



Patterns and Persistence of Substance Use Disorders: A 16-Year Longitudinal Study of Delinquent Youth After Detention

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Background

- Substance use disorders (SUDs) are prevalent among youth in juvenile detention.
- After detention, SUDs continue to be prevalent in this population.
- Prior longitudinal studies of youth in the juvenile justice system have short follow-up periods; they could not examine psychiatric comorbidities as youth age.
- Although informative, these studies investigated only *group* prevalence rates, not changes within *individuals*.
- We address these key omissions.

Research Questions

- What is the prevalence of SUDs among youth in detention and as they age?
- Among those with SUDs, what is the prevalence of psychiatric comorbidities?
- Among those with an SUD in detention, what proportion persisted with an SUD in adulthood? Are there differences in persistence by sex or by racial/ethnic group?

Data

- Data are from *the Northwestern Juvenile Project*, a longitudinal study of the mental health needs and outcomes of 1829 delinquent youth, ages 10 to 18 years.
- We recruited this stratified, random sample between 1995 and 1998 at intake to the Cook County Juvenile Temporary Detention Center (CCJTDC) in Chicago, Illinois.

Methods

- We interviewed participants while in detention, and re-interviewed them up to 13 times over the subsequent 16 years, whether they were living in a correctional facility or in the community.
- We assessed 10 SUDs: alcohol, marijuana, and “other” illicit drugs (e.g., cocaine, methamphetamine, and opiates). For psychiatric comorbidities, we assessed mood anxiety, and behavioral disorders.
- Disorders were assessed using:
 - Diagnostic Interview Schedule for Children, version 2.3 at baseline
 - Diagnostics Interview Schedule for Children, version 4, the Diagnostic Interview Schedule IV, and the Composite International Diagnostic Interview (WMH-CIDI) at follow-up interviews.
- To generate prevalence estimates and inferential statistics that reflect CCJTDC’s population, each participant was assigned a sampling weight augmented with a nonresponse adjustment to account for missing data. Because drug use is restricted in correctional facilities, we adjusted analyses by time spent in correctional facilities.

Acknowledgements

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KEY FINDINGS

1. **Prevalence of SUDs among delinquent youth decreased over time, yet remained high as youth aged (Figures 1& 2).**
 - By median age 32, 16 years after detention, about 20% of males and 10% of females had an SUD.
2. **A large proportion of delinquent youth with SUDs are burdened by psychiatric comorbidities as they age.**
 - Among those who had an SUD 3 years after detention, 81% of males and 71% of females had a comorbid psychiatric disorder (median age 19).
 - Among those who had an SUD 15 years after detention, 64% of males and 58% of females had a comorbid psychiatric disorder (median age 31).
 - Among males and females, behavioral disorders were the most common comorbid disorder.
3. **Males, Non-Hispanic Whites, and Hispanics are more likely to persist with an SUD as they age.**
 - **Sex Differences (Figure 3).** Five and 15 years after detention, at median ages 20 and 31, males were more likely to persist with an SUD compared to females (OR 1.7 (1.1, 2.6) and OR 1.9 (1.1, 2.3), respectively).
 - **Racial/Ethnic Differences (Figure 4).** 15 years after detention (median age 31), non-Hispanic white males and Hispanic males were more likely to persist with an SUD compared African American males (OR 3.2, (1.5, 7.0) and OR 2.5 (1.1, 5.6), respectively).
4. **To improve the health outcomes of delinquent youth, interventions need to address persistent SUDs and psychiatric comorbidities.**

