

The Perceptions of Implementing a Narcan Take Home Kit

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Abstract

Prescription opioid use is a recommended treatment for different types of pain (Dowell, Haegerich, & Chou, 2016). The risk of potential overdose is increased in patients prescribed opioids when several factors are present; chronic opioid therapy, males, older age, taking multiple prescriptions especially benzodiazepines, mental health disorders, lower socioeconomic status, when prescribed dose is 100 mg of morphine equivalents or greater per day, history of illicit opioid use, previous opioid overdose, and alcohol use (WHO, 2014; Ray & Lukens, 2017). The purpose of this project was to pilot implement a Narcan Take-Home Kit Program and identify the obstacles, perceptions, and barriers of the providers prior to implementation of the program. A questionnaire consisting of thirteen questions, consisting of a Likert scale, was distributed to the providers of a pain clinic. The outcome of the project was favorable. Providers agreed that Narcan can be safely administered by a lay person and did not feel legally responsible for the use. The project response was small; future studies are needed to identify obstacles, perceptions, and barriers of the implementation of a Narcan Take Home Kit.

Keywords: Narcan access, prescribing Narcan, providers perceptions of Narcan administration, Narcan take home kit

The Perceptions of Implementing a Narcan Take Home Kit

Prescription opioid use is a recommended treatment for different types of pain (Dowell, Haegerich, & Chou, 2016). However, using opioid medications does not come without risk. One of the deadliest risks associated with opioid use is overdose and misuse (Dowell, Haegerich, & Chou, 2016). Overdoses may be intentional or unintentional. More than 475,000 emergency room visits in 2009 were linked to the abuse of prescription pain medications (Centers for Disease Control [CDC], 2011). This number is only expected to rise and opioid prescribing continues. The CDC (2017) reports deaths associated with opioids were five times higher in 2016 than in 1991.

The risk of potential overdose is increased in patients prescribed opioids when several factors are present; chronic opioid therapy, males, older age, taking multiple prescriptions especially benzodiazepines, mental health disorders, lower socioeconomical status, when prescribed dose is 100 mg of morphine equivalents or greater per day, history of illicit opioid use, previous opioid overdose, and alcohol use (WHO, 2014; Ray & Lukens, 2017). However, just because one of these risk factors is present does not mean the patient's pain should not be treated. A patient that is high risk of an overdose needs access the reversal agent. Narcan (naloxone), is a Food and Drug Administration (FDA) approved medication to reverse opioid overdoses (FDA, 2018). In the past, Narcan has only been available to hospital and emergency professionals to administer, but Narcan has been proven to be effective in reversing opioid associated overdoses when used by the layperson (Wheeler, Jones, Gilbert, & Davidson, 2015; Harm Reduction Coalition, 2014; Open Society Foundations, n.d.).

Currently, there is not a formal Narcan Take Home Kit program where patients have access to Narcan in the Des Moines Metro Area. The evidence shows, this is a safe and effective

program for the treatment of opioid overdoses. The purpose of this project was to pilot implement a Narcan Take-Home Kit Program and identify the obstacles, perceptions, and barriers of the providers prior to implementation of the program.

Background of the Problem

Opioids are prescribed to patients within a community setting for a variety of reasons and for pain management. Some patients have other chronic conditions that are being treated with a variety of medications. Adding opioids to a long list of medications can put the patient at risk of adverse effects. There are many organizations that recognize the risk associated with opioid prescribing; the CDC, WHO, Institute of Medicine, the Harm Reduction Coalition, and Healthy People 2020.

In 2010, there were enough prescription pain killers prescribed in the United States to which every American adult could take around the clock dosing of opioids for one month (CDC, 2014). The high number of opioids being prescribed translates to an enormous amount of prescription pain killers being available to the public. This can lead to misuse, abuse, addiction, and overdose. Overdose deaths associated with opioids were five times higher in 2016 than in 1999 (CDC, 2017). These overdoses may be intentional; the patient takes more medication than prescribed, or unintentional; the opioid was taken with other chronic health conditions and medications. Regardless of the person's intent, overdoses are occurring within communities. Most opioid overdoses occur in the patient's private home and are witnessed (WHO, 2014). Safe practices need to be implemented. As a result, Healthy People 2020 (2018) has published the following objective "Increase the safe and effective treatment of pain."

