

Training Student Pharmacists to Recommend and Dispense Naloxone: Is a Written Continuing Educational Model Enough?

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Conclusion

- A simulated laboratory activity prepared third year pharmacy students to recommend, prescribe, and dispense naloxone
- Pharmacy student knowledge increased
- Pharmacy student confidence increased
- Value is added for live training

Background

- North Dakota pharmacists are given full prescribing authority for naloxone
- Pharmacists must register with the North Dakota Board of Pharmacy and attest to completing one hour of topic relevant education
- Prior to participating in a 1-hour lecture and 2-hour laboratory, students completed a one hour online training module sufficient for meeting the state requirement

Objectives

- To determine if pharmacy students' knowledge and confidence of recommending and dispensing naloxone increases after participation in a 1-hour lecture and 2-hour laboratory
- Activity learning objectives:
 - Recommend, prescribe, and dispense naloxone
 - Counsel a patient on available forms of naloxone
 - Utilize a faculty-developed toolkit with relevant resources to aid in recommending, prescribing and dispensing naloxone

Methods

- Participate in a 1-hour lecture and 2- hour simulated laboratory activity
- Complete a survey before and after the activity. Pre-survey was administered 12 weeks after the online training. survey was delivered immediately after the laboratory activity.

Figure 1. Laboratory Activity



Results

- 77 students completed the pre and post-surveys
- A Paired Sample T-Test analyzed survey items
- Five of the six knowledge questions showed a significant ($p<0.05^*$) gain in knowledge
- All confidence survey questions showed a significant gain in confidence

Table 1. Mean Ratings of Confidence
1=Strongly Agree 3=Neutral 5=Strongly Disagree

Question	Pre	Post
I feel confident in my ability to counsel patients how to respond to an emergency opioid overdose situation	2.89	1.56
I feel confident in my ability to instruct patients on the signs of overdose	2.24	1.59
I feel confident in my ability to counsel patients on how to administer naloxone via the intranasal route (Narcan)	2.94	1.53
I feel confident in my ability to counsel patients on how to administer Evzio auto-injector.	2.91	1.49
I feel confident in my ability to counsel patients on how to administer naloxone with a vial and syringe	2.76	1.54
I feel confident in my ability counsel patients on how to administer naloxone via the intranasal route with an atomizer.	3.19	1.61
I feel confident in my ability to determine if a patient is at risk for opioid misuse	2.27	1.69
I feel confident in my ability to identify patients who should be prescribed naloxone	2.54	1.61
I feel confident in my ability to initiate a conversation with a patient and recommend the possession of naloxone	2.79	1.77

Table 2. Percentage of Correct Responses

Question Topic	Pre	Post
Risks associated with naloxone use*	84%	99%
What to do if an overdose victim doesn't respond to naloxone*	87%	100%
Proper position in which to place an overdose victim	91%	99%
Storage conditions for naloxone*	26%	89%
Third-party prescribing*	84%	100%
State requirement for naloxone consultation*	64%	96%