Operation Naloxone: Multi-Institutional Opioid Overdose Prevention Service Learning For Health Professions Students

Lubna Mazin; Lucas G. Hill, PharmD; Kirk E. Evoy, PharmD; Kenneth A. Lawson, PhD

BACKGROUND

• 2015 American deaths

HIV 6,138
Gun Violence 35,763
Motor Vehicle Crashes 37,757
Drug Overdose 52,404

• The United States Department of Health and Human Services identified expansion of the use and distribution of naloxone as one of the three priority areas to focus the opioid-drug related overdoses and deaths initiative.

• All U.S. states and D.C. have enacted legislation to increase naloxone access, often by empowering pharmacists to dispense it under a standing order.

OBJECTIVES

• To use a “train the trainer” model to allow students and community members to engage in service learning to respond to opioid overdoses with naloxone.

• To determine the effect of participation in outreach events on overdose-related knowledge retention, self-efficacy ranking, and attitudes regarding harm reduction interventions.

METHODS

• Initial assessment administered
• 90-minute Train-the-trainer seminars

• Follow-up assessment administered immediately after seminar
• Contact information collected
• Opportunities for service learning activities
• 2nd follow-up assessment administered after 3 months.

Assessment Content:

Knowledge (9): Multiple choice questions
Self-efficacy (2): Five-point Likert scale questions*
Attitudes regarding Harm Reduction (4): Five-point Likert scale questions*

*Likert scale was ordered as 1 = strongly disagree to 5 = strongly agree; the higher the score the more self-efficacy the participants believed they had or the more positive their attitudes were towards harm reduction strategies.

RESULTS

Community Outreach Service Learning Activities:

Opioid Overdose Trainings (High-Intensity)
Tabling Events (Low-Intensity)

Table 1: Difference in Mean Scores

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>NO PARTICIPATION (N=80)</th>
<th>PARTICIPATION (N=40)</th>
<th>Score Difference</th>
<th>P VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>KNOWLEDGE</td>
<td>6.24 (± 1.46)</td>
<td>6.36 (± 1.51)</td>
<td>0.12 (0.644)</td>
<td></td>
</tr>
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<td>SELF-EFFICACY</td>
<td>7.46 (± 1.27)</td>
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Table 2: Mean Score of Follow-up Assessment Questions Based on Participation in Service Learning Event

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DISCUSSION

• Initial train-the-trainer seminar improved overdose-related knowledge, self-efficacy ranking, and attitudes regarding harm reduction.

• There was significant increase in scores from pre-assessment to post-assessment and pre-assessment to 3-month follow-up assessment.

• Some of this benefit was retained after three months; however, knowledge and self-efficacy scores significantly decrease from post-assessment to 3-month follow-up.

• Operation Naloxone opioid overdose prevention service learning was beneficial to students and made an impact on the community. Several opioid overdose reversals have been reported as a result of opioid rescue training and naloxone distribution.

• Students who participated in community outreach events did not exhibit superiority for any outcomes at follow-up.

FUTURE PLANS

• High-intensity events (trainings) will be prioritized over low-intensity events (tabling) to ensure educational value for participating students.

• Establishment in other Colleges of Pharmacy including Texas A&M, University of Houston, and University of Texas El Paso.

CONTACT

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REFERENCES

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90-minute train-the-trainer seminar:

• Opioid overdose epidemiology
• Risk factors
• Symptoms
• Overdose response training
• Case scenarios