The growing opioid epidemic and lives lost has raised concern for the American people. The WHO was called upon in 2010 to provide guidance in reducing deaths associated with

prescription pain killers (WHO, 2014). One of the suggestions that came about was access to Narcan (naloxone). The Harm Reduction Coalition (2014) and The National Academies of Sciences Engineering Medicine (Bonnie, Ford, & Phillips, 2017) support the access and distribution of Narcan within the community to prevent death from opioid overdoses. Having access to the antidote to opioids and knowing how to administer it saves lives (Harm Reduction Coalition, 2014).

Research Purpose

Narcan (naloxone) is the antidote to reverse the effects of opioid analgesics. The availability and use of Narcan has been limited to the hospital setting and emergency medical professionals. Narcan is recommended and can safely be administered by non-health care professionals within the community, if proper tools are available (Walley et al., 2013; Lewis et al., 2016; Jones, Lurie, Compton, 2016). Perceptions of providers were explored with the implementation of a Narcan Take Home Kit.

Review of Literature

The CINAHL and Medline databases searches identified literature for this review. The search terms used were “Narcan Take Home Kit,” “increasing Narcan access,” “prescribing Narcan,” and “Narcan distribution program.” With both databases, limitations were placed on the search to include articles in the English language between 2012 and 2018 and restricted to research within the United States. Six articles within Medline and five articles within CINAHL were identified. Abstracts eliminated articles from further consideration when a Narcan was not discussed within a community setting.

A copy of each article considered was acquired and read. The history/use and theoretical framework were all identified. The largest reason for excluding papers was lack of discussion of

Narcan use by the lay person and when Narcan distribution was used for intravenous drug use. There is limited research of a Narcan Take Home Kit within a clinic setting, most research is done around illicit drug abuse and the use of Narcan within the community.

History/Use of Narcan

Narcan has been the reversal agent of opioids since 1971 (Adapt Pharma Inc., 2017). The movement of Narcan from healthcare providers hands to the hands of general members of the community began almost 20 years ago. Since having access to Narcan within a community setting, programs have showed success by increasing public knowledge around overdoses and administration of Narcan. Deaths associated with opioid overdoses have also been prevented.

A study large observational conducted on the impact of overdose education and naloxone distribution program in Massachusetts indicated a significant decrease in opioid overdose deaths as compared to those communities that did not have a program (Walley et al., 2013). Between 2006 and 2009, 2,912 opioid users and nonusers were provided Narcan and education; 327 doses of Narcan were reported as administered in 153 overdoses with a successful reversal reported 98% of the time (Walley et al., 2013). Additionally, the Baltimore Student Harm Reduction Coalition initiated a Narcan program in 2014. Of the 285 participants who received training and a take home Narcan kit, three successful overdose reversals were reported (Lewis et al., 2016). Another important aspect of the study was the increase in prevention, identifying, overdose treatment significantly increased after training and was retained for at least 12 months (Lewis et al., 2016).

Narcan does not need to come from a free, community program. In a study by Jones et al., (2016), showed within US Retail Pharmacies, there was a 1170% increase of Narcan dispensing from 2013 to 2015. As a part of safe practice, outpatient providers are able and can

prescribe Narcan to his or her patients. However, the article does suggest future studies on the facilitators and perceptions of Narcan distribution programs (Jones et al., 2016).

A similar study to The Perceptions of a Narcan Take Home Kit was conducted on pharmacists in Canada (Edwards, Bates, Edwards, Ghosh, & Yarema, 2017). These pharmacists were screened on the thoughts of screening high risk patients for a Narcan Take Home Kit. Results showed an overall positive reaction to the program and willingness in participating in the project (Edwards et al., 2017). Barriers included time and educational material supplied to the pharmacists to use (Edwards et al., 2017).

Summary of Literature Review

After a literature review this history/use of Narcan Take Home Kits and theoretical framework were identified. Evidence showed that the use of Narcan within the community is beneficial and can reduce opioids associated deaths. Research is limited around use of Narcan Take Home Kits within a clinic setting, most research focuses on Narcan use and illicit drug use.

