

Study Co-investigators

Funding

The NCSBN Center for Regulatory Excellence & the Margaret E. Wilkes Scholarship Award, University of Pittsburgh School of Nursing

1. Susan M. Sereika, PhD	University of Pittsburgh School of Nursing
--------------------------	--

2. Deborah S. Finnell Johns Hopkins School of Nursing

3. Dawn Lindsay, PhD Institute for Research, Education, and Training in

Addictions (IRETA)

4. Kathy Puskar, DrPH, RN, FAAN University of Pittsburgh School of Nursing

5. Ann M. Mitchell, PhD, RN, FIAAN, FAAN University of Pittsburgh School of Nursing

Objectives

1 List the negative consequences associated with alcohol and opioid (AO) use continuum

Identify demographic/background, personal, and professional predictors of nurses' motivation to provide care to patients with AO use-related problems

Propose future research and practice implications that enhance motivation to provide AO care and promote patients' access to care via informing nursing education and practice regulations

Objectives

1 List the negative consequences associated with alcohol and opioid (AO) use continuum

Identify demographic/background, personal, and professional predictors of nurses' motivation to provide care to patients with AO use-related problems

Propose future research and practice implications that enhance motivation to provide AO care and promote patients' access to care via informing nursing education and practice regulations

Objective 1: Consequences Associated with Alcohol & Opioid Use Problems

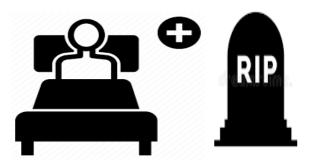
Economic Burden

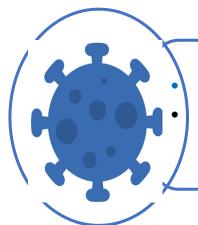


Physical & Psychosocial Consequences



Morbidity & Mortality





More than 40 states reporting significant surge in number of opioid-related deaths There was a 54% increase in national sales of alcohol for the week ending March 21, 2020, compared with 1 year before; online sales increased 262% from 2019

Nurses' Role

4

Nurses remain the most trustworthy healthcare professionals

2

 Nurses as the largest group of health professionals are in an ideal position to screen their patients for AO use problems and implement preventive measures

-

Nurses can play a significant role in early recognition and intervention for individuals with AO use problems

Problem Statement

Education

Patient-Provider Interaction

Patient Outcomes







Stigma Types

1 Self-Stigma

"What people with a disorder do to themselves when they internalize the stigma" 2 Social Stigma

"The phenomenon of large social groups endorsing stereotypes about and acting against a stigmatized group" Structural Stigma

"The rules, policies and procedures of institutions that restrict the rights and opportunities for members of stigmatized groups"

Public Polices & Laws Enactment

Public Institution
Personnel

Objectives

1 List the negative consequences associated with alcohol and opioid (AO) use continuum

Identify demographic/background, personal, and professional predictors of nurses' motivation to provide care to patients with AO use-related problems

Propose future research and practice implications that enhance motivation to provide AO care and promote patients' access to care via informing nursing education and practice regulations

