While of great importance in the practice of medicine, patient safety and quality improvement are rarely included in medical school curricula. On January 3, 2006, Jefferson's 3rd year medical students attended the 3rd annual Interclerkship Day, a program devoted to improving patient safety, with nationally-recognized speakers and focused workshops.

Safer, Alert, and Fatigue Education in Residency (SAFER)

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Dr. Judith Owens, Director of the Pediatric Sleep Disorder Center at Brown Medical School and internationally-recognized authority on sleep, put a challenge to the third year medical students to do their part to minimize the adverse effects of sleep deprivation. Dr. Owens, the author of the recent JAMA paper, Neurobehavioral performance of residents after heavy night call vs. after alcohol ingestion, helped dispel some of the common myths about sleep and work performance.

Myth 1: Medical students and residents can adapt to less sleep. Reality: All sleep debts need to be paid, sooner or later.
Myth 2: People have a good sense of how sleepy they are. Reality: Sleepy people underestimate their level of sleepiness and overestimate their alertness.
Myth 3: People can try harder when they’re sleepy, so that it does not effect their performance. Reality: Try as you may, you cannot compensate for the effects of sleep deprivation, which harm performance as much as several alcoholic drinks.

What to do about the problem is less clear. Though more intensive call schedules do lead to significantly higher error rates, adding a night float has not shown to make a difference in these error rates. A reason for this is that residents often do not sleep as they should, outside of the hospital. Dr. Owens made clear that, as high quality medical care depends on staying up on the latest research, doctors are similarly responsible personally for showing up to work well-rested.

Dr. Owens also emphasized how personally dangerous sleep deprivation can be to trainees. Dr. Owens personally suffered a motor vehicle accident during residency and, based on the data she shared, she was not unusual. She cited studies showing that emergency department residents are seven times more likely to have a car accident than before residency and nationally residents are two times more likely to have accidents and nearly six times more likely to have near miss accidents following call.

How about countermeasures, such as caffeine and napping? Unfortunately, there is no magic pill, other than plenty of sleep. Napping can help, as any sleep is better than no sleep. Coffee, unfortunately, as many of these readers know, is a double-edged sword. While it can temporarily increase alertness, and somewhat make up for performance losses due to sleepiness, tolerance develops and subsequent sleep is more disrupted and less restorative. Dr. Owens gave the instructive take-home measure that doctors,
including those in training, need to focus on being “alert to take the best possible care of your patients and yourself”. We need to consider it our personal, professional responsibility to do all in our power to show up ready to work, whether that means going to bed earlier, getting more naps or strategic cups of coffee. It’s our personal health and the health of those we care for that’s at risk.