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**Professional Factors that Predict Nurses' Motivation to Work with Patients with Opioids Use Problems: A National Survey**

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**PROJECT TEAM**

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\*Funding for this study was provided by the CRE Grant Program for Doctoral Students from the NCSBN Center for Regulatory Excellence and the Margaret E. Wilkes Scholarship Award, University of Pittsburgh School of Nursing

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# CONSEQUENCES OF OPIOID USE

## Economic Burden



- Every year, prescription and opioid use costs \$ 78.5 billion
- Includes:
  - ✓ Loss of productivity
  - ✓ Healthcare expenses
  - ✓ Criminal justice costs

## Physical & Psychosocial Consequences



- Child abuse and neglect
- Reduced quality of life
- Increase crime and violence
- Increased motor vehicles crashes
- 20- 70% of hospital and emergency medical admissions are associated with AOD use problems

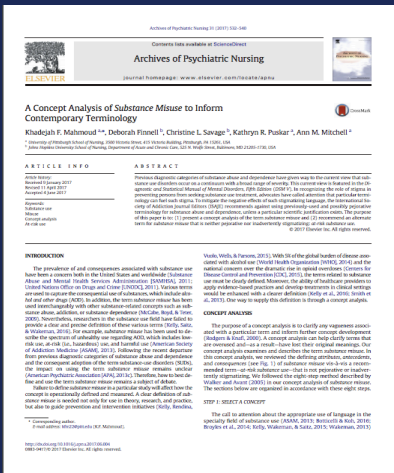
## Morbidity & Mortality



- Everyday, 128 Americans die of an opioid overdose
- In 2017, more than 47,000 Americans died as a result of an opioid overdose
- An estimated 1.7 million people in the US suffered from substance use disorders related to prescription opioid use

• National Institute on Drug Abuse. (2018). Misuse of prescription drugs. Retrieved from <https://www.drugabuse.gov/about-drug-abuse/prescription-drug-misuse>. Accessed June 17, 2018.  
 • CDC/NCHS, National Vital Statistics System, Mortality. (2018). CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; Retrieved from <https://wonder.cdc.gov>. Accessed July 26, 2020.  
 • Center for Behavioral Health Statistics and Quality (CBHSQ). (2018). 2017 National Survey on Drug Use and Health: Detailed Tables. Rockville, MD: Substance Abuse and Mental Health Services Administration

# OPIOID USE PROBLEMS DEFINITION



Any level of opioid use that increases the risk of harm to a person's health or well-being or that increases the risk of harm to others, but does not meet the diagnostic criteria for a disorder

• Mahmoud, K. F., Finnell, D., Savage, C. L., Puskas, K. R., & Mitchell, A. M. (2017). A concept analysis of substance misuse to inform contemporary terminology. *Archives of Psychiatric Nursing*, 31, 532-540.  
 • Finnell, D., Mitchell, A.M., Savage, C. L., Kane, I., Kearns, R., Poole, N., ... Coulson, S. (2015). Alcohol screening a brief intervention: A self-paced program for nurses. *Addiction Science & Clinical Practice*, 10(2), 1. <https://doi.org/10.1007/s12529-015-9210-2>

## PROBLEM STATEMENTS

- ✓ The health care of persons with substance use problems is negatively impacted when providers have negative attitudes and opinions about this population.
- ✓ These negative outcomes include an avoidant and task-oriented approaches and shorter visits, which leads to poorer patient outcomes.
- ✓ Professional factors that predict nurses' motivation to work with patients with opioid use problems need to be identified to inform strategies to address negative attitudes toward this patient population.

• Neville, K., & Roan, N. (2014). Challenges in nursing practice: Nurses' perceptions in caring for hospitalized medical-surgical patients with substance abuse/dependence. *Journal of Nursing Administration*, 44(6), 339-346. doi: 10.1097/NNA.0000000000000079

• Van Bommel, L. C., Brouwers, E. P., van Weeghel, J., & Garretsen, H. F. (2014). Healthcare professionals' regard towards working with patients with substance use disorders: Comparison of primary care, general psychiatry and specialist addiction services. *Drug & Alcohol Dependence*, 134, 92-98.

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## AIM

**Aim:** To identify professional factors (work experience with substance use (SU), SU-education, role adequacy, role legitimacy, role support, task-specific self-esteem, work satisfaction, perceived role responsibility, and perceived self-efficacy) that predict nurses' motivation to work with patients with opioid use problems.

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**PROFESSIONAL ATTITUDES MEASURES**

	Measures	No. Items	Reliability (opioid)
Substance Use (SU)-Work experience	- Measured as yes "2" or no "1" using an investigator-developed questionnaire	1	-
SU-Education	- Measured as nursing school education, continuing education, in-service education or other sources of education in substance use	5	-
Role Adequacy	- Measured using Role Adequacy subscale in AAPPQ-PC*	7	(.942)
Role Legitimacy	- Measured using Role Legitimacy subscale in AAPPQ-PC*	4	(.725)
Role Support	- Measured using Role Support subscale in AAPPQ-PC*	3	(.920)
Task-Specific Self-Esteem	- Measured using Task-specific Self-esteem subscale in AAPPQ-PC*	6	(.827 <sup>a</sup> )
Work Satisfaction	- Measured using Work Satisfaction subscale in AAPPQ-PC*	5	(.841 <sup>a</sup> )
Perceived Role Responsibility	- Measured using an adapted version of the Role Responsibility subscale developed by Saitz and colleagues (2002)	4	(.891)
Perceived Self-Efficacy	- Measured using an adapted version of Perceived Self-efficacy subscale developed by Saitz and colleagues (2002)	7	(.930)

