



## POSITION STATEMENT

### Adolescent Sleep Hygiene

#### Introduction

A focus on rehabilitation of adolescents remains at the core of all health care and correctional programming in juvenile correctional facilities. Adequate sleep is critical to juvenile rehabilitation. Moreover, reports of sleep disturbance and requests for “sleep meds” are a very common sick call request. The American Academy of Sleep Medicine and the American Academy of Pediatrics recommend 8 to 10 hours of sleep per night for teenagers and 7 to 9 hours for young adults. However, as many as 85% of adolescents in the community get fewer hours of sleep, and approximately 16% suffer from insomnia. Based on solid research confirming the above factors, the American Academy of Pediatrics in 2014 recommended a delay in school start time for all middle and high school students (Owens, 2014).

#### Background

Adolescent insomnia is often related to medical comorbidities (including sleep apnea, particularly among obese youth and those who snore loudly) as well as the following risk factors often found in incarcerated youth:

- Psychological conditions (e.g., attention-deficit/hyperactivity disorder, posttraumatic stress disorder, anxiety disorders, depressive and other mood disorders)
- Poor sleep hygiene (e.g., inconsistent sleep schedules, caffeine)
- Acute stress/family disorganization
- Substance use (especially marijuana, alcohol, psychostimulants)

In addition, many patients enter the juvenile justice system already taking psychotropic or over-the-counter medication that either specifically targets insomnia or somehow impacts sleep architecture.

Additional risk factors for poor sleep specifically associated with the correctional environment may impact sleep even in juveniles without premorbid medical/psychiatric conditions or prior history of sleep disturbance, including the following:

- Adjustment issues (e.g., sights, sounds, smells, preconceived fears of being physically or sexually assaulted, fear of being bullied or extorted)
- Environmental factors (e.g., doors slamming, staff yelling, loudspeaker announcements, staff talking by handheld devices/intercoms, comfort of bed and bedding, room temperature)
- Sleep-wake cycle and forced phase shift at time of detention

Numerous sequelae of impaired sleep have been identified, including the following:

- Psychological: Patients with impaired sleep have been found to be 4 times more likely to develop new major depression over next 3 to 5 years, 2 times more likely to develop anxiety, and 7 times more likely to develop substance use disorders (Morin, 2012). Insomnia is also associated with suicide risk (Wong, 2016).

- Medical: Patients with impaired sleep have higher rates of hypertension, heart disease, and diabetes mellitus (Mitchell, 2012).
- Academic: Poor sleep interferes with executive functioning tasks including attention, information processing, and self-regulatory processes such as impulse control.
- Social: Incarcerated adults with impaired sleep have demonstrated limited ability to fully partake in or benefit from prison-based programs (Harner, 2014) and school performance appears worse in those with impaired sleep (Montgomery, 1983, Saarenpaa-Heikkila, 1995).

Sleep management has been studied in incarcerated adults. Most positive changes in sleep quality were either within the first 2 weeks of imprisonment or after 2 months (Elger, 2003). Interventions reviewed have included education around sleep hygiene, cognitive-behavioral therapy (CBT), which often treats the root cause, leads to fewer side effects, and produces effects that are sustained over time, and medication, which seems to have a particular role for short-term use with a more rapid initial response than CBT.

Finally, there is little evidence to support the safe and effective management of sleep disturbance in incarcerated adolescents. A multifaceted approach that incorporates psychoeducation, CBT, and medication, however, has been shown most effective both for adolescents in the community and for incarcerated adults.

### **Position Statement**

All correctional facilities serving adolescents should develop and maintain a comprehensive approach toward the assessment and treatment of sleep disorders that includes the following considerations:

1. Health care providers should maintain an active role in providing consultation to facility administrators regarding **environmental and structural factors** that may contribute to improved sleep among adolescents. The following are examples of strategies to consider:
  - a. Schedule shifts to optimize adolescent sleep patterns (e.g., bedtime, wake-up time, school start time, daytime nap opportunity, timing of recreation/physical activity, timing of medication administration)
  - b. Access to light (either natural outdoors or light boxes) at appropriately timed intervals
  - c. Unit routines around bedtime (e.g., showers, relaxation groups, calm music, low lights, chamomile tea)
  - d. Limited caffeine intake, especially in the afternoons and evenings
  - e. Enhanced sleep conditions overnight (including minimal noise, comfortable beds, adequate room temperature, dark units, blue lights instead of bright flashlights for routine checks, access to eye masks and/or ear plugs if needed)
2. Facilities should follow a consistent process for conducting a **comprehensive assessment** of reported sleep disturbance that includes a history of sleep patterns both prior to and since the time of incarceration; a log of current sleep patterns completed by the patient, the staff, or both; review for possible medical (such as sleep apnea) and/or

psychiatric (such as mood disorders, posttraumatic stress disorders, substance use disorders) comorbidity; and review of diet, exercise, and other health behaviors associated with sleep.

3. The initial approach to management of sleep problems should include **psychosocial interventions** for the individual patient that incorporate patient education regarding healthy sleep hygiene and habits; introduction of relaxation strategies such as guided imagery or progressive muscle relaxation; and the evidence-based practice of cognitive-behavioral therapy for insomnia (CBT-I).
4. Additional approaches may include **group sessions and staff training** regarding adolescent sleep and sleep hygiene strategies.
5. When initial psychosocial interventions are not effective, **psychopharmacological interventions** may be used in careful consideration with the following guidelines:
  - a. Psychiatric consultation should be considered whenever psychotropic medication is being used.
  - b. Psychiatric comorbidity should always be the primary target for any medication trials.
  - c. Medication that is either over-the-counter or FDA approved for treatment in adolescents should be tried prior to any off-label medication trials for insomnia.
  - d. Informed consent from the guardian and assent from the minor patient must be obtained prior to initiating medication.
  - e. Ongoing monitoring by health care providers and nursing staff is essential to assess for benefit and adverse effects, and must focus on discontinuing medication as soon as it is no longer necessary.
  - f. Special attention must be paid to the risk of diversion in the incarcerated population.

*Adopted by the National Commission on Correctional Health Care Board of Directors  
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## **References**

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