

Reported Sleep Disturbances in Incarcerated Adolescents with Substance Use Disorders: Assessing the Need for a Sleep Hygiene Protocol

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Introduction

- Youth in the juvenile justice system have high rates of substance use disorders and sleep problems¹.
- Adult research indicates an association between substance use and sleep disturbance, especially insomnia².
- Sleep problems may decrease one’s ability to regulate, control, or inhibit emotion and behavior³, which is of particular importance in a juvenile justice setting.
- Rates of co-occurring substance use and sleep problems among youth in the juvenile justice system are unknown.

Current Study

- The purpose of this study is to explore the rates of reported sleep disturbance and prescription medication use related to sleep in a sample of incarcerated adolescents with a history of substance use.

Methods

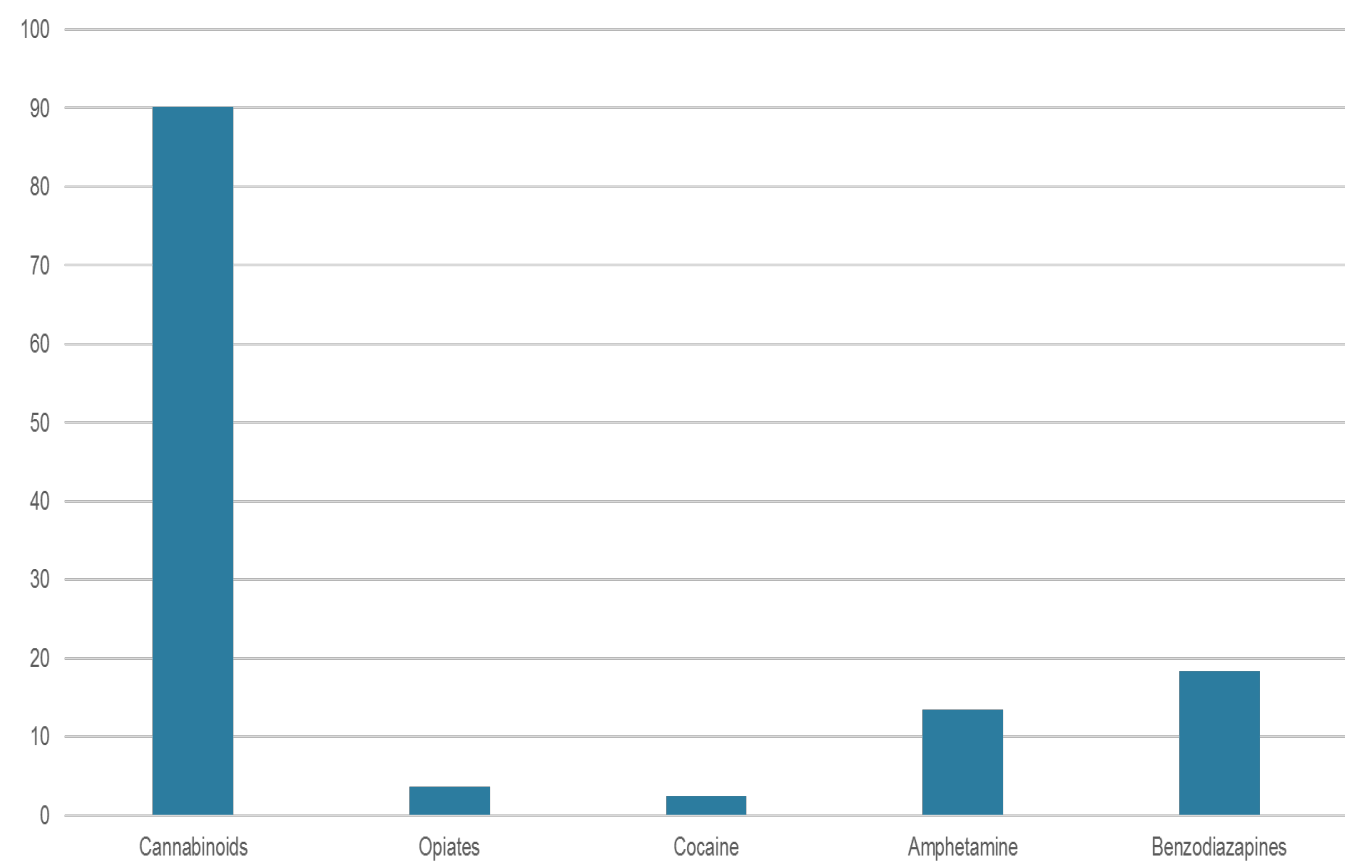
Participants	Measures
• $n = 83$ incarcerated, adjudicated adolescents referred for behavioral health treatment (including substance abuse treatment) under the age of 19 at time of study • 19 females, 64 males	• Nursing intake forms • Presence or absence of sleep disturbance • Self-reported substance use • Urine toxicology screens • Psychiatric interview of sleep patterns • Adolescent Substance Abuse Subtle Screening Inventory
Procedure	
• Retrospective chart review of adolescents referred for individual therapy & clinical services	

Results

Figure 1. Positive Urine Drug Screen – Cannabinoids (n = 82)



