# **Enhancing Future Healthcare Professional Education Surrounding Substance Use Disorders**

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## **BACKGROUND**

- The opioid crisis remains a significant public health concern.
- Healthcare professionals report feeling inadequately prepared, and healthcare professional schools have limited curricular time to address this issue thoroughly.
- A recent review of this research was published summarizing several studies evaluating attitudes and perceptions surrounding naloxone and buprenorphine dispensing.
  - Barriers to dispensing include concerns about the clientele, moral and ethical issues, lack of education and training, workflow, and management support.
  - Education & training increases comfort levels and willingness to discuss and dispense these medications.
- Faculty and addiction professionals have cooperated to include opportunities for healthcare professional students to improve their understanding and comfort levels in addressing substance use disorder (SUD) and providing overdose prevention within their future practices.

## **METHODS**

Roseman University College of Pharmacy (RUCOP) faculty conducted cross-sectional surveys to evaluate substance use disorder training added within the pharmacy and interprofessional education (IPE) curriculum.

 2021: 180 RUCOP in-coming pharmacy students were invited to complete an electronic PRE- and POST-Overdose Prevention Training (ODPT) survey, evaluating participant understanding and comfort level with educating and counseling on naloxone, and familiarity with community resources.

RUCOP and Touro University (TU) cooperatively designed and facilitated an IPE event to improve future healthcare professionals' understanding and comfort levels in addressing SUD and providing overdose prevention.

 2022: 245 healthcare professional students were invited to complete a PRE- and POST-IPE survey covering the same content areas as stated above, with 3 additional questions.

Results from all PRE- and POST-training survey data were analyzed, using an independent t-test, in SPSS version 28 with an alpha set to 0.05 for superiority.

Following completion of the IPE training, pharmacy students (in their terminal year) were provided an opportunity to shadow (1-2 days) or rotate (6 weeks) within a comprehensive outpatient substance use disorder treatment center as part of the Ambulatory Care advanced pharmacy practice experience (APPE).

• Students completed an exit survey with free-form questions to assess perception or practice change.

## **DISCLOSURES**

The authors have no conflicts of interest to disclose surrounding research presented.

## **PHARMACY STUDENT LEARNING**

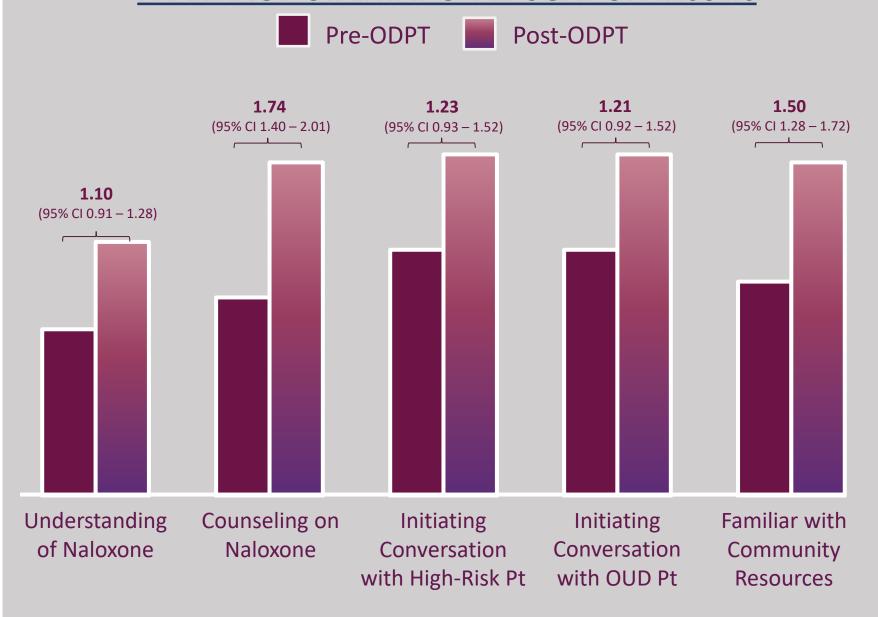
## LAYERED LEARNING

P1 ORIENTATION (ODPT): Harm Reduction, Identifying High-Risk Patients, Overdose Prevention & Reversal Training, and Naloxone Distribution

P2 INTERPROFESSIONAL EDUCATION: Harm Reduction, Overdose Prevention & Reversal, Substance Use Screening Tools, SBIRT Training, Patient Case Discussions, and Naloxone Distribution

ADVANCED PHARMACY PRACTICE EXPERIENCE: Complete 6-week clinical rotation in an outpatient substance use disorder treatment center

## PHARMACY ORIENTATION EDUCATION RESULTS



## ADVANCED PHARMACY PRACTICE CALL-OUTS

People from all walks of life come here for recovery

I learned to put aside my own prejudice regarding drug use and to really see OUD as a medical condition that requires treatment

I learned more about the OUD population stigma, and it changed my opinion

I want to be the person they enjoy coming to when they make progress or aren't afraid to talk to if there are any setbacks because I will never be judgmental towards them.

