A content review of online naloxone Continuing Education courses for pharmacists in states with standing orders

Delesha M. Carpenter[a,*], Courtney A. Roberts[b], Salisa C. Westrick[c], Stefanie P. Ferreri[b], Korey A. Kennelty[d], Kevin A. Look[e], Olufunmilola Abraham[f], Courtenay Wilson[a,g]

[a] Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, Asheville, NC, USA
[b] Eshelman School of Pharmacy, University of North Carolina at Chapel Hill, Chapel Hill, NC, USA
[c] Harrison School of Pharmacy, Auburn University, Auburn, AL, USA
[d] College of Pharmacy and Carver College of Medicine, University of Iowa, Iowa City, IA, USA
[e] School of Pharmacy, University of Wisconsin-Madison, Madison, WI, USA
[f] Department of Pharmacy and Therapeutics, University of Pittsburgh, Pittsburgh, PA, USA
[g] Mountain Area Health Education Center, Asheville, NC, USA

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ABSTRACT

Background: Many community pharmacists are uncomfortable educating patients about naloxone, an opioid reversal agent.

Objective: To examine whether training materials prepare pharmacists to counsel patients and caregivers about naloxone, online naloxone education materials for pharmacists in the 13 states with standing orders were analyzed.

Methods: Two coders reviewed 12 naloxone training programs and extracted data for 15 topics that were clustered in four categories: background/importance, naloxone products, business/operations, and communication. Programs that included communication content were coded for whether they: 1) suggested specific verbiage for naloxone counseling; 2) recommended evidence-based communication practices; and 3) included example naloxone conversations.

Results: Most programs covered the majority of topics, with the exception of extended treatment for individuals who overdose and naloxone storage/expiration information. Eleven programs addressed pharmacist-patient communication, although information on communication was often limited. Only one program included an example pharmacist-patient naloxone conversation, but the conversation was 10 min long and occurred in a private room, limiting its applicability to most community pharmacies.

Conclusions: Online naloxone training materials for pharmacists include limited content on how to communicate with patients and caregivers. Training materials that include more in-depth content on communication may increase pharmacists' confidence to discuss the topics of overdose and naloxone.

1. Introduction

Over the past 20 years, opioid-related overdoses have increased fourfold,[1,2] killing more than 33,000 people in 2015.[1] Given increases in opioid deaths, many states have granted pharmacists authority to dispense naloxone, an opioid reversal agent. In fact, as of January 2017, pharmacists in 13 states (AL, GA, IN, IA, MD, MI, NC, PA, SC, TN, UT, VA, WI) are able to dispense naloxone without a physician prescription pursuant to a statewide standing order.[3,4] As such, community pharmacists now have a significant opportunity to prevent opioid-related overdose deaths by dispensing naloxone and educating patients who take opioids and their caregivers about how to use naloxone.

Dispensing naloxone is new to pharmacists' role and many barriers exist that can prevent pharmacists from recommending, dispensing, and counseling patients and caregivers on naloxone use. For example, recent reports show that a majority of community pharmacists do not feel comfortable dispensing naloxone[5] or educating patients about how to use it.[6] Pharmacists who are less comfortable counseling about naloxone may be less likely to dispense it,[7] reducing the potential positive impact that pharmacists can have on reducing opioid-related deaths. Studies outside the area of naloxone have shown that tailored communication between pharmacists and patients can improve patient

medication adherence and reduce medication costs.[8] One way to effectively increase pharmacists' self-efficacy, or confidence, to counsel about naloxone is through training that models effective communication strategies[9–13]; however, whether existing naloxone training programs for pharmacists include communication-related content is unknown.

The study's purpose was to examine whether training materials prepare pharmacists to counsel patients and caregivers about naloxone. Online naloxone education materials for pharmacists in the 13 states with standing orders were examined, with a particular focus on content related to pharmacist-patient and pharmacist-caregiver naloxone communication. Caregivers were defined as third parties (e.g., parents, friends, police, clergy) who obtain naloxone in order to administer it to another person who has overdosed.

2. Methods

For the 13 states that have standing orders, each state's Board of Pharmacy (BOP) and State Pharmacy Association (SPA) website was identified. Naloxone training programs listed on each state BOP/SPA website were eligible for review if they: 1) were accredited by the Accreditation Council for Pharmacy Education (ACPE); 2) offered current Continuing Education (CE) credit at the time of the review (April 2017); 3) were offered at no charge to view by members of the state's Pharmacy Association and/or the general public; 4) were available online (e.g., article, online course, website, or webinar); and 5) were specific to naloxone education (i.e., excluded broad substance abuse education). If a BOP or SPA website recommended a training program from a national organization, such as PrescribetoPrevent.org, the program was included for review if it met the above criteria.