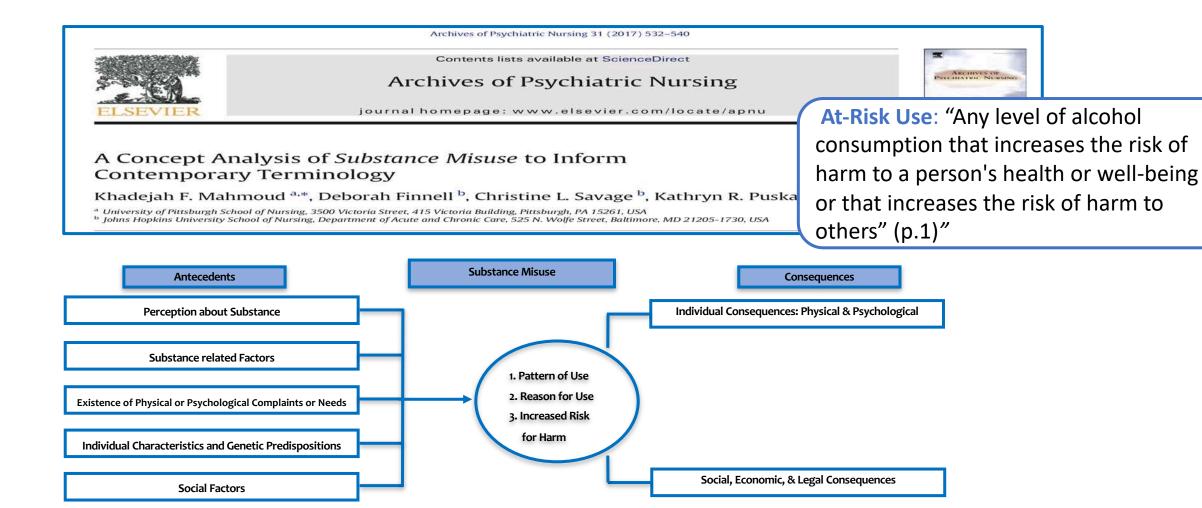
Objectives

1 List the negative consequences associated with alcohol and opioid (AO) use continuum

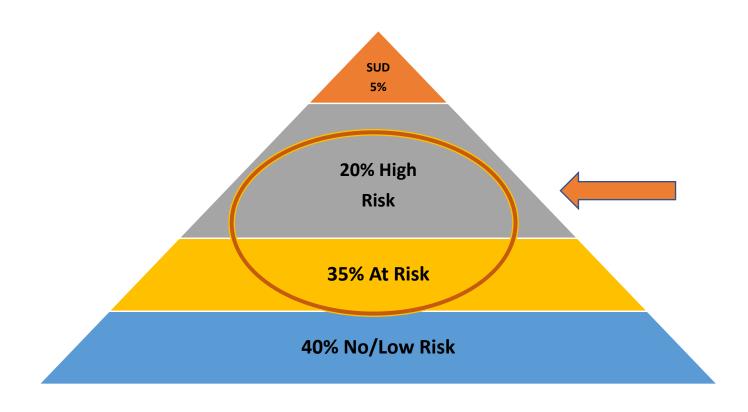
Identify demographic/background, personal, and professional predictors of nurses' motivation to provide care to patients with AO use-related problems

Propose future research and practice implications that enhance motivation to provide AO care and promote patients' access to care via informing nursing education and practice regulations

Objective 2: Proposing An Alternative Term for Substance Misuse



Objective 2: Target Population



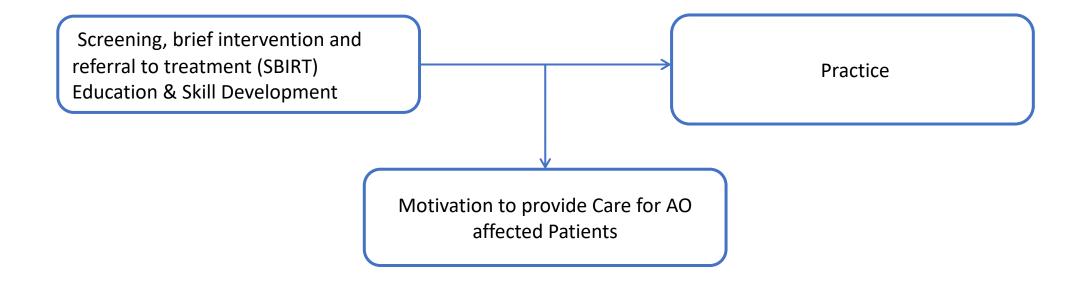
Objective 2: Screening, Brief Intervention, & Referral to Treatment (SBIRT)

 SBIRT is a universal screening and early intervention tool for patients with risky substance use

