffington Post July 8, 2017; http://bit.ly/2CDihhE.)

The sheriff is surely not alone in holding this opinion, but some departments have successfully instituted naloxone programs. At least 220 are scattered around the country, and they have been deemed safe from liability. (Am J Public Health 2015;105(8):1530.) A survey of law enforcement personnel from the state of Washington (n=251) about a law providing immunity from prosecution to bystanders who administered naloxone for overdoses found mixed opinions on the concept. “Most of the positive comments (21 of 29 responses) indicated their reasoning simply as naloxone saves lives: ‘Don’t like drug use, but it’s more an illness than a crime, and it would be good to have something on hand that can assist with an OD,’” according to the survey in the Journal of Urban Health. (2013;90(6):1102.)

The existing literature suggests a qualified yes: It is safe to release opioid overdose patients at the scene after reversal. A study from San Antonio examined the outcomes of 552 treat-and-release overdose patients who received naloxone for an opioid overdose but were not transported by EMS. They did not uneath any deaths at two days and only nine at 30 days (with the shortest interval between ODs being four days, a delay sufficient enough to doubt the existence of correlation between naloxone reversal and adverse outcome). (Prehosp Emerg Care 2011;15(3):320.)

A 2016 literature review also found that first responders could safely administer naloxone to heroin OD patients and that those patients were safe for release prior to EMS transport if they had normal mentation and normal vital signs. (Clin Toxicol 2017;55(2):81.)

Finally, a freshly published systemic review of six studies on the topic concluded that nontransport after reversal of overdose with naloxone seems to be associated with a low rate of serious harm, but they appropriately noted that risks of transport versus nontransport have not been directly compared. (Ann Intern Med 2017;167(12):867.)

The new highly concentrated synthetic opioids such as carfentanil and acrylfentanyl could be game-changers. (EMN 2016;38(12):9; http://bit.ly/2CxbPz2; Clin Toxicol 2017;55(6):589.) Another study already reported a trend toward “deeper” overdoses requiring increasing rates of multiple naloxone doses by EMS nationwide, with the percentage of such patients increasing from 14.5 percent in 2012 to 18.2 percent in 2015, a 26 percent jump in four years. (Prehosp Emerg Care 2017;21(4):41.) The current evidence regarding safe treat-and-release from the field may need to evolve quickly what with the wider spread of highly concentrated opioids expected.

This may muddy the waters some, but it also supports the notion of law enforcement naloxone capability in another important way: law enforcement protection. A recent statement from the American College of Medical Toxicologists said that “workers who may encounter fentanyl or fentanyl analogs should be trained to recognize the signs and symptoms of opioid intoxication [in patients or colleagues], have naloxone readily available, and be trained to administer naloxone and provide active medical assistance.” (Clin Toxicol 2017 Sep 5;1-4; doi: 10.1080/15563650.20171373782.)

The Verdict

Some may equate first-responder naloxone programs to clean-needle and condom distribution, but we think such dismissal disregards its potential. Consider a teen who overdoses on synthetic opioids ordered over the internet, an elderly patient whose debilitated condition causes an accidental overdose with minimal narcotic dosage, a first responder who suffers an OD due to an aerosolized product, or even a heroin addict who turns things around after getting another chance. First-responder use of naloxone seems justified given the safety evidence, though it may not make a meaningful long-term difference every time.

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