Promoting Healthy Work Environments by Evaluating and Addressing Sleep Habits of Nursing Students

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# Disclosure

DR. THOMAS, DR. MCINTOSH AND DR. LAMAR HAVE NO CONFLICT OF INTEREST TO REPORT.

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### Objectives

- Explain current situational context that promotes nursing student sleep deprivation.
- Discuss consequences of sleep deprivation for nursing students and healthcare environments.
- Describe participants, methods, and results of a study of nursing students' sleep habits.
- Analyze nursing student sleep study implications.
- Develop strategies that address nursing student sleep deprivation and promote healthy work environments



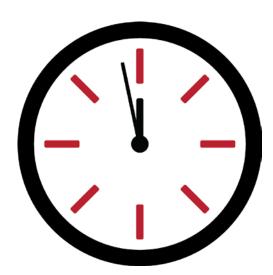
# A Snapshot of a Current Nursing Student

- Full time classes
- Part- to full-time employment
- ▶ 8-12 hour work shifts
- ▶ 8-12 hour clinical experiences
- Work + clinical experiences = 7 days/week
- Working and clinical experiences on all shifts
- Competing commitments (i.e. academic, employment, social) lead to sleep deprivation



# Daily Challenges for Schools of Nursing

- Increasing competition for clinical sites
- Increasing use of 12 hour shifts for clinical reduces number of clinical days but provides realistic experience and professional practice transition
- Demanding didactic and clinical requirements
- Decreasing clinical day availability



# Consequences for Nursing Students

Sleep dysfunction and physical/mental fatigue creates increase risk for:

- ► Injury during and/or after clinical and work experiences
- Increased error rates
- Motor vehicle accidents
- Increased stress
- Academic failure
- Early burnout
- Substance abuse
- Acute and chronic health issues



## Study Participants

- ▶ 328 pre-licensure nursing students\* were invited to participate
- 182 agreed to participate
- ▶ 179 completed the study (54%) response rate
- ▶ 157 were 19-24 years old
- ▶ 169 females/10 males
- ► 163 were single

(\*all students were enrolled in a baccalaureate nursing program)

#### Methods

- ► A 21-item 4-point Likert scale
- Questionnaire included:
  - Personal sleep habits
  - Number of hours at clinical and work
  - Motor vehicle use after clinical and work
  - Spare time activities
  - Sleep aid use
  - Stimulant use

#### Results

- 87% of participants needed 8 or more hours of sleep to feel rested
- 60% participants only received 5-6 hours of sleep
- 62% of participants reported 6 hours or less of sleep prior to attending class and 6 hours or less of sleep prior to a nursing clinical experience
- ▶ 98% of participants believed they would perform better academically if they had more sleep

#### Results Continued

- 85% of participants admitted to using some form of caffeine to combat sleepiness
- 31% of participants took sleeping pills to induce sleep
- 20% of participants took other forms of stimulants to stay awake



#### Results Continued

- 99% of participants believed they provided quality care with less than 8 hours of sleep
- Participants believed they were safe to work in clinical 97% and work settings 96%
- 85% of student participants believed 12 hour school and work experiences did not negatively impact safety

## Implications

- Schools of nursing and healthcare leaders must collaborate to develop strategies that improve clinical hours and encourage improved student sleep habits
- Establish safety considerations for those engaged in consecutive 12 hour work shifts and clinical experiences
- ► Teach nursing students about the potential negative impact of 12 hour shifts and poor sleep habits on performance and personal health

#### What Clinical Sites Can Do

- Limit students' outside employment hours while in clinical courses
- Nurse (who made an error) talk to students about importance of sleep
- Quiet room on their break
- Encourage use of buddy system with students



### What Schools of Nursing Can Do

- Admit the Issue
- Discuss at student events
- Discuss at faculty meetings
- Develop & implement a simulation related to sleep
- Talk honestly to students about effects of sleep deprivation
- Educate on tips for healthy sleep

#### What the Student Can Do

- Create a schedule that includes sufficient time for hours of sleep needed
- Take action to improve sleep
- Avoid stimulants and sleep aides
- Exercise regularly
- Seek help



#### References

- Abdalkader, R. H. & Hayajnep, F. A. (2008). Effects of night shift on nurses working in intensive care units at Jordan University Hospital. European Journal of Scientific Research, 23(1), 70-86.
- Bootzin, R. & Stevens, S. (2005). Adolescents, substance abuse, and the treatment of insomnia and daytime sleepiness. Clinical Psychology Review, 25, 629-44.
- Eanes, L. (2015). The potential effects of sleep loss on a nurse's health. American Journal of Nursing, 115(4): 34-40.
- Kurebayashi, L. Miyuki, do Prado,. & Paes da Silva, M. (2012). Correlations betweenstress and anxiety levels in nursing students. Journal of Nursing Education and Practice, 2(3): 128-134.
- Robinson, M. (2011). Supportive attitudes and working nursing students. Oklahoma Nurse, 56 (1): 21.