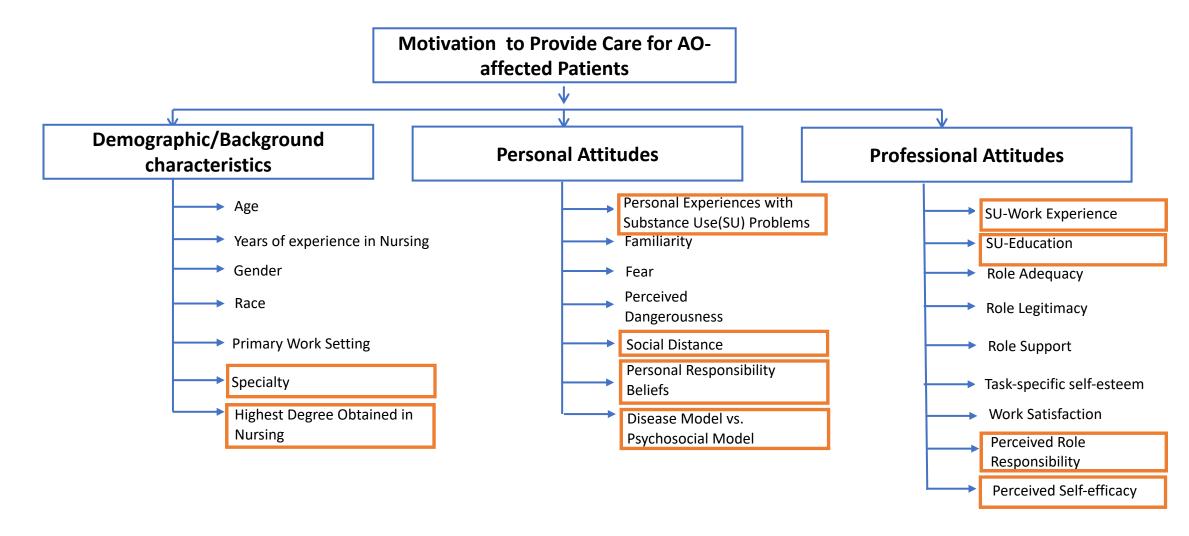
SBIRT implementation has been strongly associated with decreased Alcohol use

SBIRT is cost-effective

Objective 2: Motivation to Provide Care for Patients with Alcohol and Opioid (AO) use problems



Objective 2: Conceptual Framework



Objective 2: Nationwide Study

Funding

The NCSBN Center for Regulatory Excellence & the Margaret E. Wilkes Scholarship Award, University of Pittsburgh School of Nursing

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

Objective 2: Demographics/ Background Characteristics Measures

	Measures (An Investigator-Developed Questionnaire)	No. Items	Reliability
Age	- Measured in years	1	-
Years of experience in nursing	- Measured in years	1	-
Gender	- Measured as female, male, or other	1	-
Race	- Measured as white and non-white	2	-
Primary work setting	 Measured as hospital-based setting, community-based settings, administrative/ other settings and multiple settings 	1	-
Specialization	 Measured as medical-surgical nurses, psychiatric mental-health nurses and addiction-trained nurses 	1	-
Highest degree obtained in nursing	 Measured as 2-year college or less, 4-year college, master's level, and doctoral level 	1	-
State	- Measured using one question "What is your state"	1	-

Objective 2: Personal Attitudes Measures

	Measures	No. Items	Reliability (alcohol, opioid)
Personal Experiences with Substance Use	- Measured as personal experience with self, a friend, a family-member, a co-worker or other using an investigator-developed questionnaire	6	-
Familiarity	- Measured using an adapted version of the Corrigan and colleagues (2003) Familiarity subscale	7	(.516 ^a , .596)
Perceived Dangerousness	- Measured using an adapted version of the Link and colleagues (1987) Perceived Dangerousness subscale	8	(.766 ^b , .808 ^a)
Fear	 Measured using an adapted version of the Corrigan and colleagues (2003) Fear Subscale 	3	(.957, .982)
Social Distance	- Measured using an adapted version of the Link and colleagues (1987) Social Distance	7	(.857 ^c , .892)
Personal Responsibility Beliefs	- Measured using an an adapted version of the Corrigan and colleagues (2003) Personal Responsibility Beliefs subscale	3	(.860, .897)
Disease Model	 Measured using an adapted version of the Disease Model subscale from the SUSS 	7	(.757, .792)
Psychosocial Model	 Measured using an adapted version of the Psychosocial Model subscale from the SUSS 	5	(.711 ^a , .788)