In the first step of the review process, two coders independently reviewed several training programs and identified the topics that were covered. They then met with six pharmacists to review findings and identify which topics would be included in the codebook. The pharmacists had worked in a wide range of practice settings including academia, chain and independent community pharmacies, inpatient and outpatient facilities/clinics, and hospitals, and had 7–20 years of clinical experience. Relevant experiences of these pharmacists to the current study include researching opioid and substance abuse treatment trends, teaching students about naloxone, designing interventions to curb opioid prescription diversion, and starting an Office Based Opioid Treatment Service and naloxone co-prescribing program. A total of 15 topics were identified. Those topics were categorized into 4 broad areas: background/importance, naloxone products, business/operations related to stocking and dispensing naloxone, and communication with patients/caregivers. The background/importance category included four topics: (1) prevalence of opioid overdose/epidemic statistics; (2) at-risk patients, (3) what naloxone is used for/signs of an overdose; and (4) extended care recommendations. Extended care recommendations are defined as linking patients with resources and programs post-overdose, such as substance abuse treatment programs. The naloxone products category included six topics: (1) formulations of naloxone/how it is supplied; (2) selecting an appropriate naloxone product for a patient (e.g., convenience, cost, preference); (3) how naloxone works/mechanism of action; (4) how to use/administer naloxone; (5) immediate follow-up care (e.g., what to do immediately after an overdose), and (6) side effects. The business/operations category included the three topics of storage/expiration information, billing/insurance (e.g., acquisition and reimbursement), and standing order legislation/requirements for billing. The category of communication included any information that focused on how to communicate with patients and/or caregivers about naloxone.

In the second step, for each training program, two independent coders used the codebook to document whether each topic was covered. For programs that included content on pharmacist-patient communication, the coders also documented whether the program: 1)

suggested specific verbiage for naloxone counseling; 2) recommended evidence-based communication strategies (e.g., teach-back, reflective listening, videos or handouts to share with patients/caregivers); and 3) included example pharmacist-patient or pharmacist-caregiver conversations about naloxone. Verbatim content related to verbiage and evidence-based communication strategies was extracted for the table in order to provide greater detail about communication recommendations. Information about the program's presentation format (e.g., pre-recorded webinar, website), length of time/number of paragraphs dedicated to communication, and target of communication (patient, caregiver, or both) also was recorded. The content analysis process used in the current study is highly similar to what has been used in other content analysis studies.[14]

In all but eleven instances, reviewers agreed on whether topics were covered (kappa score = 0.96). In cases of disagreement, reviewers met and reached consensus on the discrepancy.

3. Results

Twelve naloxone training programs met the inclusion criteria (Fig. 1). Five states (North Carolina, Iowa, Pennsylvania, Virginia, and Wisconsin) had their own online training programs that were included in the review. Several states that did not have their own naloxone training programs linked to the same external training programs; thus, the total number of programs reviewed does not equal the total number of states included in the review. Most programs (n = 9) were approximately 1 h (for webinar format) or an average of 10 pages (for written format) in length.

Table 1 shows that the vast majority of content areas were addressed by the training programs. With regard to the background/importance category, all programs covered the topics of at-risk patients and what naloxone is used for/signs of an overdose. Eleven of 12 programs included information on opioid overdose/epidemic statistics. However, only 50% of programs covered the topic of extended treatment for people who experienced an overdose.

For the naloxone product category, 100% of programs covered the topics of how naloxone works, how long naloxone is active, and immediate post-overdose follow-up care. Only one program did not include information on how to use/administer naloxone; however, information on this topic was included in a different section on the website. Most programs (10 of 12) covered the topic of selecting an appropriate naloxone product for patients.

Coverage of topics in the business/operations category was less consistent. Only half of programs included information on storage and expiration and 66% discussed billing/insurance information. All programs, however, provided information on standing order legislation.

Eleven of the 12 programs addressed how to communicate about naloxone (Table 2) Most programs dedicated 3 min or less (for webinar format) or 6 paragraphs or less (for written formats) to the topic of pharmacist-patient communication. Half of programs were targeted to pharmacist-patient communication, while the other half included content general enough for pharmacist communication with patients and caregivers.

Eight programs included specific verbiage to use during naloxone conversations, with the most common recommendation being to use the words "bad reaction" or "accidental overdose" instead of "overdose" (n = 5). Often, this recommendation was made in order to reduce stigma that is associated with using the word "overdose." Three programs also suggested making an analogy to an "Epi-pen" (n = 3) or "fire extinguisher" (n = 3) when discussing naloxone. One program suggested referring the patient back to the physician to obtain a co-prescription for naloxone.

Seven programs recommended evidence-based communication strategies. Specifically, four programs recommended using teach-back or patient handouts and videos. Demonstration devices (n = 3) and motivational interviewing (n = 2) were also recommended. With the