Theoretical Framework

Betty Neuman's Health Care Systems Model (1972) provides a system-based approach to nursing practice. The theory follows the patient from a state of well-being, to disease stricken, and back to well-being, The Health Care Systems Model provides comprehensive care to the patient, regardless of the state of being in which he or she is in using primary, secondary, and tertiary care (Current Nursing, 2012).

There are many concepts within Neuman's Health Care Systems Model and nursing interventions that can be implemented based on the state of well-being of the patient. In the central core of the Health Care Systems Model, unique patient characteristics maintain stability (Current Nursing, 2012). Various lines of defense surround the core, helping to maintain

stability. These lines are the normal line of defense and flexible line of defense (Ahmadi & Sadeghi, 2017). Stressors affect lines of defense and alter system stability (Ahmadi & Sadeghi, 2017).

The current state of opioid addiction in the United States is a result of prescribing habits of providers (Bonnie et al., 2017). These prescribing habits are considered stressors in Neuman's model, making opioids available to misuse, abuse, and divert. Because of these stressors, the lines of defense are altered. When all lines of defense fail, the patient moves towards illness or death, entropy (Current Nursing, 2012). Today's health care system and patients are in a state of entropy.

The nurse, and other health care providers, must implement interventions to prevent adverse effects and return patients back to stability, reconstitution (Current Nursing, 2012). As reconstitution occurs, the patient and health system move back towards stability or negentropy (Current Nursing, 2012). Health care providers and patients must make this move.

Implementing an opioid risk assessment may provide information to providers and patients that could stability back into the system, or health of the individual, moving both to negentropy.

Narcan use within the community relates to Betty Neuman's Health Care Systems Models brings clarity to the current opioid situation; entropy. It also identifies the need to assist patients and the health care system back to a state of stability by preventing safe, effective treatment of opioid overdoses.

Methodology

Perceptions of Implementing a Narcan Take Home Kit was a qualitative descriptive study. Non-probability and convenience sampling were used. The project was conducted at Mercy Center for Pain Medicine. An approval letter was obtained. Subjects involved were

health care providers on all levels practicing within the clinic who prescribe narcotics and opioids to patients within the clinic. Inclusion criteria of subjects include being over the age of 19, reads and understands English, MD, DO, and APRNs who have prescribing authority, and agree to participate in the study and complete the online survey. Exclusions of the subjects are non-readers of English, under the age of 18, and providers not practicing at Mercy Center for Pain Medicine. There are no exclusions regarding length of experience, age, gender, socioeconomic status or ethnic racial minority populations.

A participant letter and Survey Monkey questionnaire was sent to all providers via email by the director of the clinic. The questionnaire contained thirteen questions consisting of a Likert scale ranging from strongly agree to strongly disagree. The study asked the health care provider his or her perceptions of implementing a Narcan Take Home Kit program.

Responses from the questionnaire provided descriptive data. None of the data was able to be linked to individual participants or institutions; no personal data was collected. The collection of data/survey responses is completely anonymous. The results were analyzed and interrelated and described for readers.