^a n=233; ^b n=230; ^c n=232; SUSS= Short Understanding of Substance Abuse Scale

Objective 2: Professional Attitudes Measures

	Measures	No. Items	Reliability (alcohol, opioid)
Work experience with Substance Use	- Measured as yes "2" or no "1" using an investigator-developed questionnaire	1	-
Education in Substance Use	- 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	(.909, .942)
Role Legitimacy	- Measured using Role Legitimacy subscale in AAPPQ-PC*	4	(.686, .725)
Role Support	- Measured using Role Support subscale in AAPPQ-PC*	3	(.832, .920)
Task-Specific Self-Esteem	- Measured using Task-specific Self-esteem subscale in AAPPQ-PC*	6	(.835°, .827°)
Work Satisfaction	- Measured using Work Satisfaction subscale in AAPPQ-PC*	5	(.801, .841 ^a)
Perceived Role Responsibility	 Measured using an adapted version of the Role Responsibility subscale developed by Saitz and colleagues (2002) 	4	(.853, .891)
Perceived Self-Efficacy	 Measured using an adapted version of Perceived Self-efficacy subscale developed by Saitz and colleagues (2002) 	7	(.916, .930)

^a n=233; AAPPQ= Alcohol and Alcohol Perception Problems Questionnaire Person Centered; * These subscales were also adapted to opioid use

Objective 2: Study Measures

AO-related Motivation				
	Measure	No. Items	Reliability (alcohol, opioid)	
Motivation	- Measured using Motivation subscale in AAPPQ-PC*	5	(.737; .746)	

^a n=233; AAPPQ= Alcohol and Alcohol Perception Problems Questionnaire Person Centered; * These subscales were also adapted to opioid use

Social Desirability			
	Measure	No. Items	Reliability
Social Desirability	- Measured using Reynold's (1982) 13-item Social Desirability scale	13	.709 ^c

c n=232

Objective 2: Sample 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:** Predominately female (n=460, 93.3%)
- Race: 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%).

Objective 2: Study Geographical Distribution (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%)

Objective 2: Alcohol-related Motivation Prediction Model

Demographics/ Background Predictors of Alcohol Use-Related Motivation (n=460)

Predictors	Adjusted (Main Predictors)		Adjusted (Parsimonious Model)	
	b (SE)	p-value	b (SE)	p-value
Years of Experience In Nursing	-0.002 (.013)	.897	011 (.008)	.153
Primary Work Setting				
Hospital-based Settings	Reference			
Community-based Settings	0.242 (.293)	.409	1.246 (.507)	.014
Administrative/ Other Settings	0.437 (.323)	.178	0.634 (.282)	.025
Multiple Settings	0.646 (.288)	.025	0.952 (.253)	<.001

Objective 2: Alcohol-related Motivation Prediction Model

Personal Attitudes Predictors of Alcohol Use-Related Motivation (n=460)

Predictors	Adjusted (Main Predictors)		Adjusted (Parsimonious Model)	
	b (SE)	p-value	b (SE)	p-value
Personal Experience with Alcohol Use				
Self	0.302 (.280)	.281	0.119 (.233)	.611
Familiarity	0.057 (.080)	.471	0.181 (.075)	.015
Perceived Dangerousness	-0.053 (.024)	.028	-0.052 (.020)	.010
Personal Beliefs Responsibility	-0.025 (.021)	.234	-0.031 (.019)	.103
Disease Model	-0.014 (.021)	.509	-0.129 (.045)	.004
Psychosocial Model	0.032 (.038)	.394	0.046 (.033)	.169

