Critical Care Nurses Experiences of Napping on Breaks During Night Shift

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September 29, 2008
Dynamics 2008 Conference
Montreal, Quebec

Background

• In Canada, 18,000 nurses in CC units/ 15,000 in ER (CIHI, 2006)
• Unique demands of critical care environment
• 24 hour care (24/7) with day/eve or day/night rotations
• Sleep deprivation → impaired personal health and risk for patient errors (Hughes & Rogers, 2004; Josten et al., 2007; Lee & Lipscomb, 2003; Mohren et al., 2002; Ruggerio, 2003)
• Majority of nurses are female – shift work negatively affects women more than men (Marquie & Forst, 1999)

Background

• Increased focus on safety in healthcare and other industries
• Napping - potential strategy to improve performance, reduce fatigue, increase vigilance (Akerstedt et al., 2003; Jha et al., 2001; Knauth & Hornberger, 2003)
• Napping on breaks during night shift for nurses has not been fully explored

Napping

• Defined as a purposeful, brief, sleep period
• Recommended as a strategy to combat sleep loss and fatigue associated with night shift work (Akerstedt et al., 2003)
• Historically nurses napping during night shift not condoned by management
• Only one known study has focused on napping in nurses (Smith-Coggins et al., 2006)

Purpose

To provide an in-depth understanding of critical care nurses’ practices, preferences, and perceptions of napping/not napping during breaks on night shift in either the ER or ICU environments

Methods

• Design - qualitative descriptive study
• Setting - acute care community hospital in Western Canada
• Subjects – convenience sampling of RNs from ER or ICU who worked night shift
• Instruments - interview guide with 15 semi-structured questions based on literature and clinical expertise of researchers
**Procedure**

- Ethical approval/ access approval/ informed consent
- One-on-one audiotaped interviews – 60-90 minutes
- Interviews transcribed verbatim and entered into Ethnograph
- Independent coding of transcripts by each researcher then discussion & consensus to identify categories and themes

**Results**

- 13 RNs:
  - ER (9); ICU (4)
- 10 nappers (77%)
- 3 non-nappers (13%)
- Majority:
  - female (11, 85%)
  - married (85%)
  - 31-50 yrs of age (54%)
  - had dependants (62%)
  - worked FT (54%)
  - D/N (54%) or N only (23%) rotation
- On average:
  - had practiced as a nurse X 17 yrs
  - on night shift x 11 yrs

**Results cont’d**

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**Emerging Themes**

- Environmental Scan
  - Foggy Thinking – Consequences of Not Napping
  - Energized or Disoriented – Impact of Napping

**Theme: Environmental Scan**

- A number of variables are taken into consideration when determining when (or if) breaks or naps will be taken.

**Environmental Scan Nurses’ Comments**

“They assess the unit first. For instance, when we are with junior nurses and we have heavy patients, we never, ever go for a nap, or we never, ever go for a break.”
Environmental Scan
Nurses’ Comments

“So, if someone’s working a double, like sixteen hours, they’ll try to give them preference for break.”

Theme: Foggy Thinking – Consequences of Not Napping

• Slowed mental processing, uncertainty, irritability, and energy loss were described by nurses who wanted but were unable to nap during night shift.

Foggy Thinking – Consequences of Not Napping
Nurses’ Comments

“...I think I tend to ask others a little bit more readily, when I’m really tired. Like I don’t have quite the confidence in my decisions, so I will, “Well, what do you think about this?”. And check my medications. I might have to check it 3 or 4 times to make sure that I’m giving the right one, and the right dose.”

Foggy Thinking – Consequences of Not Napping
Nurses’ Comments

“You won’t respond as quickly. Say that the nurse is supposed to be monitoring telemetry, and they’re a little bit sleepy, and they’re kind of nodding off. And a run of something happens on the screen, and they miss it. Then that could be something that’s potentially quite serious.”

Theme: Energized or Disoriented – Impact of Napping

• Most nurses felt refreshed following a nap, while a few nurses avoided napping because of significant challenges with sleep inertia.

Energized or Disoriented – Impact of Napping
Nurses’ Comments

“We take care of people’s lives, and we need to be alert, and this is the middle of the night. And it’s natural for us to take a break, completely relax, and then come right up back at it, in a refreshed way.”
Energized or Disoriented - Impact of Napping

Nurses’ Comments

“...Sometimes when I go for break, I’m slow...wish I hadn’t picked this shift up and then I take my break, it’s like whoosh, let’s go, let’s clean all the Dynamaps...and I just feel happier after.”

Why Nurses Do Not Nap

- Busy, often understaffed units
- Unstable patients
- Codes
- Lack of a comfortable place to nap
- Interruptions during nap because of shared space or multi-purpose use
- Sense that management does not support napping
- Fear of sleep inertia
- Vigilance: “sleeping with one eye and two ears open”

Implications for Practice

- Emergent themes speak to the complex, dynamic nature, and unpredictability of the critical care environment.
- The ability to achieve a restorative nap was impacted by complex factors including:
  - the demands of patient care and safety,
  - staffing needs,
  - shift work rotation, and
  - organizational and environmental factors

Next Steps

- Survey of critical care nurses across Canada regarding this issue (in progress – WATCH for Upcoming email!!!)
- RCT to test a napping intervention that is effective within the critical care environment
Research Dissemination

June 2008, Baltimore, EMBARGOED FOR RELEASE

- Nurses Working Overnight Support the Need for a Restorative Nap During the Night Shift
- A research abstract that will be presented at SLEEP 2008, the 22nd Annual Meeting of the Associated Professional Sleep Societies (APSS), identifies a number of personal health, safety, and patient care issues that support the need for a restorative nap during the night shift among nurses.

Acknowledgements

Financial support received from:

- Manitoba Nursing Research Institute, Outcomes Research Grant, Faculty of Nursing, University of Manitoba
- Dr. John Wade Research Award, Manitoba Institute for Patient Safety

To sincerely thank the ER and ICU nurses who participated in this study