



Sleep Deprivation and the Potential Impact on Nursing Students' Practice and Health



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There are no financial conflicts of interest.

Today's Nursing Students

- Full time classes
- Part to full-time employment
- 12 hour work shifts
- 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

Implications for Nursing Students

- Sleep dysfunction and physical/mental fatigue increase risk for:
- Injury during and/or after clinical and work experiences
 - Increased error rates
 - Automobile accidents
 - Stress
 - Academic failure
 - Early burnout
 - Substance abuse
 - Acute and chronic health issues

Results

- 87% of participants needed 8 or more hours of sleep to feel rested
- 107 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
- 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
- 99% of participants believed they provided quality care with less than 8 hours of sleep
- Participants believed they were safe to work in clinical and work settings
- 85% of student participants believed 12 hour school and work experiences did not negatively impact safety

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 between stress 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.

Today's Nursing School

- Increasing competition for clinical sites
- Decreasing clinical day availability
- 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

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

- Used a 21-item 4-point Likert type scale
- Questions included:
- Personal sleep habits
 - Number of hours at clinical experiences and work
 - Motor vehicle use after work and clinical experiences
 - Spare time activities
 - Sleep aid use
 - Stimulant use

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

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