Objective 2: Alcohol-related Motivation Prediction Model

Professional Attitudes Predictors of Alcohol Use-Related Motivation (n=460) **Predictors Adjusted Adjusted** (Main Predictors) (Parsimonious Model) b (SE) b (SE) p-value p-value 0.596 (.260) 0.486 (.220) Substance Use-Work Experience .023 .028 Substance Use-Education 0.681 (.272) 0.949 (.380) .013 Any Education .013 -0.648 (.265) -0.537 (.237) School of Nursing Education .015 .024 In-Service Education -0.755 (.255) -0.615 (.230) .003 .008 0.089 (.031) .004 0.096 (.026) <.001 Role Adequacy -0.058 (.054) .288 0.025 (.055) .641 Role Legitimacy **Role Support** 0.002 (.058) -0.077 (.058) .973 .185 0.145 (.041) 0.084 (.048) <.001 .082 Task-Specific Self-Esteem 0.429 (.043) 0.384 (.039) <.001 <.001 **Work Satisfaction Role-Responsibility** 0.305 (.123) 0.610 (.123) .014 <.001

Objective 2: Opioid-related Motivation Prediction Model

Demographics/ Background Predictors of Opioid Use-Related Motivation (n=460)

Predictors	Adjusted (Main Predictors)		Adjusted (Parsimonious Model)	
	b (SE)	p-value	b (SE)	p-value
Age	-0.008 (.015)	.601	0.033 (.012)	.006
Race				
Non-White	-0.328 (.311)	.291	0.167 (.343)	.627
Primary Work Setting				
Community-based Settings	0.313 (.323)	.333	0.593 (.245)	.016
Specialization				
Psychiatric Mental-Health Nurses	0.060 (.298)	.840	0.001 (.271)	.997
Addiction-Trained Nurses	0.742 (.392)	.059	1.073 (.372)	.004
Highest Degree Obtained in Nursing				
Master's Level	-0.070 (.275)	.799	0.226 (.247)	.360
Doctoral Level	0.362 (.385)	.347	0.072 (.323	.825

Objective 2: Opioid-related Motivation Prediction Model

-0.073 (.023)

0.063 (.037)

Disease Model

Psychosocial Model

Personal Predictors of Opioid Use-Related Motivation (n=460) **Predictors Adjusted Adjusted** (Main Predictors) (Parsimonious Model) b (SE) b (SE) p-value p-value Personal Experience with Drug Use 0.948 (.393) Self 0.286 (.361) .428 .016 Friend -0.680 (.306) .027 -0.550 (.233) .019 Family-Member 0.074 (.339) .828 0.143 (.207) .489 Other 0.582 (.636) .361 2.138 (.716) .003 -0.050 (.025) **Perceived Dangerousness** -0.058 (.021) .005 .044 Fear -0.018 (.039) .650 0.003 (.036) .929

.001

.095

-0.049 (.023)

0.072 (.035)

.031

.038

Objective 2: Opioid-related Motivation Prediction Model

Professional Predictors of Opioid Use-Related Motivation (n=460)						
Predictors	Adjusted (Main Predictors)		Adjusted (Parsimonious Model)			
	b (SE)	p-value	b (SE)	p-value		
Substance Use-Work Experience	0.674 (.298)	.024	0.636 (.268)	.018		
Substance Use-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

Study's Strengths & Limitations

Study's

Strengths

- ✓ This is the first study to identify demographics/ background, personal, professional predictors of nurses' motivation to provide AO-related care
- ✓ Examined two-way interactions predictors of AO-related motivation
- ✓ Large sample size (N=493)
- ✓ An online nationwide study
- ✓ Examined the difference in the study's variables between medical-surgical nurses, psychiatric mental-health nurses, and addiction-trained nurses

Study's

Limitations

- ✓ Use of cross-sectional descriptive correlation design
- ✓ The adapted familiarity sub-scale for both alcohol and opioid reported unsatisfactory reliability
- ✓ The sample was predominately female and white
- ✓ Response bias