Figure 1. Prevalence of SUDs (%): Males

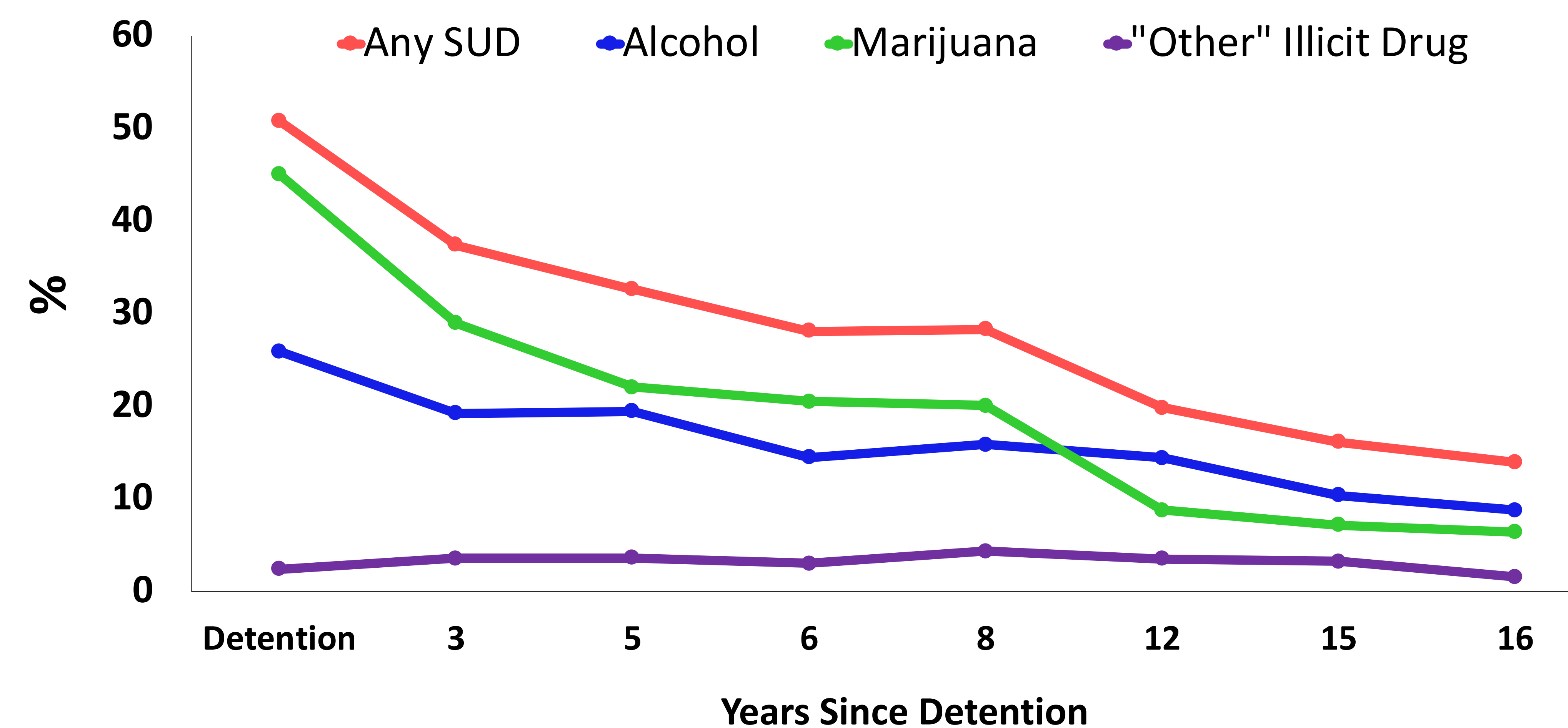


Figure 2. Prevalence of SUDs (%): Females

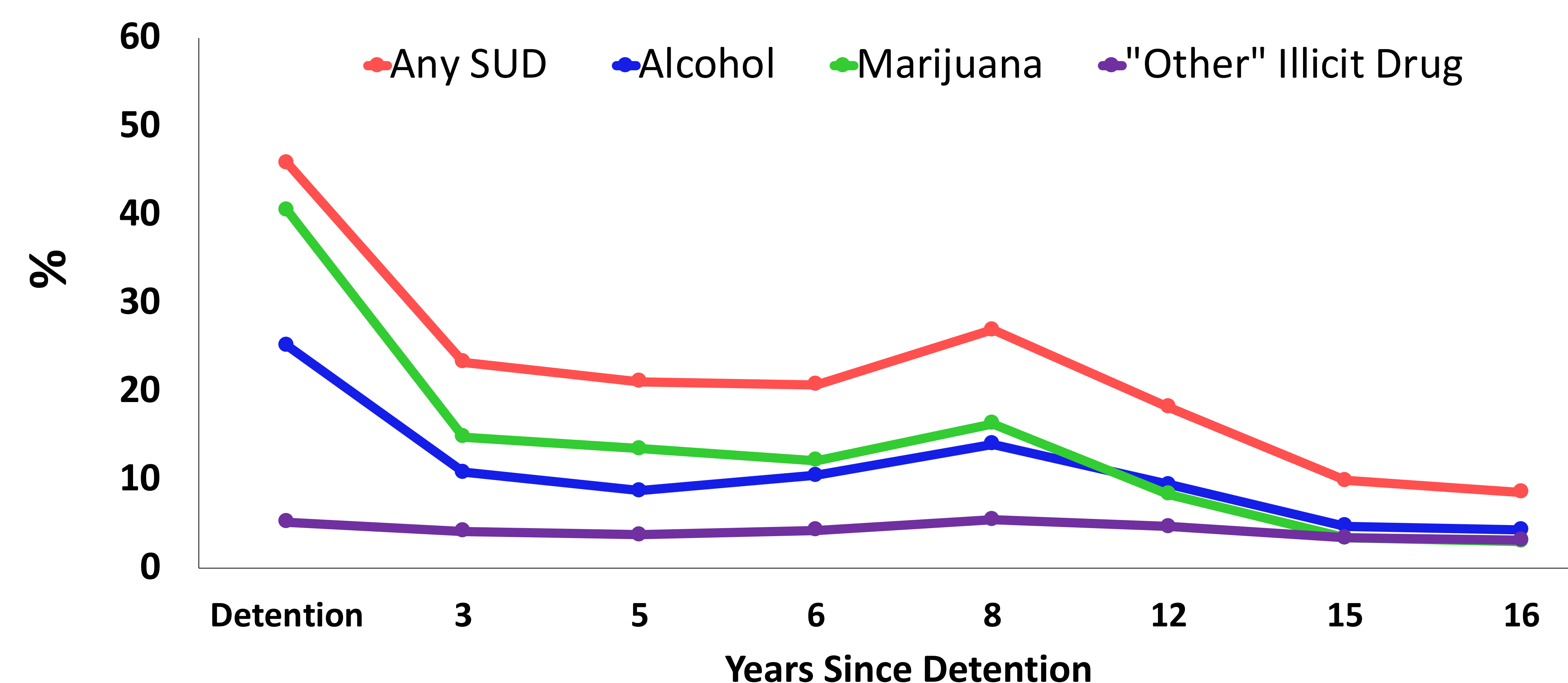


