

Opiate Overdose Educational Intervention and Naloxone Prescribing Programs

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Opiate Overdose

- Opiate overdose deaths are preventable!
- Boston—Overdose is the leading cause of death in homeless adults¹
- NYC—26% of all sheltered and 18% of unsheltered deaths were due to overdose²
- Pittsburgh—In 2016, 8 of 9 unsheltered deaths were due to overdose
- Majority of opiate overdose deaths involved fentanyl³
 - Increasing accounts of fentanyl found in cocaine, methamphetamine, and pressed pills

Reducing Opiate Overdose Deaths

- Empower consumers to make safer choices, conduct surveillance & research, advocate for local, state & federal reform
 - Standing pharmacy orders, drug immunity/good samaritan laws
- Overdose education and naloxone distribution programs
 - Education was retained 3 months after education and participants had higher rates of participation in treatment⁶
- Naloxone is most effective in the hands of people that use opiates
- Train staff at shelters and HCH services and equip with naloxone

Project Design

- Purpose was implement and evaluate a 15 minute overdose training and prescribe and track naloxone fills
- HCH clinic in shelter/drop-in center in Pittsburgh
- 30 adult men and women that used opiates in the past year and homeless (HRSA)
- Education on local laws surrounding overdose, risk factors, signs, and response to overdose, including intranasal naloxone use
 - 6 Question pre and post test
- Naloxone prescription phoned into pharmacy of patients' choice (off site)
 - Insurance or HCH voucher
- 1 week follow-up with pharmacy

TABLE 1 Patient Demographics (Sample Size = 30)		
	Frequency	%
Gender		
Female	20	66.67
Male	10	33.33
Race		
African American or Black	10	33.33
Caucasian or White	15	50
More than one race	3	10
Did not disclose race	2	6.67
Insurance status		
Insured	23	76.67
Uninsured	7	23.33
Housing status		
Street	19	63.33
Shelter	3	10
Transitional program	3	10
Other homelessness	5	16.67
Overdose history		
Experienced or witnessed an overdose	20	66.67
Did not experience or witness an overdose	10	33.33

Education

- Local laws surrounding overdose
- Risk factors for overdose
 - History of prior overdose
 - Decreased tolerance
 - Injection drug use
 - Combining opiates with other drugs

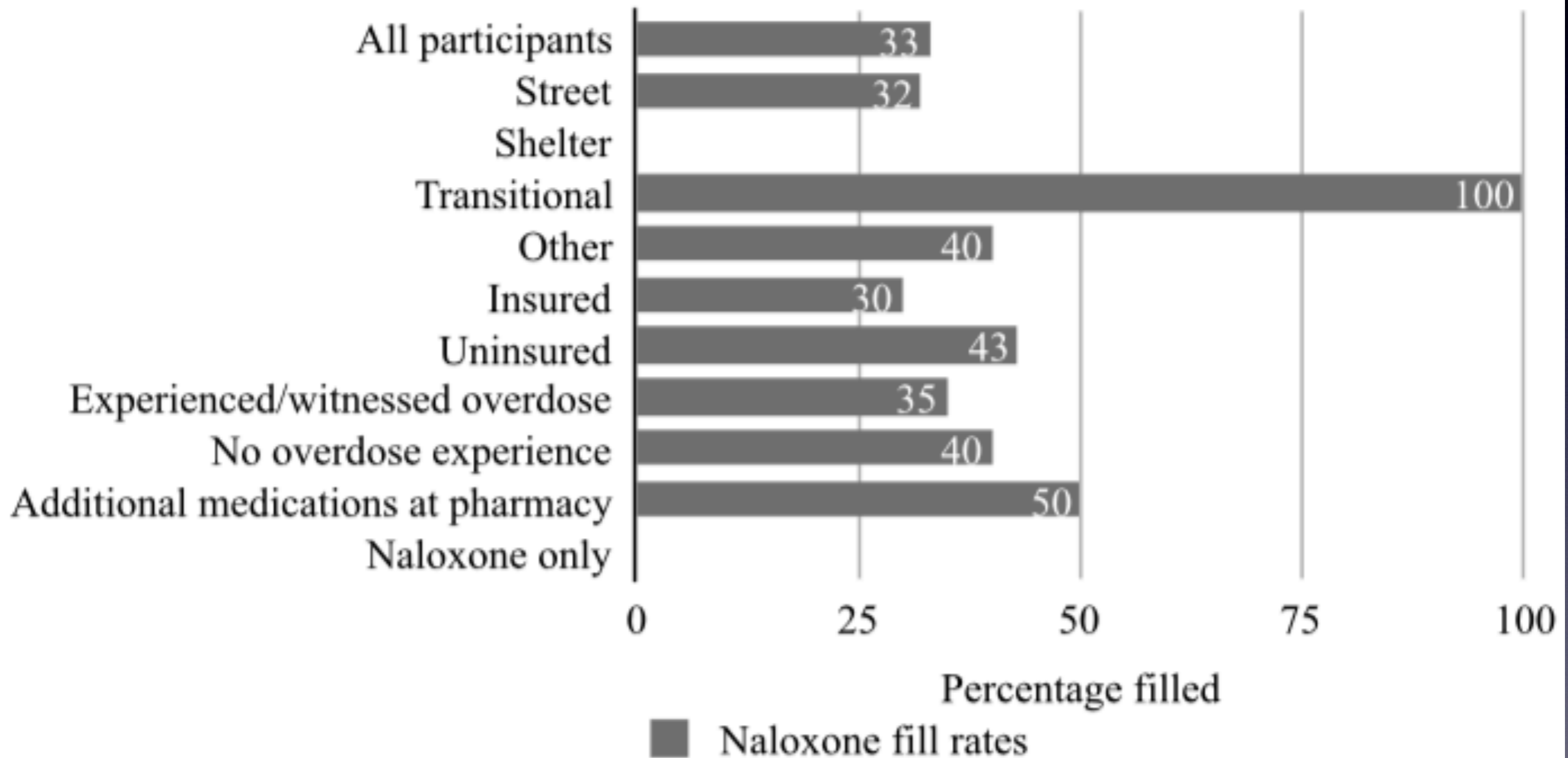
Education cont.