Objectives

1 List the negative consequences associated with alcohol and opioid (AO) use continuum

Identify demographic/background, personal, and professional predictors of nurses' motivation to provide care to patients with AO use-related problems

Propose future research and practice implications that enhance motivation to provide AO care and promote patients' access to care via informing nursing education and practice regulations

Objectives

3

1 List the negative consequences associated with alcohol and opioid (AO) use continuum

Identify demographic/background, personal, and professional predictors of nurses' motivation to provide care to patients with AO use-related problems

Propose future research and practice implications that enhance motivation to provide AO care and promote patients' access to care via informing nursing education and practice regulations

Objective 3: Future research and practice Implications

- 1. Incorporate presentations from persons in recovery from AO use problems in teaching nursing students and educational forums with nurses in practice
- 2. Provide clinical experiences wherein nursing students can experience the day-to-day work of nurses working across the continuum of care with the population
- 3. Expand opportunities for real-world experiences in which students can apply what they learn in lectures into practice
- 4. Frame the students' perceptions about substance use problems in the context of disease process





References

- 1. Mahmoud, K. F., Finnell, D., Savage, C. L., Puskar, K. R., & Mitchell, A. M. (2017). A concept analysis of substance misuse to inform contemporary terminology. *Archives of Psychiatric Nursing*, 31, 532-540.
- 2. 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), http://dx.doi.org/10.1186/1940-0640- 10-S2-O18.
- 3. Cabriales, J. A., Cooper, T. V., & Taylor, T. (2013). Prescription drug misuse, illicit drug use, and their potential risk and protective correlates in a Hispanic college student sample. Experimental and Clinical Psychopharmacology, 21(3), 235–244. http://dx.doi. org/10.1037/a0031973.
- 4. Walker, L. O., & Avant, K. C. (2005). Concept analysis (4th ed.). Prentice Hall: New Jersey.
- 5. Watson, H., Maclaren, W., & Kerr, S. (2007). Staff attitudes towards working with drug users: Development of the Drug Problems Perceptions Questionnaire. Addiction, 102(2), 206Y215. doi:10.1111/j.1360-0443.2006.01686.x
- 6. Watson, H., Marclaren, W., Shaw, F., & Nolan, A. (2003). Measuring staff attitudes to people with drug problems: The development of a tool. Retrieved from www.scotland.gov.uk/Publications/2003/08/17735/23437
- 7. Mahmoud, K. F., Terhorst, L., Lindsay, D., Puskar, K. R., & Mitchell, A. M. (2017). Undergraduate Nursing Students' Perceptions of Individuals With Drug Use Problems: Confirming the Factor Structure of the Drug and Drug Problems Perception Questionnaire. *Journal of addictions nursing*, 28(4), 196-202.
- 8. Cund, A. (2013). Alcohol education revisited: Exploring how much time we devote to alcohol education in the nursing curriculum. *Nurse Education In Practice*, 13(1), 35-39.
- 9. Gallup. (2017). Honesty/ethics in professions. Retrieved from https://news.gallup.com/poll/1654/honesty-ethics-professions.aspx
- 10. American Nurses Association. (2018). American Nurses Association: ANA Enterprise. Retrieved from https://www.nursingworld.org

