How to Recognize Sleep Deprivation and Fatigue for Faculty, Residents, Fellows, Students - Graduate Medical Education

Tired & Sleepy? Here’s What to Do ...

Sleep deprivation and fatigue interfere with concentration, cognition, fine motor tasks, decision-making, and emotional stability. It potentially can impact patient safety, as well as safety of resident physicians, especially when driving while drowsy after call. Our institution requires residents & fellows to receive training about managing sleep and fatigue each year. Below are a few key points to remember:

SIGNOS OF SLEEP DEPRIVATION & FATIGUE:
- Difficulty keeping eyes open
- Nodding and/or yawning repeatedly

SIGNOS WHILE DRIVING:
- All of the above, plus trouble focusing on road
- Drifting lanes, missing exits
- Don’t remember driving the past few miles
- Closing eyes at traffic lights

WHAT TO DO IF DROWSY BUT NEED TO WORK:
- Talk to your supervising faculty member
- Take a nap in a call room
- Drink a caffeinated beverage
- Darken room
- Turn off electronic devices
- Set alarm to wake up < 30 minutes (to prevent sleep inertia)

WHAT TO DO IF DROWSY BUT NEED TO DRIVE:
- Find alternative – don’t drive. Call friend or take cab or Uber. UT GME will reimburse for a 1-way local ride.
- Use call room in the hospital.
- If post-call, take 20 minute nap & drink cup of coffee or tea before leaving for home.
- If already driving & you notice signs of sleepiness, stop driving.

WHAT TO DO IF A COLLEAGUE OR SUPERVISOR APPEARS DROWSY OR FATIGUED:
- Tell them they appear sleep-deprived & you’re concerned.
- Pull over at a safe place & take a short nap.

WHAT TO DO IF A COLLEAGUE ... (CONTINUED):
- Tell them they appear sleep-deprived & you’re concerned.
- If they’re working, suggest they take a nap < 30 minutes.
- If they’re about to drive, suggest they nap first, or get ride from friend, bus, or cab/Uber. UT GME will reimburse for a 1-way local cab/Uber. Erlanger also provides call rooms that could be used for naps.
- If needed, inform the supervising faculty, chief resident, mentor, or program director. Sleep deprivation & fatigue can impact can impact patient care & documentation, which can be harmful to patients—and may place the hospital at risk. If needed, go up the Chain of Command to the Chair and then DiO and Dean.
- If this is a chronic issue, suggest that they see a doctor or counselor, which are covered through UT GME health plan & Resident Assistance Program (ENI).

CAUSES OF SLEEP DEPRIVATION & FATIGUE:
- < 6 hours sleep per night
- Shift work
- Jet lag
- Illness
- Depression, anxiety, & stress
- Medication side effects
- New baby, puppy, or loud environment
- Disrupted sleep (unable to complete full sleep cycles)
- Snoring and sleep apnea in self or roommate
- Other sleep disorders

Source: American Academy of Sleep Medicine and its SAFER Presentation
“Sleep and Fatigue Education in Residency”
HEALTHY SLEEP HABITS:
The best way to stay safe & keep your patients safe is to prevent fatigue & sleep deprivation. Since physician training sometimes requires inconsistent schedules & long hours, it is important to follow these sleep promotion guidelines when possible:

- Go to bed & get up at same time each day.
- Develop pre-sleep routine.
- Use relaxation to help you fall asleep.
- Protect your sleep time of at least 7 hours.
- Avoid going to bed hungry or too full.
- Get regular exercise.
- Reduce fluid intake before bedtime.
- Avoid caffeine in late afternoon or evening.
- Avoid alcohol before bedtime.
- Avoid nicotine.
- Ensure that sleeping environment is:
  - Cooler temperature
  - Dark (use shades)
  - Quiet (use ear plugs)
- Use bedroom only for sleep and intimacy.
- Do not use electronic devices.

HOW TO PREPARE FOR CALL OR SHIFT WORK:

- If possible, take a nap during a break in your shift or before reporting for a Night Float rotation. A nap of 20-30 minutes improves alertness & performance. Don’t nap longer – or you risk sleep inertia or extreme gogginess.
- Arrange for someone to pick up after a night shift or take a bus or cab home.
- Try to keep the same schedule on work days and off days to maximize alertness.
- If possible, alter your sleep time a few days before your shift change. For example:

<table>
<thead>
<tr>
<th>SCHEDULE</th>
<th>SLEEP TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Shift (7 AM – 7 PM)</td>
<td>8 PM – 3 AM</td>
</tr>
<tr>
<td>Night 1 of Transition</td>
<td>9 PM – 4 AM</td>
</tr>
<tr>
<td>Night 2 of Transition</td>
<td>10 PM – 5 AM</td>
</tr>
<tr>
<td>Night 3 of Transition</td>
<td>11 ON – 6 AM</td>
</tr>
<tr>
<td>New Night Shift (6 PM – 7 AM)</td>
<td>9 AM – 4 PM</td>
</tr>
</tbody>
</table>
- Use moderate amounts of caffeine to stay alert while working.

- Stop drinking caffeine in the last half of your shift.
- Avoid sunlight if you need sleep during day. Wear sunglasses.
- Make sure household understands need for quiet so you sleep.
- If these steps aren’t working, consider other measures:
  - Short, bright light sessions when you first wake & at mid-day for your shift. Use light box, lamp, visor, or simulator.
  - Melatonin supplement (0.5 mg) several hours before planning to sleep.
  - Talk to doctor about sleep medications which may have unwanted side effects.

UT GRADUATE MEDICAL EDUCATION FATIGUE MANAGEMENT & MITIGATION

UT GME recognizes that students, residents, fellows & faculty need 7 or more hours of sleep per night for optimal performance & periodic long weekends to prevent burnout. That’s why we emphasize the following:

- Honest reporting of duty hours so we can help prevent fatigue & burnout.
- Resident and faculty education on fatigue & burnout to develop a culture supporting non-judgmental fatigue management & mitigation – for students, residents, fellows, & faculty.
- Limitations on call duty & work shifts that limit duty hours to fall on average within the 80 hours per week maximum required by the ACGME.
- Back-up call assignments to allow for absences or fatigue-mitigation measures.
- Additional resources –
  - Call rooms
  - Reimbursement for 1-way local taxi or Uber fare for those too sleepy to drive home
  - UT Resident Assistance Program (similar to an Employee Assistance Program) provided by UT at no cost to the trainee for up to 6 counseling sessions for each issue or problem annually (ENI Balance Works)
  - Health insurance plans that include counseling services to help with depression, anxiety, stress, burnout, or other issues
  - Information about ENI and health insurance is available on our website www.comchattanooga.uthsc.edu or from the GME Office (423.778.7442).

5 WARNING SIGNS YOU NEED SLEEP

- You start to doze off while driving.
- You are forgetful or make mistakes.
- You feel fatigued or lack energy.
- You are irritable, grouchy, or easily lose your temper.
- You rely on caffeine to get through the day.