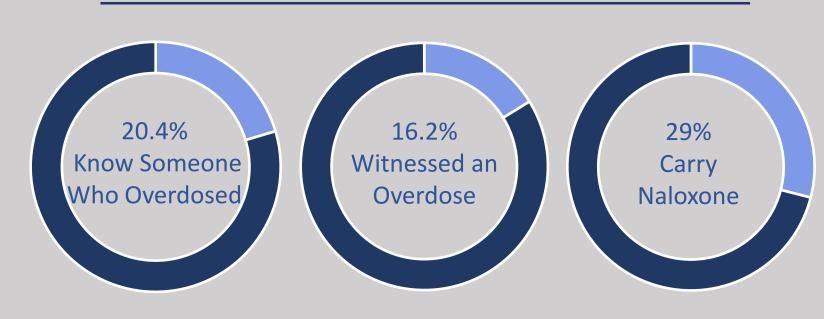
This experience reshaped my opinions on OUD. Many of the patients I encountered have been in trouble with the law and are now doing amazing things in their lives.

I've never encountered so many thankful individuals that truly appreciated receiving the care and support they needed.

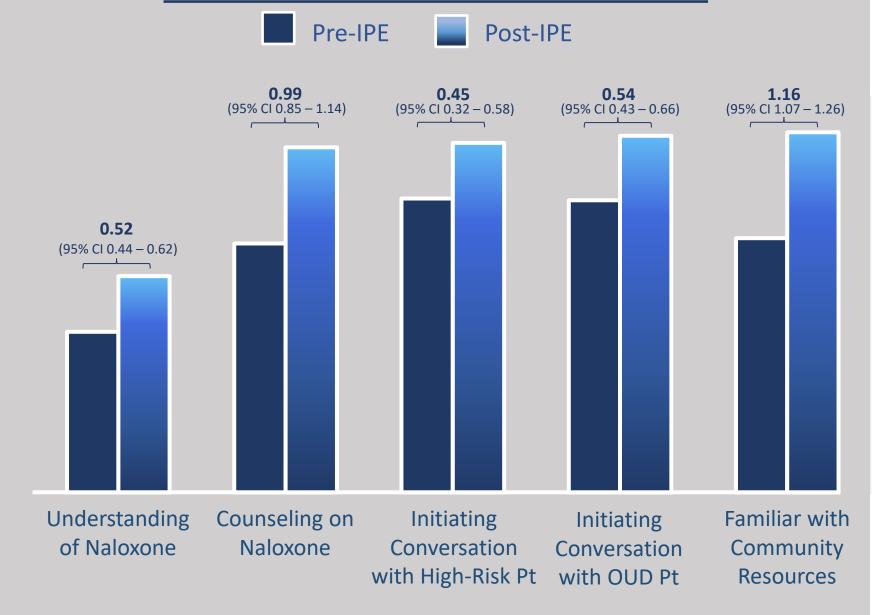
I came into this opportunity with an open mind, and truly fell in love with the population.

## INTERPROFESSIONAL STUDENT LEARNING

## PRE-INTERPROFESSIONAL EDUCATION RESPONSES



## **INTERPROFESSIONAL EDUCATION RESULTS**



### IPE SURVEY PARTICIPANT CHARACTERISTICS TABLE

		Pre-IPE Participants N = 229	Post-IPE Participants N = 129
Academic Program; n (%)	RUCOP	85 (37.1)	45 (34.9)
	TU-PA	75 (32.8)	44 (34.1)
	TU-DO	69 (30.1)	40 (31.0)
Years of Healthcare Experience; mean ± std dev		4.4 ± 3.21	4.2 ± 2.68
Previous Naloxone Training; n (%)		101 (44)	n/a

RUCOP = Roseman University College of Pharmacy; TU-PA = Touro University Physician Assistant; TU-DO = Touro University Doctor of Osteopathic Medicine

#### **RESULTS**

- 121 (67.2%) in-coming pharmacy students completed the PRE-ODPT survey and 85 (47.2%) completed the POST-ODPT survey.
- Approximately 50% were 25 34 years of age and 60% were female.
- Significant improvements were observed with respect to level of understanding of naloxone and comfort level surrounding counseling and initiating naloxone conversations in high-risk patients and persons living with OUD.
- Respondents reported improved familiarity with community OUD and overdose prevention resources.
- 229 (93.5%) completed the PRE-IPE survey and 129 (52.7%) completed the POST-IPE survey.
- Over 80% of respondents were 25 34 years of age and 60% were female. All areas showed statistically significant improvement in response to training.
- Following APPE rotations and shadowing opportunities, students provided free-form responses themed around reduced stigma and an increased level of compassionate care for persons living with SUD.

## **CONCLUSION & DISCUSSION**

- Negative perceptions of healthcare professionals toward patients with SUD are common and are well-documented to correlate with reduced quality and care access.
- Through a layered-education approach, healthcare professional students gain a heightened level of awareness surrounding OUD; are more comfortable initiating conversation and addressing SUD with a non-stigmatizing patient-centered approach; and report changes in perceptions of recovery that they will carry into their future practices.
- Preliminary evidence shows that enhanced SUD education and experience improves healthcare professional student preparedness in addressing SUD in the community.

## **FUTURE DIRECTION**

In addition to continuing training and surveys, we plan to follow each cohort longitudinally, and additionally include a survey to assess stigma surrounding each training session. Comparison of cohorts based on training:

ODPT, IPE, & no SUD treatment center experience

ODPT, IPE, & 1-day SUD treatment center experience

ODPT, IPE, & 6-week SUD treatment center experience

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