Figure 3. Persistence of Any SUD (%) from Detention to Follow-Up

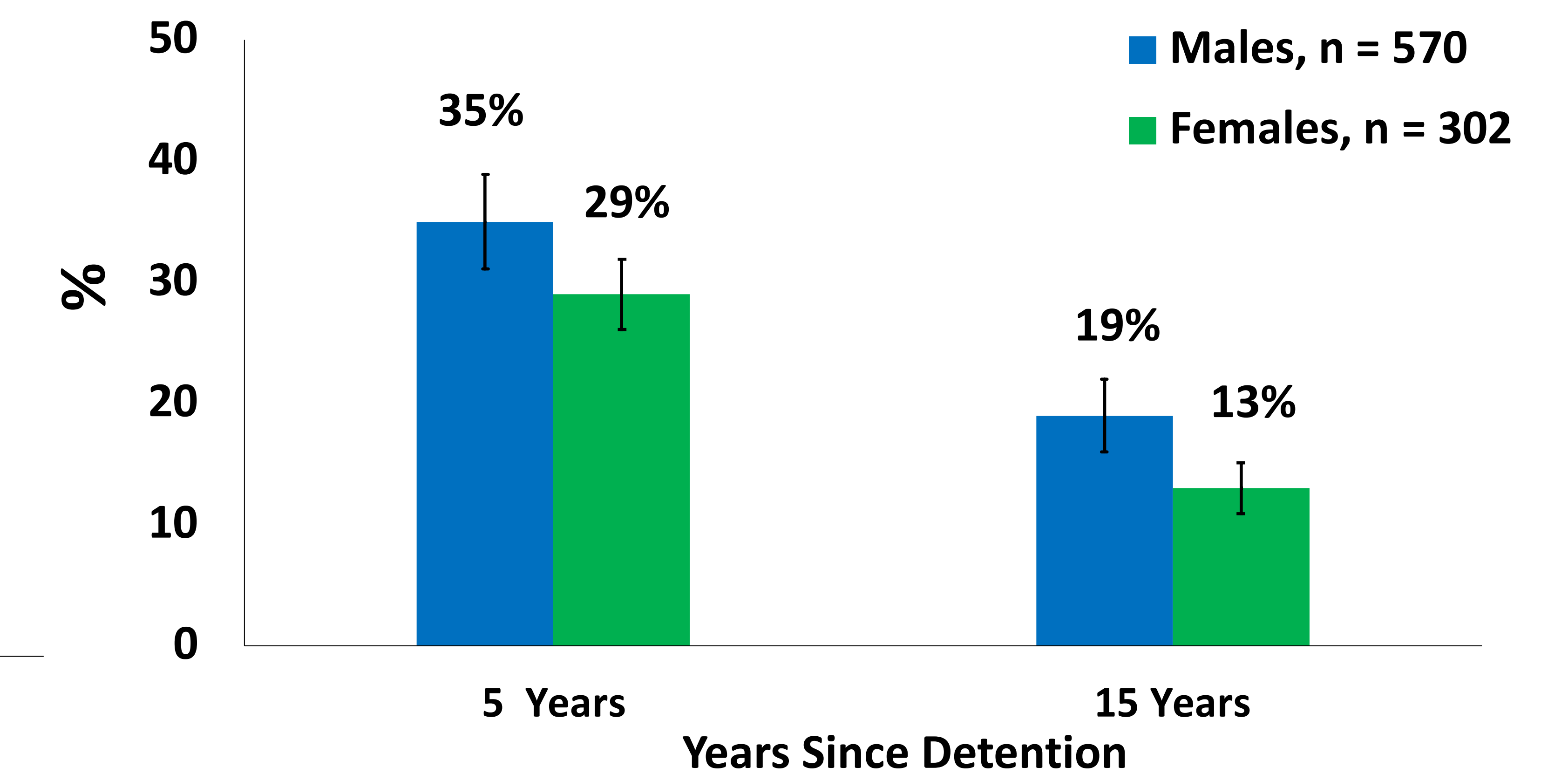


Figure 4. Persistence of Any SUD (%) 15 Years After Detention: Males

