

# A simulation curriculum designed for front-line staff caring for patients with OUD in the acute care setting was successful at creating improved perceptions and attitudes across multiple domains.

## A Simulation Curriculum to Improve Care of Patients with Opioid Use Disorder

Christine A. Murphy, Barbara E. Lakatos, Maria Bentain-Melanson, Genina F. Salvio, Colleen E. Shelly, Scott G. Weiner

The authors have no relevant conflicts of interest to disclose.

### INTRO

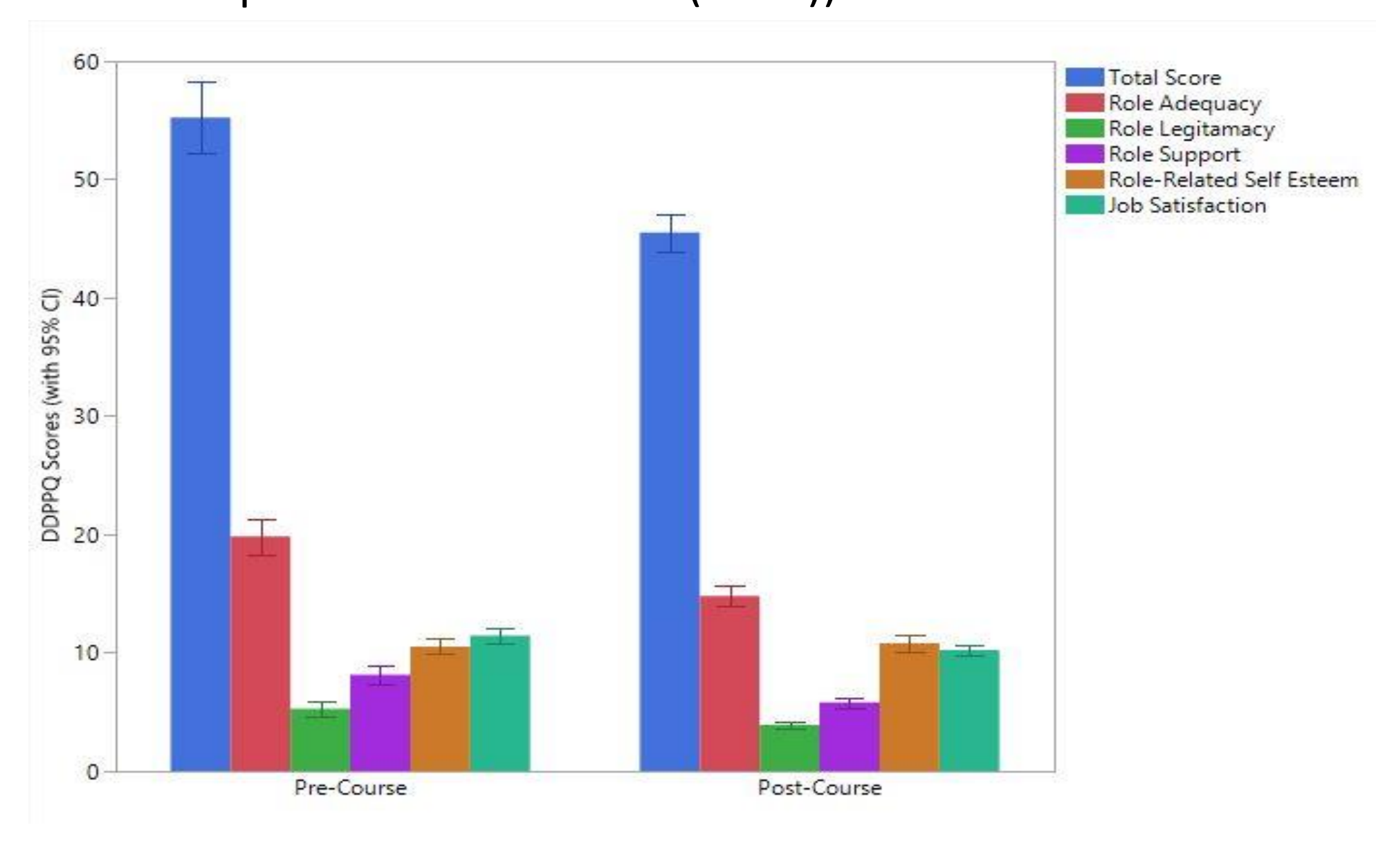
- The **complexity of opioid use disorder (OUD) is widely misunderstood**, and the influx of patients in the acute care setting with OUD has outpaced many hospitals' ability to educate frontline staff.
- **Frontline staff commonly receive limited or no education regarding the neurobiology of addiction and care approaches for patients with OUD**, resulting in **moral distress, burnout, and stigma**.
- The purpose of this project was **to improve staff attitudes and perceptions** when working with patients who have OUD using an intervention of **blended didactic substance use disorder (SUD) education and a high-fidelity simulation experience**.

