

# Sex Specific Outcomes in a Substance Use Intervention Program

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## Published In/Presented At

Amaducci, A. M., Anderson, R. A., Frey, A. S., Sheen, A. W., Colon, M. F., Roth, P. Stephens, J. Weaver, K. R., Burmeister, D. B., Greenberg, M. R., Cannon, R. D. (2018, October). *Sex Specific Outcomes in a Substance Use Intervention Program*. Poster Presented at: The American College of Emergency Physicians (ACEP) Research Forum. San Diego, California.

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# Sex Specific Outcomes in a Substance Use Intervention Program

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## OBJECTIVE

We set out to determine sex specific outcomes of a substance use intervention program in the ED setting.

## METHODS

A convenience sample of patients was approached during scheduled provider times at three hospitals: a level one trauma center and two affiliated community hospitals in a suburban and an urban setting. Inclusion criteria were subjects >18 years old who had capacity to answer survey questions and participate in interventions, were not critically ill, were willing to participate in the intervention program, and admitted to unhealthy use of tobacco products, alcohol, street drugs, or potentially addictive prescription drugs. Emergency medicine residents, medical students, and an addiction recovery specialist were utilized to screen and approach patients.

Definitions of unhealthy substance use were as follows: any use of tobacco products; alcohol use as defined as three drinks per occasion or seven per week for women, four per occasion or 14 per week for men; any use of street drugs or narcotics without a prescription. A brief intervention was then performed which assessed the participant's readiness to change their current habits and they were given referrals ranging from informational pamphlets to direct referral from the ED to inpatient treatment facilities.

Follow-up was performed via telephone at approximately six weeks–six months for all patients who completed a survey and brief intervention. Variability in phone follow-up time period was induced due to the nature of phone access in the population studied. Substance specific follow-up included number of times tobacco was being used, how many alcoholic drinks per day both typically and at maximum, and how many days per week drugs were being used. Sex specific frequency of use of particular substances as well as the frequency of successful referral in men vs. women was collected.

## ACKNOWLEDGMENT

This project was funded, in part, by Lehigh Valley Health Network's institutional research main funds and one unrestricted grant, the Philadelphia College of Osteopathic Medicine MEDNet research grant.

## RESULTS

The total number of patients screened was 2,281, 75.5% at the level one trauma center (n=1,723), and 24.5% at the two community hospitals (n=558). Of the 2,281 patients screened, 44% were male (n=1,007) and 56% were female (n=1,274).

Of the males, 31% (n= 318) screened positive for substance use. The most common substance for the males was tobacco (n=224). Of male substance users, 40% (n=126) agreed to intervention. At follow-up 23% (n=29) stated they either stopped or decreased their substance use.

Of the females, 21.5% (n= 274) screened positive for substance use. The most common substance for the females was tobacco (n= 208). Of female substance users, 40% (n=108) agreed for intervention. After follow-up 28% (n=30) stated they either stopped or decreased their substance use.

Overall rates of warm hand-off were 11 of 126 (4.7%) for men and 2 of 108 (1.9%) for women. Four of the men used alcohol only, six used drugs, and one used both drugs and alcohol. Both women used alcohol and neither used drugs.

## CONCLUSIONS

Our study found that overall rates of unhealthy substance use is higher in males. A successful intervention that lead to decrease in substance use over all substances was higher in women as opposed to men. Although the numbers were very small and this limits the strength of our conclusions, successful warm hand-off to rehabilitation was low in both sexes but higher in males.