

# Pilot testing an asynchronous online harm reduction and pharmacotherapy stigma reduction training for substance use professionals



WAYNE STATE  
School of Medicine

Margo Mekjian, BS; Mindy Vincent, LCSW, MPA; Felicia Frabis, MPH; Erin Fanning Madden, PhD, MPH; Tyson S. Barrett, PhD; Suzanne Prevedel, MEd; Chris Meier, PhD, MPH, MSW; Claire Warnick, MA; Maren Wright Voss, ScD, PhD; Sandra H. Sulzer, PhD  
Department of Family Medicine and Public Health Sciences

## BACKGROUND

- Overdose deaths in the United States increased over 1000% in the last decade, including 103,000 overdose deaths in 2021
- The growing number of drug overdose deaths has emphasized the need for intervention
- Both harm reduction and pharmacotherapy interventions for substance use disorder (SUD) display strong evidence for reducing adverse events and drug overdose risk
- Despite substantial evidence, stigma continues to withhold the use of these interventions
- Previous stigma research suggests that contact-based educational interventions that connect professionals to individuals with lived experience and allow opportunity for self-reflection reduces stigmatizing attitudes towards people who use drugs (PWUD)
- There is a gap in stigma research on stigma interventions specifically aimed at substance use treatment providers and altering their attitudes toward evidence-based interventions

### Purpose:

This pilot study aimed to explore changes in attitudes and planned actions associated with an online harm reduction and pharmacotherapy training among substance use professionals.

## METHODS

- A free 4-hour asynchronous online harm reduction and pharmacotherapy curriculum was delivered to healthcare professionals who work with PWUD between 2020-2021
- The curriculum was delivered by a current harm reduction practitioner and an individual with lived experience.
- The training contained both readings and videos describing harm reduction programs, showing these programs in practice, as well as story by a person with lived experience of substance use working in harm reduction currently
- Pre- and post-training surveys used Likert-scale questions to assess knowledge, attitudes, and planned actions
- Stigma scores were calculated for each participant based on survey responses
  - Higher scores indicated more stigmatizing attitudes
- McNemar tests were performed to analyze pre-and post-test changes in stigma

The following table describes various characteristics of participants at pretest.

Characteristic	N = 76	Characteristic	N = 76
<b>Gender</b>		Other	1 (1.6%)
Man	22 (34%)	Unknown	12
Woman	41 (63%)	<b>Education</b>	
Other, or prefer not to disclose	2 (3.1%)	Associate's Degree	3 (4.6%)
Unknown	11	Bachelor's Degree	18 (28%)
<b>Race/Ethnicity</b>		Master's Degree	36 (55%)
Asian American	1 (1.6%)	Other advanced degree (PhD, JD, etc.)	4 (6.2%)
Hispanic	7 (1.6%)	Some college	4 (6.2%)
Native American	2 (3.1%)	Unknown	4 (6.2%)
Native American, Hispanic	1 (1.6%)	<b>Treat SUD</b>	46 (70%)
Non-Hispanic White	51 (80%)	Unknown	10
Non-Hispanic White, Other	1 (1.6%)		

## RESULTS

- 76 participants completed the training
- 32 participants completed both the pre- and post-survey (n=63 responded pre-training and n = 36 responded post-training)
- Participants were located in 15 states across the US, primarily in Utah
- Five of the 23 survey items demonstrated a significant change in attitudes and planned actions relating to harm reduction or pharmacotherapy interventions after the training
- These items included attitudes towards:
  - Methadone and buprenorphine (P=.021)
  - Overdose prevention sites (OPS)/"drug consumption facilities" (two items, P=.025, P=.056)
  - Naloxone distribution (P=.017)
  - Intent to promote pharmacotherapy interventions (P=.006)
- Majority of survey responses to stigmatizing attitude statements changed from "neutral" in the pre-survey to "disagree" in the post-survey
  - Demonstrated increased acceptance of harm reduction strategies following the training

## DISCUSSION

- This study demonstrated that online asynchronous educational interventions show promise in reducing stigmatizing attitudes towards harm reduction and pharmacotherapy in substance use treatment providers
- Our study fills a gap in research seeking to reduce stigma toward evidence-based practices among substance use treatment providers and illuminates a need for addressing the underlying drivers of stigma in this population
- Future research may benefit from using a more robust randomized study design to build upon the results seen in our study and identify strategies that go beyond education to target the wider societal factors influencing stigma.

## PUBLIC HEALTH IMPLICATIONS

- SUD and drug overdose are public health emergencies in the US
- Interrupting stigma in the substance use treatment workforce is a step towards curbing this crisis
- Online educational interventions are cost effective and low burden, making it a feasible intervention

## LIMITATIONS

- Findings of this pilot study draw on a small sample that may be subject to selection bias
- Volunteers received the training, and thus may represent individuals with preexisting positive attitudes toward harm reduction and pharmacotherapy, and thus low baseline stigma
- Such bias may have translated into smaller changes to stigma survey measures than would be observed in the general population of treatment personnel
- Study design was also limited by the timing of the post-training survey, which was offered immediately after training completion, and thus cannot speak to longer-term trends in attitudes.
- Survey asks about intention to act in stigmatizing ways, such self-reported measures of stigma cannot observe whether behavior change occurred

The figures below show the changes from pretest to posttest for the outcomes that showed significant change after the training.

