TITLE: Fatigue Management

PURPOSE: The purpose of this policy is to promote patient safety and resident/fellow (trainee) learning and well-being by providing guidelines to prevent, identify and manage fatigue in regard to graduate medical education trainees.

POLICY STATEMENT: UVM Medical Center is committed to providing an environment that provides trainees with a high quality learning experience and promotes patient safety and trainee well-being. Trainees and faculty should adhere to the following guidelines to prevent, identify and counteract the potential negative effects of fatigue.

PROCEDURE:

Identification
Restricting duty hours alone may not preclude fatigue. Fatigue may be due to a variety of factors. These factors may exist on their own or in combination and include:

- Too little sleep
- Fragmented sleep
- Disruption of the circadian rhythm
- A myriad of other conditions which may masquerade as fatigue, such as anxiety, depression, thyroid disease or other medical conditions, or medication side effects
- Primary sleep disorders

Trainees and faculty members should be aware of the characteristic symptoms of sleep deprivation. These include:

- Repeatedly yawning and nodding off during conferences
- "Micro-sleeps" - a few seconds of "sleep" the "awake" resident may not even recognize
- Increased tolerance for risk
- Passivity
- Inattention to details
- Decreased cognitive functions
- Irritability
- Increased errors

Trainees and faculty members who recognize that they may be exhibiting signs of sleep deprivation should attend to their own health and wellness. Likewise, trainees and faculty members who identify that a colleague may be exhibiting signs of sleep deprivation should discuss the matter in a collegial manner with their colleague and encourage them to attend to their health and wellness.

Management
It is probably inevitable that there will be some sleep loss and fatigue in the course of medical training. The implementation of strategies to minimize the effects of sleep loss and fatigue is a shared responsibility of UVM Medical Center, the faculty, and trainees.

Strategies that can be employed by faculty to manage trainee sleep loss and fatigue so it doesn't interfere with patient care and safety, education, and trainee well-being, include the following:

- Adhering to the UVM Medical Center duty hour requirements (Policy GME 12, Resident/Fellow Duty Hours)
- Minimizing prolonged work (greater than 24 hours of clinical duties)
• Protecting periods designed to address sleep debt (i.e. providing trainees a minimum of at least twenty-four (24) hours off each week free from all clinical responsibilities)
• Critically appraising the best way to implement shift work
• Assisting trainees to identify co-existent medical issues which impair their sleep (e.g., undiagnosed sleep disorder, depression, stress)
• Include specific discussions regarding the management of fatigue in their regular discussions with trainees

Strategies that can be employed by trainees to manage sleep loss and fatigue include the following:
• Adhering to the UVM Medical Center duty hour requirements
• Setting priorities for "time off"
• Utilizing UVM Medical Center napping resources (sleep rooms)
• Utilizing the practical strategies discussed below

Practical Strategies

Naps
Naps can prevent and ameliorate some degree of fatigue. However, there are some caveats that should be observed:
• Brief (1-2 hours) napping prior to a prolonged period of sleep loss, such as twenty-four (24) hours on-call, can enhance alertness.
• To be therapeutic during a shift, naps should be frequent (every 2-3 hours) and brief (15-30 minutes).
• Naps work best the "earlier" they are in a period of sleep deprivation.
• Naps should be timed during the circadian window of opportunity, between 2-5 a.m. and 2-5 p.m.
• Longer naps, such as those more than thirty (30) minutes in duration may be counterproductive.

Caffeine
Using caffeine, a central nervous system stimulant, "strategically" can help manage fatigue. It is not a sleep substitute. Tolerance quickly develops. If caffeine is intended to be used to counteract fatigue, minimize the regular use of caffeine so that it will be more effective when consumed. The effects of caffeine generally occur within 15-30 minutes. 200 mg (1-2 cups of brewed coffee) is a usual dose.

Resources
If a trainee or faculty member has a question or would like additional information about the prevention, identification, and management of fatigue, please contact a sleep disorders specialists at UVM Medical Center.

DEFINITIONS:
Duty hours are defined as all clinical and academic activities and includes; patient care (inpatient and outpatient), all administrative duties related to patient care, in-house call, home call, scheduled academic activities (e.g., conferences, morning report, lectures, etc.), research that is a required part of the GME program, and moonlighting. Duty hours do not include reading and preparation time spent away from the duty site.

RELATED POLICIES: GME 12, Resident/Fellow Duty Hours

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