- Signs and symptoms of overdose
 - LOC
 - Respiratory depression
- Response to opiate overdose
 - Attempt to arouse
 - Call 911
 - Naloxone administration
 - Rescue breathing if needed
 - Repeat naloxone if needed

Pre and Post Knowledge

- 4 T/F, 1 multiple choice, and 1 ordering question
- Pre-test mean 3.17 +/- 1.12; Post-test mean 5.37 +/- 0.71
 - P-value <0.001
- Pre-test: Most knowledgeable about local laws and how to respond to overdose
- Least knowledgeable about signs of overdose (7 options)
 - Most recognized “shallow or no breathing, gurgling sounds” and “LOC (can’t be woken up or aroused)” and “blue or purple fingernails and lips”
 - Half misidentified “falling asleep” as a sign

Naloxone Fill Rates



Barriers

- Cost
- State laws
- Clinician time⁵
- Stigma

Conclusions

- Create a policy and standing order
- Train the trainers, then train the masses!
 - Signs/symptoms and order of response to overdose
 - Rescue breathing
- Distribute naloxone on site

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References

1. Meges, D., Zevin, B., Cookson, E., Bascelli, L., Denning, P., Little, J., I Williamson, J. (2014). Adapting your practice: Recommendations for the care of homeless patients with opioid use disorders. Retrieved from <https://www.nhchc.org/resources/clinical/adapted-clinical-guidelines/>
2. Gambatese, M., Marder, D., Beiger, E., Gutkovich, A., Mos, R., Griffin, A., I Madsen, A. (2013). Programmatic impact of 5 years of mortality surveillance of New York City homeless populations. *American Journal of Public Health*, 103(Suppl. 2), S193YS198. doi:10.2105/AJPH.2012.301196
3. U.S. Department of Health and Human Services, National Institute of Health, National Institute on Drug Abuse. (2016). *Drug facts: Fentanyl*. Retrieved from <https://www.drugabuse.gov/publications/drugfacts/fentanyl/>
4. Pietrusza, LM., Puskar, K.R., Ren, D., & Mitchell, A.M. (2018). Evaluation of an Opiate Overdose Educational Intervention and Naloxone Prescribing Program in Homeless Adults that Use Opiates. *Journal of Addictions Nursing*, (29)3: 188-195).
5. Behar, E., Santos, G. M., Wheeler, E., Rowe, C., & Coffin, P. O. (2015). Brief overdose education is sufficient for naloxone distribution to opioid users. *Drug and Alcohol Dependence*, 148 209Y212. doi:10.1016/j.drugalcdep.2014.12.009
6. Wagner, K. D., Valente, T. W., Casanova, M., Partovi, S. M., Mendenhall, B. M., Hundley, J. H., I Unger, J. M. (2010). Evaluation of an overdose prevention and response training programme for injection drug users in the Skid Row area of Los Angeles, CA. *The International Journal on Drug Policy*, 21(3), 186Y193. doi:10.1016/j.drugpo.2009.01.003