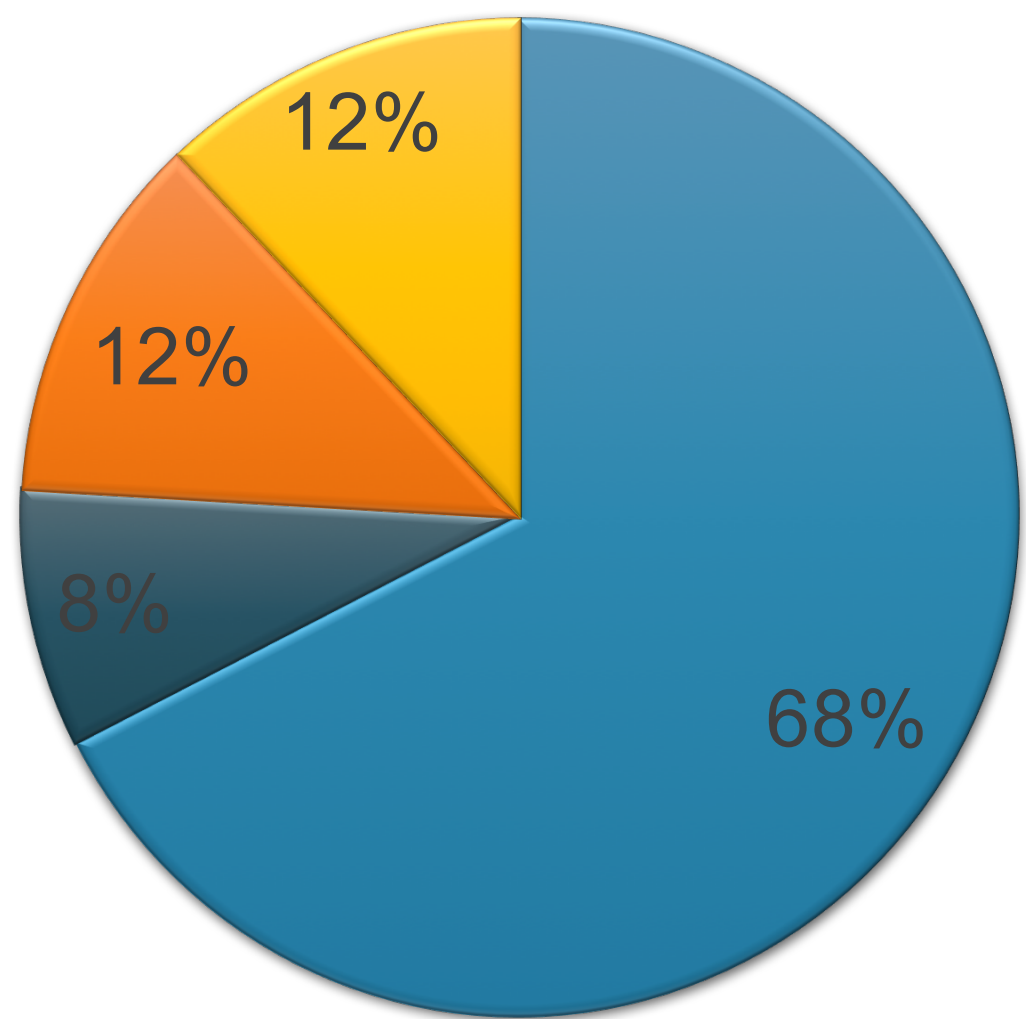
Table 1. Positive Urine Drug Screen Results (n = 82)



Substance Use Prevalence

- Self-reported Substance Use Only: 58.2 % (n = 39)
- Self-reported Substance Use on intake & Substance Use Problems identified on SASSI-A2: 32.8 % (n = 22)
 - Differences not significant (Chi square = 0.62, p = 0.74)
- Most participants screened positive for cannabinoids (90.2%, n = 74)

Table 2. Sleep Medications and Sleep Problems (n = 82)



- Sleep problems + meds
- Sleep problems + no meds
- No sleep problems + meds
- No sleep problems + no meds

Sleep Problem Prevalence

- Sleep problems with prescribed sleep medications: 68.3% (n = 56)
- Sleep problems without prescribed sleep medication: 8.5 % (n = 7)
- No sleep problems identified at intake, later prescribed sleep medications: 12.2 % (n = 10)
- Overall group differences statistically significant (Chi square = 12.22, p < 0.001).

Conclusions

- This retrospective chart review highlights the prevalence of sleep disturbance, prescription of sleep medication, and substance use in incarcerated adolescents.
- The majority of adolescents referred for behavioral health treatment reported sleep problems and were prescribed medications for sleep.
- The majority of adolescents tested positive for cannabinoids at intake, indicating a need for psychoeducation around the influence of cannabinoids on sleep.
- Results support the development of a protocol for objectively assessing and managing reported sleep disturbance in the context of treatment of co-occurring sleep and substance use disorders in a correctional setting.

Future Considerations

- Comprehensive assessment, including objective toxicology screens, self-report, correctional staff-report, and clinician assessments are indicated to better assess co-occurring sleep and substance use problems among incarcerated adolescents.
- Multi-method, targeted approaches to assess for and manage sleep disturbance are indicated in juvenile correctional facilities given the potential concern for substance abuse or misuse.

References

1 Shufelt, J. L., & Cocozza, J. J. (2006). *Youth with mental health disorders in the juvenile justice system: Results from a multi-state prevalence study* (pp. 1-6). Delmar, NY: National Center for Mental Health and Juvenile Justice; 2 Johnson, E. O., & Breslau, N. (2001). Sleep problems and substance use in adolescence. *Drug and alcohol dependence*, 64(1), 1-7.; 3 Wong, M. M., Brower, K. J., & Zucker, R. A. (2009). Childhood sleep problems, early onset of substance use and behavioral problems in adolescence. *Sleep medicine*, 10(7), 787-796.

Acknowledgements

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