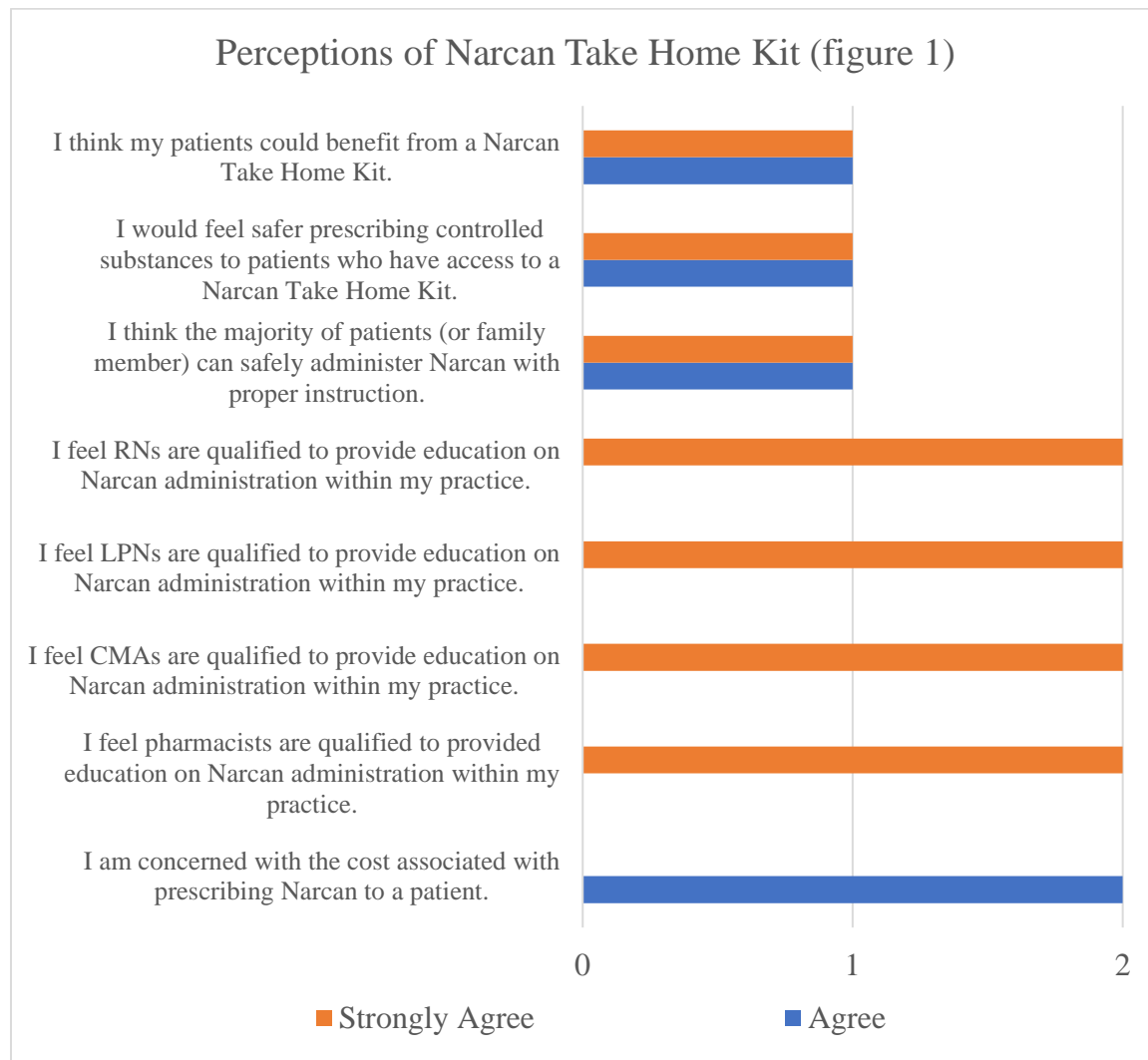
Summary of Findings

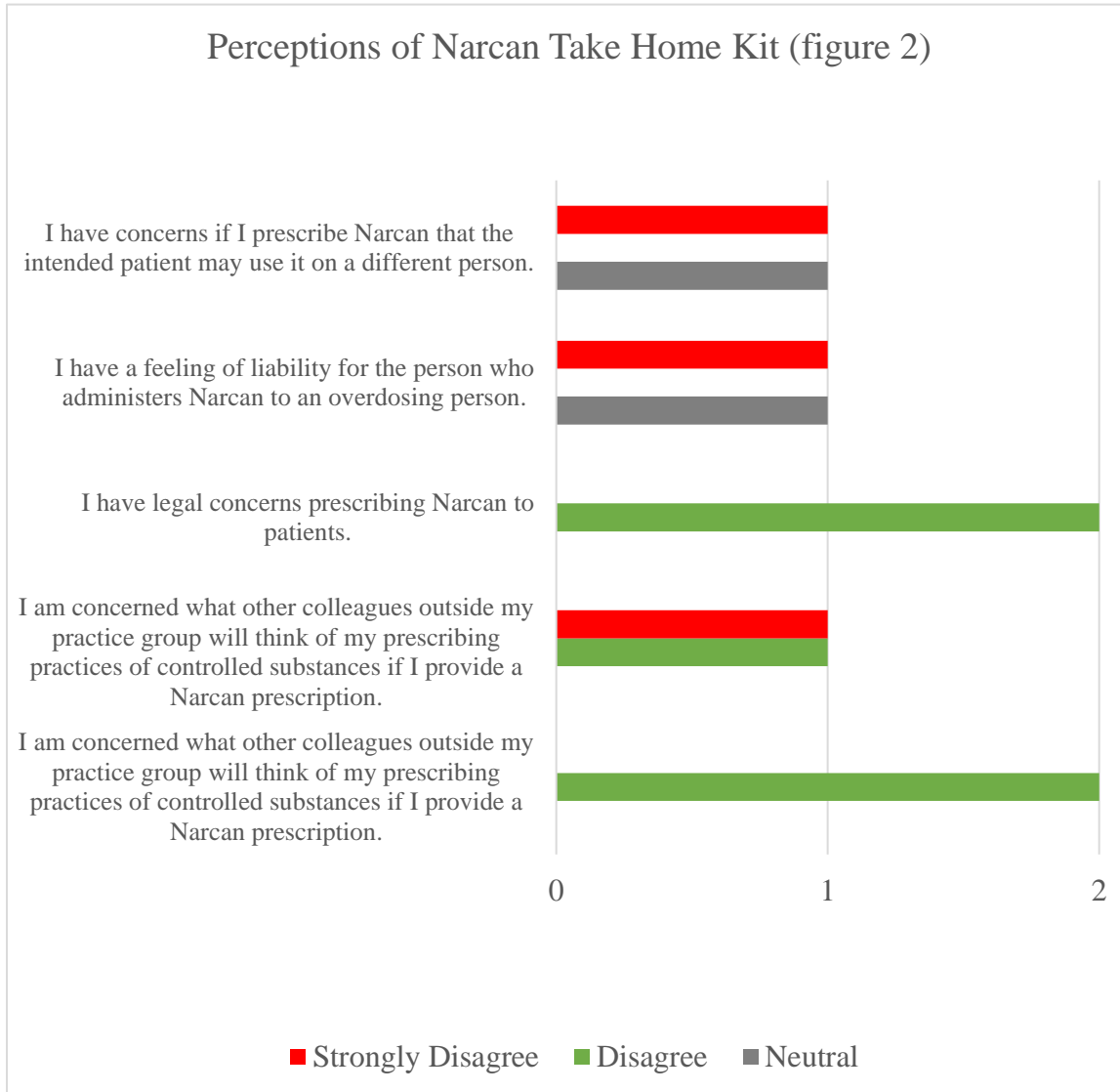
Results from the survey showed similar perceptions between providers towards Narcan Take Home Kits. Most perceptions explored were favorable when it comes to prescribing Narcan Take Home Kits. Two out of nine providers responded to the survey. The small sample size and small number of respondents does indicate the need for further research.

Among the providers who responded, perceptions were positive or favorable in regards to patients benefiting from a Narcan Take Home Kit feeling safer prescribing controlled substances to patients having access to a kit and patients and/or family members can safely administer

Narcan after instruction (figure 1). In regards to patient education, providers all strongly agree that RNs, LPNs, CMAs, and/or pharmacists are qualified to do so (figure 1).

Providers also feel that Narcan will be used on the person it was prescribed to and do not have a feeling of liability for the person who administers Narcan to an overdosing person (figure 2). Providers consistently disagreed with what other colleagues within and outside their practice will think of individual prescribing practices of controlled substances if Narcan is prescribed (figure 2). Both providers surveyed agreed with concerns with the costs associated with Narcan Take Home Kits (figure 1).





Conclusions and Recommendations

Evidence shows Narcan can safely be prescribed and administered by the lay person. By examining perceptions and barriers of providers prior to implementing a Narcan take home kit, positive perceptions were identified towards lay person use and resources available to provide education. Providers did not feel legally responsible for the lay person administering Narcan. The providers surveyed also did not feel other providers would have negative feelings towards

him/her if prescribing Narcan. A barrier of implementing the program include the cost associated with Narcan.

Perceptions in this study were similar, but the study was limited with only two participants. Future studies should include more participants. An increase in participation with this study could have been achieved with a longer period for participants to respond, incentives by responding, and reminders provided in a variety of ways to respond to the survey.

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