<sup>a</sup> n=233; AAPPQ= Alcohol and Alcohol Perception Problems Questionnaire Person Centered; \* These subscales were also adapted to opioid use

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**MEASURES**

<i>Motivation</i>			
	Measure	No. Items	Reliability (opioid)
Motivation	- Measured using Motivation subscale in AAPPQ-PC*	5	(.746)

<sup>a</sup> n=233; AAPPQ= Alcohol and Alcohol Perception Problems Questionnaire Person Centered; \* These subscales were also adapted to opioid use

<i>Social Desirability</i>			
	Measure	No. Items	Reliability
Social Desirability	- Measured using Reynold's (1982) 13-item Social Desirability scale	13	.709 <sup>c</sup>

<sup>c</sup> n=232

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## ONLINE NATIONWIDE STUDY

**Design:** A descriptive correlational design

**Sample & Setting:** A sample size of 493 nurses were recruited from four national organizations using online survey via Qualtrics:

- ✓ National Association of Nurse Practitioners in Women's Health (NPWH) (2,600 members)
- ✓ Academy of Medical-Surgical Nurses (AMSN) (13,000 members)
- ✓ American Psychiatric Nurses Association (APNA) (12,500 members)
- ✓ International Nurses Society on Addictions (IntNSA) (700 members)

**Duration:** The study was conducted over a period of six months and occurred between November 2018 and May 2019

**Targeted Population:** General medical-surgical nurses, psychiatric mental-health nurses, and addiction-trained nurses

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## DEMOGRAPHICS/BACKGROUND CHARACTERISTICS (N=493)

- **Age:** Mean of 48.47 (SD= 13.09)
- **Years of experience in nursing:** Median of 17.00 (IQR=22.50)
- **Gender:** The sample was predominately female (n=460, 93.3%)
- **Race:** The sample was predominately Caucasian (n=410, 83.2%)
- **Primary work setting:** Approximately one-third of the participants reported working in hospital-based settings (n=176, 35.7%)
- **Highest degree obtained in nursing:** More than 85% of nurses had at-least a 4-year college degree in nursing (n=426, 86.4%)
- **Specialization:** More than half of the nurses worked in general medical-surgical (n=264, 53.5%).

Note. Little's Missing completely at Random test was performed and was insignificant; An indicator variable was created and logistic regression was performed to compare between participants with missing data and participants with complete data in relation to their age, years of experience in nursing and specialization ; SD= Standard deviation , IQR= Interquartile range

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## GEOGRAPHICAL DISTRIBUTION

Nationwide Study (N=482)		
Regions	States Included	n (%)
Region 1	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont	62 (12.58%)
Region 2	New Jersey, New York, Puerto Rico, and the Virgin Islands	36 (7.30%)
Region 3	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia	83 (16.84%)
Region 4	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee	88 (17.85%)
Region 5	Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin	71 (14.40%)
Region 6	Arkansas, Louisiana, New Mexico, Oklahoma, and Texas	26 (5.27%)
Region 7	Iowa, Kansas, Missouri, and Nebraska	5 (1.01%)
Region 8	Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming	36 (7.30%)
Region 9	Arizona, California, Hawaii, Nevada, American Samoa, Commonwealth of the Northern Mariana Islands, Federated States of Micronesia, Guam, Marshall Islands, and Republic of Palau	48 (9.74%)
Region 10	Alaska, Idaho, Oregon, and Washington	27 (5.48%)

• U.S. Department of Health and Humans Services (2014). Regional Offices. Retrieved [July 21, 2019] from <https://www.hhs.gov/about/agencies/iea/regional-offices/index.html>

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## OPIOID-RELATED MOTIVATION PREDICTION MODEL

<i>Professional Predictors of Opioid Use-Related Motivation (n=460)</i>				
Predictors	Adjusted (Main Predictors)		Adjusted (Parsimonious Model)	
	b (SE)	p-value	b (SE)	p-value
SU-Work Experience	0.674 (.298)	.024	0.636 (.268)	.018
SU-Education				
School of Nursing Education	-0.778 (.299)	.010	-0.502 (.259)	.053
Continuing Education	0.624 (.363)	.086	0.840 (.250)	.001
Role Adequacy	0.047 (.033)	.149	0.003 (.027)	.901
Task-Specific Self-Esteem	0.221 (.045)	<.001	0.102 (.049)	.039
Work Satisfaction	0.330 (.046)	<.001	0.281 (.045)	<.001
Role-Responsibility	0.263 (.157)	.094	0.231 (.120)	.056

Note. b= Unstandardized regression coefficient; SE= Standard error; SU= Substance use

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**STRENGTHS**

- ✓ This is the first study to identify professional predictors of nurses' motivation to provide opioid-related care
- ✓ Large sample size (N=493)
- ✓ An online nationwide study

**LIMITATIONS**

- ✓ Use of cross-sectional descriptive correlation design
- ✓ The sample was predominately female and white
- ✓ Response bias

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**CONCLUSION**

- ✓ This study provides insights to the effect of professional attitudes on nurses' motivation to provide care to patients with opioid use problems
- ✓ This study informs the development of interventions designed to enhance nurses' motivation via targeting professional factors

**FUTURE IMPLICATIONS**

- ✓ Identify additional educational and clinical practice gaps that may inform interventions aiming to enhance screening for opioid use
- ✓ Promote the transfer of opioid use-acquired knowledge and skills into clinical practice, and foster implementation of evidence-based interventions

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**THANK YOU... ANY QUESTIONS?**

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