



Narcan (Naloxone): Concerns and Recommendations



Background

Prescription drug abuse continues to be a national epidemic. In 2013 it was estimated that 6.5 million people aged 12 years and older reported using prescription medications for nonmedical reasons.ⁱ In that same year, 22,810 overdose deaths involved prescription medications.ⁱⁱ Some of the most commonly abused prescription medications are opioid pain relievers such as oxycodone, hydrocodone and morphine.ⁱⁱⁱ Since 2003, more overdose deaths have involved opioid analgesics than heroin and cocaine combined.^{iv}

Naloxone (marketed under the name Narcan) is a prescription opioid antagonist used in opioid overdoses to counteract life-threatening depression of the respiratory and central nervous systems.^v Naloxone comes as a solution that can be injected intravenously, intramuscularly, or subcutaneously and also comes as a pre-filled auto-injection device.^{vi} In April of 2014 the U.S. Food and Drug Administration (FDA) approved a hand-held auto-injector that rapidly delivers a single dose of Naloxone, intended for use by friends, family members or caregivers to treat an opioid overdose.^{vii}

Concerns

Several states have expanded access to Naloxone from medical professionals to first responders^{viii} and as of June 2014, 14 states have expanded prescription access of Naloxone to third parties (friends and family members).^{ix} Below are some legitimate concerns that have been raised by experts in both the medical and substance abuse prevention and treatment communities.

- The patient may have additional life-threatening issues and an untrained individual might not recognize the possible severe side effects of Naloxone. Severe side effects can include agitation, hypo- and hypertension, cardiac arrhythmias, dyspnea, pulmonary edema, encephalopathy, seizures, coma, and death.^x
- Other medical conditions can be mistaken for a drug overdose by an untrained individual and administering Naloxone and in these instances could be very harmful to an individual.
- Studies on the use of this drug in women who are pregnant or breastfeeding have not been done.^{xi}
- Abrupt reversal of opioid depression may result in nausea, vomiting, sweating, tachycardia, increased blood pressure, tremulousness, seizures, ventricular tachycardia and fibrillation, pulmonary edema, and cardiac arrest which may result in death.^{xii}

Recommendations

It is necessary for first responders, including emergency medical technicians, law enforcement and firefighters to have all the necessary tools and training to save the lives of individuals who have overdosed, including access to Naloxone.

If access is to be expanded beyond medical professionals and first responders, training should be required in order to obtain a prescription. Training should include at minimum the following:

- Training on risk factors for opioid overdose;
- Training on recognizing opioid overdoses;
- Training on responding to overdoses, including resuscitation techniques, calling for an ambulance and most importantly the administration of Naloxone;
- Education on the possible side effects of an abrupt overdose reversal; and
- Counseling on substance use intervention strategies (permitting access by friends and family may preclude the level of attention necessary for addressing the underlying addiction).

Recommendations Continued

Patients successfully treated with Naloxone should be kept under continued surveillance. The duration of some narcotics may exceed that of Naloxone;^{xiii} therefore, it is our recommendation that a requirement for immediate follow-up medical care be required when Naloxone is administered.

We recommend that third party prescriptions provided in the state of Florida for Naloxone include education on Florida's Substance Abuse Impairment Act, commonly known as the "Marchman Act" as well as information on how a family member can file a petition with the court to facilitate an assessment and/or treatment.

We recommend physicians prescribing Naloxone be trained to practice Screening, Brief Intervention, and Referral to Treatment (SBIRT). SBIRT is early intervention and treatment services for people with substance use disorders and those at risk of developing these disorders.^{xiv} The benefits of SBIRT include reducing healthcare costs and more importantly, the severity of drug use and risk of trauma.^{xv}

Lastly, we recommend that a pilot program be established that would track, compile and report the number of successful overdose reversals, number of individuals that required additional medical care, number of individuals who required more than one doses of Naloxone per overdose, number of individuals who have had more than one distinct Naloxone reversal (multiple overdoses reversed), and the number of individuals that were assessed and referred to substance abuse treatment.

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ⁱ Substance Use and Mental Health Estimates from 2013 National Survey on Drug Use and Health, Substance Abuse & Mental Health Services Administration. (Sept. 4, 2014), <http://www.samhsa.gov/data/sites/default/files/NSDUH-SR200-RecoveryMonth-2014/NSDUH-SR200-RecoveryMonth-2014.htm>

ⁱⁱ Prescription Drug Overdose in the United States: fact Sheet, CDC (last updated July 3, 2014). <http://www.cdc.gov/homeandrecreationalafety/overdose/facts.html>

ⁱⁱⁱ Drug Facts: Prescription and Over-the-Counter Medications, fact sheet NIH (last updated Dec, 2014). <http://www.drugabuse.gov/publications/drugfacts/prescription-over-counter-medications>

^{iv} CDC Grand Rounds: Prescription Drug Overdoses- a U.S. Epidemic <http://www.cdc.gov/cdcgrandrounds/archives/2011/01-february.htm>

^v Narcan Side Effects Center, Medical Editor: Charles Patrick Davis, MD, PhD, Rx List the Internet Drug Index. <http://www.rxlist.com/narcan-side-effects-drug-center.htm>

^{vi} Naloxone Injection, Medline Plus, <http://www.nlm.nih.gov/medlineplus/druginfo/meds/a612022.html>

^{vii} FDA News Release, FDA approves new hand-held auto-injector to reverse opioid overdose, April 3, 2014 <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm391465.htm>

^{viii} Matt Sledge, Eric Holder Calls On First Responders To Carry Naloxone, Anti-Overdose Drug, Huffington Post (April 16, 2014). http://www.huffingtonpost.com/2014/04/16/eric-holder-naloxone_n_5160717.html

^{ix} Naloxone Access Statutes, National Alliance for Model State Drug Laws (June 19, 2014). <http://www.namsdl.org/library/16CE4FDC-19B9-E1C5-3175B29881A03FBC/>

^x Narcan Side Effects Center, Medical Editor: Charles Patrick Davis, MD, PhD, Rx List the Internet Drug Index. <http://www.rxlist.com/narcan-side-effects-drug-center.htm>

^{xi} Narcan Side Effects Center, Medical Editor: Charles Patrick Davis, MD, PhD, Rx List the Internet Drug Index. <http://www.rxlist.com/narcan-side-effects-drug-center.htm>

^{xii} Narcan Side Effects Center, Medical Editor: Charles Patrick Davis, MD, PhD, Rx List the Internet Drug Index. <http://www.rxlist.com/narcan-side-effects-drug-center.htm>

^{xiii} Naloxone Dosage, Drugs.com <http://www.drugs.com/dosage/naloxone.html>

^{xiv} Screening, Brief Intervention, and Referral to Treatment (SBIRT) <http://www.samhsa.gov/sbirt>

^{xv} SBIRT: Screening, Brief Intervention, and Referral to Treatment, Opportunities for Implementation and Points for Consideration, Substance Abuse & Mental Health Services Administration, http://www.integration.samhsa.gov/SBIRT_Issue_Brief.pdf