### METHODS

- Interprofessional staff (including nurses, physician assistants, patient care associates) participated in a training course: **45-minute didactic lecture** discussing the neurobiology of SUD, stigma reduction, pain management for individuals with OUD, medication for OUD (MOUD) and harm reduction principles.
- The training was followed by **three simulation cases** based on frequently encountered clinical situations: pain management, safe environment of care, and education with patient and family. A debriefing session was conducted after each case.
- **Effectiveness of the course was measured with the Drug and Drug Problems Perceptions Questionnaire (DDPPQ)**, administered before and after the course and at three months.
- **Lower scores denote more positive attitudes**.

### RESULTS

- 46 participants completed the course over four sessions
- DDPPQ scores were calculated and averaged for each timeframe (pre-course (n=46), post-course (n=45), and follow-up after three months (n=20)).



### DISCUSSION

- A simulation curriculum designed for front-line staff caring for patients with OUD in the acute care setting **was successful at creating improved perceptions and attitudes across multiple domains**.
- Additionally, it appears that the effect was stable three months after the intervention.
- Education can shift the construct toward OUD as a chronic treatable medical illness that is within scope of front-line staff practice.
- With this lens, staff can skillfully support patients in life-saving treatment, positively influence patient outcomes and reduce stigma.
- **Understanding the disease of OUD and care approaches through courses like this one may further reduce moral distress and burnout in frontline staff and improve patient outcomes.**

**Table 1:** Professional Characteristics of Cohort

Professional Role	n	%
Nurse	n=26	56.5%
Patient care associate	n=11	23.9%
Physician assistant	n=5	10.9%
Advanced practice nurse	n=2	4.4%
Other	n=2	4.4%

Years of experience since graduation: median 3 years <IQR 0.75-10>  
 Formal training about SUD in school: n=11, 24.4%  
 OUD patients cared for each month: median 1 <IQR 1-3>

**Table 2:** Drug and Drug Problems Perceptions Questionnaire (DDPPQ) Scores  
(Lower scores indicate improvement)

	Pre-course (n=46) mean (95% CI)	Post-course (n=45) mean (95% CI)	p value
Total score	55.2 (52.2-58.3)	45.5 (43.9-47.1)	<0.001
Role adequacy	19.8 (18.3-21.4)	14.8 (13.9-15.7)	<0.001
Role legitimacy	5.3 (4.6-6.0)	3.9 (3.6-4.2)	<0.001
Role support	8.1 (7.3-9.0)	5.8 (5.4-6.2)	<0.001
Role-specific self-esteem	10.5 (9.9-11.2)	10.8 (10.1-11.5)	0.72
Job satisfaction	11.4 (10.8-12.1)	10.2 (9.7-10.7)	0.001

	Post-course (n=45) mean (95% CI)	3-month follow-up (n=20) mean (95% CI)	p value
Total score	45.5 (43.9-47.1)	46.8 (44.8-48.8)	0.154
Role adequacy	14.8 (13.9-15.7)	15.8 (14.4-17.2)	0.216
Role legitimacy	3.9 (3.6-4.2)	4.0 (3.5-4.5)	0.352
Role support	5.8 (5.4-6.2)	5.8 (4.8-6.7)	0.54
Role-specific self-esteem	10.8 (10.1-11.5)	10.6 (9.7-11.5)	0.642
Job satisfaction	10.2 (9.7-10.7)	10.7 (10.1-11.2)	0.129

**Table 3:** Definitions of DDPPQ Sub-domains

- Role adequacy:** Providers feeling adequately prepared for their role, including having appropriate knowledge of the causes and effects of drug use to enable them to carry out their professional role and to give appropriate info and advice over the short and longer term
- Role legitimacy:** The extent to which providers view particular aspects of their work as being their responsibility
- Role support:** The perception that providers have from their colleagues in order to perform their role effectively, including being able to ask advice when needed
- Role-specific self-esteem:** Professional self-esteem and motivation to work with people who use drugs
- Job satisfaction:** Expectations of satisfaction when working with patients who use drugs

