

SECTION FIVE – WORK SCHEDULES

POLICY NO: 5.3

SUBJECT: RESIDENT FATIGUE

A. PURPOSE

Limiting fatigue in medical residents is crucial to improving patient safety in a teaching hospital setting. Residents who suffer from sleep deprivation run a greater risk of creating serious medical errors than those who have had an adequate amount of rest.

The institution and the GMEC are sensitive to the fact that overly tired residents can pose a danger to patients even if they don't exceed the work hour limitations.

II. SCOPE:

This policy applies to program directors, faculty, nurses and house staff members.

III. POLICY:

A. Factors that can lead to fatigue on duty

1. *Acute sleep loss*

Include non-work related issues such as trouble at home, too much partying on days off or being sick. Pay attention when the residents say they had a day off but did not get much sleep for whatever reason.

2. *Cumulative sleep loss*

Spotting of cumulative sleep loss is more difficult. It can creep on the resident so that he/she gets used to being tired as just the normal state of being.

3. *Length of continuous wakefulness*

It is important to pay attention to how long has the resident actually been awake before the shift started.

4. *Time of day and circadian pattern*

The primary sleepiness window is 3 am to 6 am but the performance can be degraded from midnight to 8 am. Fatigue can strike in those time periods without many other risk factors being present.

B. Signs of “dangerous” fatigue levels

1. *Inconsistent performance*

Any deviation from the residents' usual performance level is considered a warning sign of fatigue e.g.: Inattentiveness in a normally attentive resident, difficulty with a task that he/she has done several times before.

2. *Overt sleepiness and fatigue behaviors*

e.g.: Yawning, nodding off during quiet moments, staring, repeated blinking of eyes

3. *Other people's observations and concerns*

Do not trust the residents to self report or admit fatigue. People tend to be very poor judges of their own level of fatigue.

4. Admission of fatigue

Since residents are usually reluctant to admit being fatigued, anyone who says he/she needs rest time should be taken seriously. They may have reached the point where they are posing a real danger to the patients.

The fatigued residents are apt to make serious errors in judgment or physically injure a patient during a procedure. They may have difficulty in communicating clearly and working as part of a team. They may also pose a driving risk. As a hospital staff, if you get the signal that a particular resident is fatigued, trust your perception and gut instinct and do not take the resident's word that "everything is alright".

C. Recommendations

1. Encourage residents and other hospital staff to be on the look out for fatigued residents and to report any concern promptly to the Senior Resident, Chief Resident or Attending physician.
2. Institute a culture in which the residents feel comfortable in saying that they are really tired and have to take a break.
3. Teach residents about optimizing naps.
Research has shown that a nap for 26 minute improved the performance by 34% and alertness by 54%. Sleeping any longer can put you in a deep sleep that leaves you groggy upon waking.

Caffeine and nap are to be combined one should ingest the caffeine before taking a short nap, not after.

D. Address the dangers of fatigued driving in a direct way

Educate the residents that there is a dramatically increased risk of accidents when driving home fatigued. The use of antihistamine or any drug with a sedative effect or driving on a long boring stretch of road can increase the risk.

The warning signs of drowsy driving like head nodding, difficulty focusing on the road, not remembering the last section you drove, drifting out of your lane, missing your exit and falling asleep briefly at a stop sign or red light, should be taken seriously.