Changes in Provider Beliefs About Opioid Harm Prevention in Older Adults After an Interprofessional Conference

Lindsey Hohmann [a], PharmD, PhD; Ariel Dulaney [a], PharmD; Anne Taylor [a], PhD; Renee Delaney [a], MBA; Haley Phillippe [a], PharmD

[a] Auburn University Harrison College of Pharmacy, Auburn, AL, USA

AUBURN UNIVERSITY
Harrison College of Pharmacy

INTRODUCTION

- Older adults (≥65) are at heightened risk for opioid-related harms.[1]
- Changes in pharmacokinetics with age lead to increased risk of opioid-related respiratory depression and overdose.[1]
- Opioid misuse in older adults may be mis-diagnosed as symptoms of normal aging.[2,3]
- Despite critical need, healthcare professionals lack training in opioid harm prevention strategies for this population.

OBJECTIVES

- Therefore, this study aimed to improve healthcare professional knowledge and beliefs regarding opioid harm prevention in older adults.

METHODS

- **Study Design:** Quasi-experimental one-group pretest-posttest study.
- **Intervention:** 8-hour interprofessional conference.
- **Participants and Recruitment:** Healthcare professionals across the southeastern United States were recruited via email.
- **Data Collection:** Anonymous online survey distributed at pre- and post-conference.
- **Survey Instrument:** Developed by the investigators, informed by the Theory of Planned Behavior[4] and Health Belief Model.[5]

Measures	Scale	Data Analysis
Intention to join a Microsoft Teams working group for collaboration	• Post • 1-item multiple choice	• Descriptive statistics • Wilcoxon signed-rank tests to assess differences in outcomes from pre- to post-conference (α = 0.05)
Knowledge of opioid use and misuse in older adults	• Pre and post • 5-item multiple choice	
Attitudes surrounding prescribing and dispensing of opioids and medications for opioid use disorder (MOUD) (5-items)	• Pre and post • 5-point Likert-type scales from 1=strongly disagree to 5=strongly agree	
Perceived susceptibility to opioid-related harm (4-items)		
Perceived barriers to opioid harm prevention in older adults (17-items)		

RESULTS

Mean(SD) knowledge (83.73%[19.92] vs 90.67%[12.45]; p=0.011) and perceived susceptibility (3.82[0.63] vs 4.03[0.63]; p=0.002) increased from pre- to post-conference, while perceived barriers decreased (2.71[0.54] vs 2.54[0.58]; p=0.001).

34.7% intended to join the Teams working group post-conference.

Table 1. Conference Topics and Learning Objectives (N = 75)

Session Title	Learning Objectives
Current Overdose Trends in the United States and in Older Adults	• Review current trends in the opioid epidemic and substance use disorders • Discuss the relevance of substance use disorder trends to older adult populations • Examine prescription and illicit potential drugs of abuse
Opioid Prescribing in the Elderly	• Review CDC prescribing guidelines for opioids with special attention to older adults. • Discuss options for treating pain in the population of older adults. • Utilize case studies to analyze practical applications of utilizing opioids for pain management in older adults with comorbid conditions.
Introduction to Medications for Treatment of Opioid Use Disorder	• Define opioid use disorder (OUD) • Describe medications to treat OUD • Examine myths related to OUD • Discuss the benefits and risks specific to the older adult population related to OUD.
Substance Use Resources for Older Populations	• Identify resources available for those with SUD • Explain how individuals gain access to treatment resources • Describe challenges and barriers for individuals with SUD to receive resources
Managing Opioid Overdose and Naloxone	• Describe how to manage an opioid overdose. • Apply opioid overdose management prevention strategies to older adult patients. • Demonstrate how to administer naloxone in the case of an opioid overdose.
Prescription Drug Monitoring Program (PDMP)	• Discuss the utilization of Prescriber and Patient reports available in the Prescription Drug Monitoring Program (PDMP). • Review "Best Practices" for utilizing the PDMP to assess a patient's risk of misuse or overdose. • Evaluate a patient case using data housed in the PDMP.
Drugs of Abuse and Fentanyl Test Strips	• List the most common substances used by older adults • Describe the role of fentanyl in the recent increase in overdose deaths • Explain how to use fentanyl test strips • Identify some limitations of fentanyl test strips
Medication Labeling Best Practices Among Older Adults	• Identify common medication errors in older adults • Determine medication labeling best practices for older adults
Enhancing Patient Care Through Collaboration	• Explore participant base knowledge of conference related subject matter • Orient participants to networking platform/resources to encourage participants to collaborate post conference • Examine the effects of an interdisciplinary approach to patient care

Table 2. Changes in Overall Knowledge, Attitudes, Perceived Susceptibility, and Perceived Barriers Scale Scores from Pre- to Post-Conference (N = 75)

Measures	Time	Cronbach's Alpha	Mean (SD) Median (IQR)	Effect Size [a]	p-Value
Overall Knowledge Score, % Correct	Pre	-	83.73 (19.92) 80.00 (80.00, 100.00)	0.295	0.011 *
	Post	-	90.67 (12.45) 100.00 (80.00, 100.00)		
Prescribing and Dispensing Attitudes Scale	Pre	0.728	3.99 (0.62) 4.00 (3.60, 4.40)	0.065	0.587
	Post	0.700	4.04 (0.56) 4.00 (3.80, 4.40)		
Perceived Susceptibility to Harm Scale	Pre	0.680	3.82 (0.63) 4.00 (3.50, 4.25)	0.376	0.002 *
	Post	0.800	4.03 (0.63) 4.00 (3.50, 4.50)		
Perceived Barriers Scale	Pre	0.852	2.71 (0.54) 2.71 (2.35, 3.06)	0.388	0.001 *
	Post	0.887	2.54 (0.58) 2.47 (2.18, 2.94)		

* Statistically significant at the alpha=0.05 level.
[a] Effect size: r = |Z|/√N; r = 0.1 small effect, r = 0.3 medium effect, r ≥ 0.5 large effect.

CONCLUSIONS AND IMPACT

- Findings support the utility of interprofessional educational interventions to increase healthcare provider knowledge and beliefs regarding opioid harm reduction strategies amongst older adults.
- Future studies may further investigate how changes in knowledge and beliefs from pre- to post-conference may differ across health professions.
- This study was limited by its quasi-experimental design and lack of additional follow-up timepoints; future studies may assess sustainment of health professional knowledge over a longer period of time.

DISCLOSURES

- Funding for this conference was made possible by grant 1R13HS029600-01A1 from the Agency for Healthcare Research and Quality (AHRQ). The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

REFERENCES AND DISCLOSURES

- Scan the QR code above for the full abstract and references.