References

- 11. Savage, C., Dyehouse, J., & Marcus, M. (2014). Alcohol and health content in nursing baccalaureate degree curricula. Journal of Addictions Nursing, 25(1), 28-34.
- 12. Naegle, M. A. (2017). Brief Report: First World Health Organization Forum on Alcohol Drugs and Addictive Behaviors: Enhancing Public Health Actions Through Partnerships and Collaboration. Journal of Addictions Nursing, 28(3), 150-151.
- 13. Puskar, K., Gotham, H. J., Terhorst, L., Hagle, H., Mitchell, A. M., Braxter, B., ... & Burns, H. K. (2013). Effects of Screening, Brief Intervention, and Referral to Treatment (SBIRT) education and training on nursing students' attitudes toward working with patients who use alcohol and drugs. Substance Abuse, 34(2), 122-128.
- 14. Goffman, E. (2009). Stigma: Notes on the management of spoiled identity. Simon and Schuster.
- 15. Janulis, P., Ferrari, J. R., & Fowler, P. (2013). Understanding public stigma toward substance dependence. Journal of Applied Social Psychology, 43(5), 1065-1072.
- 16. Corrigan, P. W., Kuwabara, S. A., & O'Shaughnessy, J. (2009). The public stigma of mental illness and drug addiction findings from a stratified random sample. *Journal of Social Work*, 9(2), 139-147.
- 17. Livingston, J. D., Milne, T., Fang, M. L., & Amari, E. (2012). The effectiveness of interventions for reducing stigma related to substance use disorders: A systematic review. *Addiction*, 107(1), 39-50.
- 18. Lefebvre, C. (2019). Stigma and MAT: A data-driven discussion of policy and public education/communication priorities [PowerPoint slides].
- 19. Gray, A. J. (2002). Stigma in psychiatry. Journal of the Royal Society of Medicine, 95(2), 72-76.
- 20. Murphy-Parker, D. (2013). Screening, Brief Intervention, and Referral to Treatment: A need for educational reform in nursing. Nursing Clinics of North America, 48(3), 485-489.
- 21. Cuijpers P, Riper H, Lemmers L. The effects on mortality of brief interventions for problem drinking: a meta-analysis. Addiction. 2004;99(7):839-845.
- 22. Substance abuse treatment. Health Partners of Western Ohio Website. http://hpwohio.org/services/substance-use-abuse/. Accessed February 24, 2016.

References

- 23. Babor, T. F., Higgins-Biddle, J. C., & World Health Organization. (2001). Brief intervention for hazardous and harmful drinking: A manual for use in primary care.
- 24. Finnell, D. S., Savage, C. L., Hansen, B. R., Sanchez, M., White, K. M., Johnson, J. A., & Seale, J. P. (2017). Integrating substance use content in an "overcrowded" nursing curriculum. Nurse Educator, 43(3), 128-131.
- 25. Mitchell, A. M., Mahmoud, K. F., Puskar, K., Hagle, H., Lindsay, D., & Knapp, E. (2016). Teaching Screening, Brief Intervention, and Referral to Treatment Techniques to Nurse Practitioner Students. *The Journal for Nurse Practitioners*, 12(7), e311- e317.
- 26. Murphy-Parker, D. (2013). Screening, Brief Intervention, and Referral to Treatment: A need for educational reform in nursing. Nursing Clinics of North America, 48(3), 485-489.
- 27. Mitchell, A. M., Kane, I., Lindsay, D. L., Hagle, H., Puskar, K., Aiello, J., ... & Knapp, E. (2017). Educating Emergency Department Registered Nurses (EDRNs) in screening, brief intervention, and referral to treatment (SBIRT): Changes in attitudes and knowledge over time. *International Emergency Nursing*, 33, 32-36.
- 28. Nash, A. J., Marcus, M. T., Cron, S., Scamp, N., Truitt, M., & McKenna, Z. (2017). Preparing nursing students to work with patients with alcohol or drug-related problems. *Journal of Addictions Nursing*, 28(3), 124-130.
- 29. Puskar, K. R., Lee, H., Mitchell, A. M., Kane, I., Albracht, S. A., Frank, L. R., ... & Houze, M. P. (2016). Interprofessional collaborative education for substance use screening: rural areas and challenges. *Online Journal of Rural Nursing and Health Care*, 16(1), 76-96.
- 30. Puskar, K., Kane, I., Lee, H., Mitchell, A. M., Albrecht, S., Frank, L., ... & Houze, M. P. (2016). Interprofessional Screening, Brief Intervention, and Referral to Treatment (SBIRT) education for registered nurses and behavioral health professionals. *Issues in Mental Health Nursing*, 37(9), 682-687.
- 31. Van Boekel, 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.