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The effect of nurse to patient ratios on stress and shift task completion

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BACKGROUND

- Nurses are concerned about high patient load and being unable to complete all shift required tasks.
- Staffing issues frequently discussed among nurses on units with dissatisfaction surrounding poor staffing ratios.
- Nurses feel they experience more stress and frustration on days when they have more patients.

PICO

For day-shift nurses on a med-surgical floor, how does a nurse to patient ratio of 7:1 or 6:1 versus a nurse to patient ratio of 5:1 affect perceived stress and perceived shift task completion?

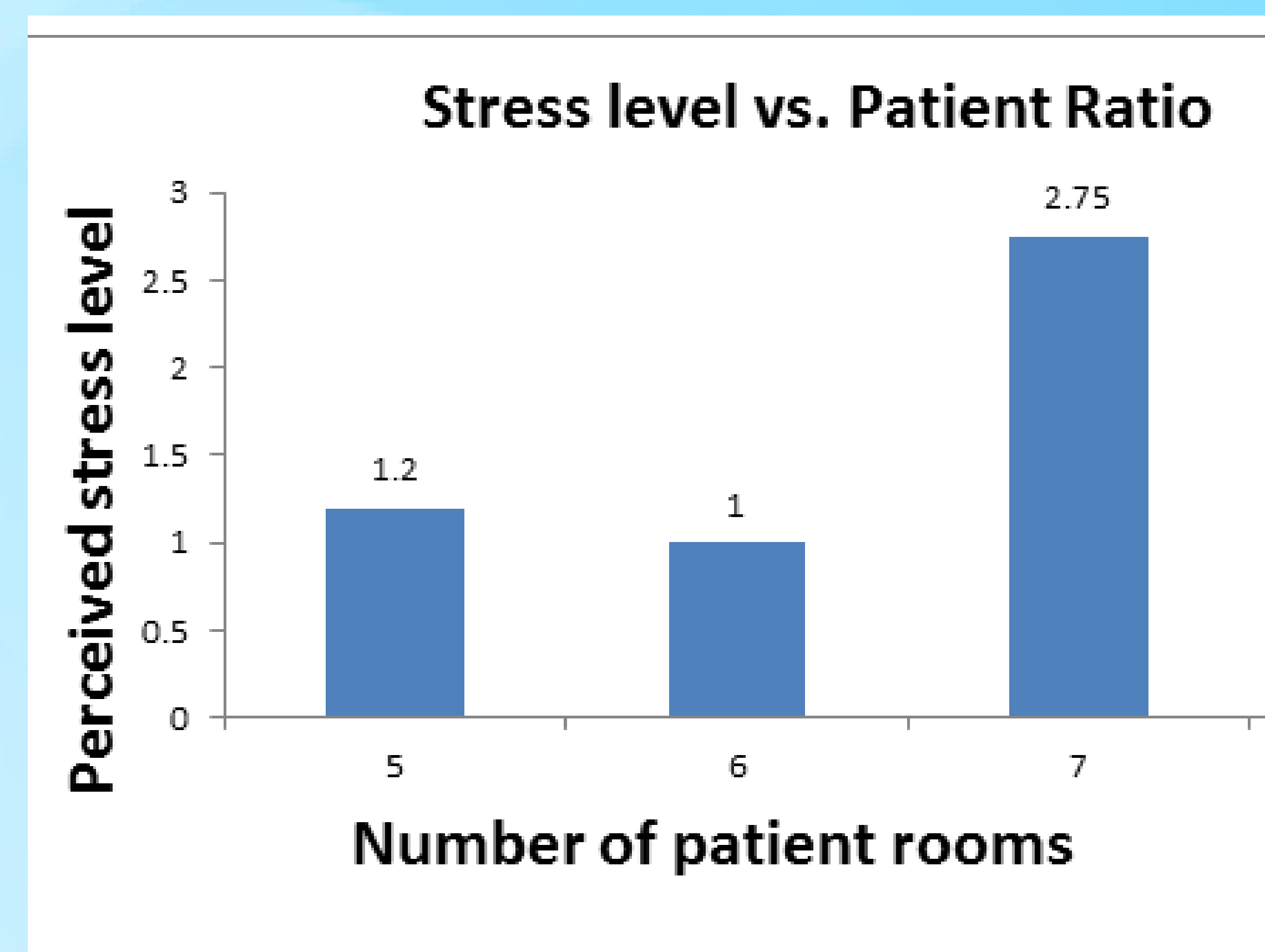
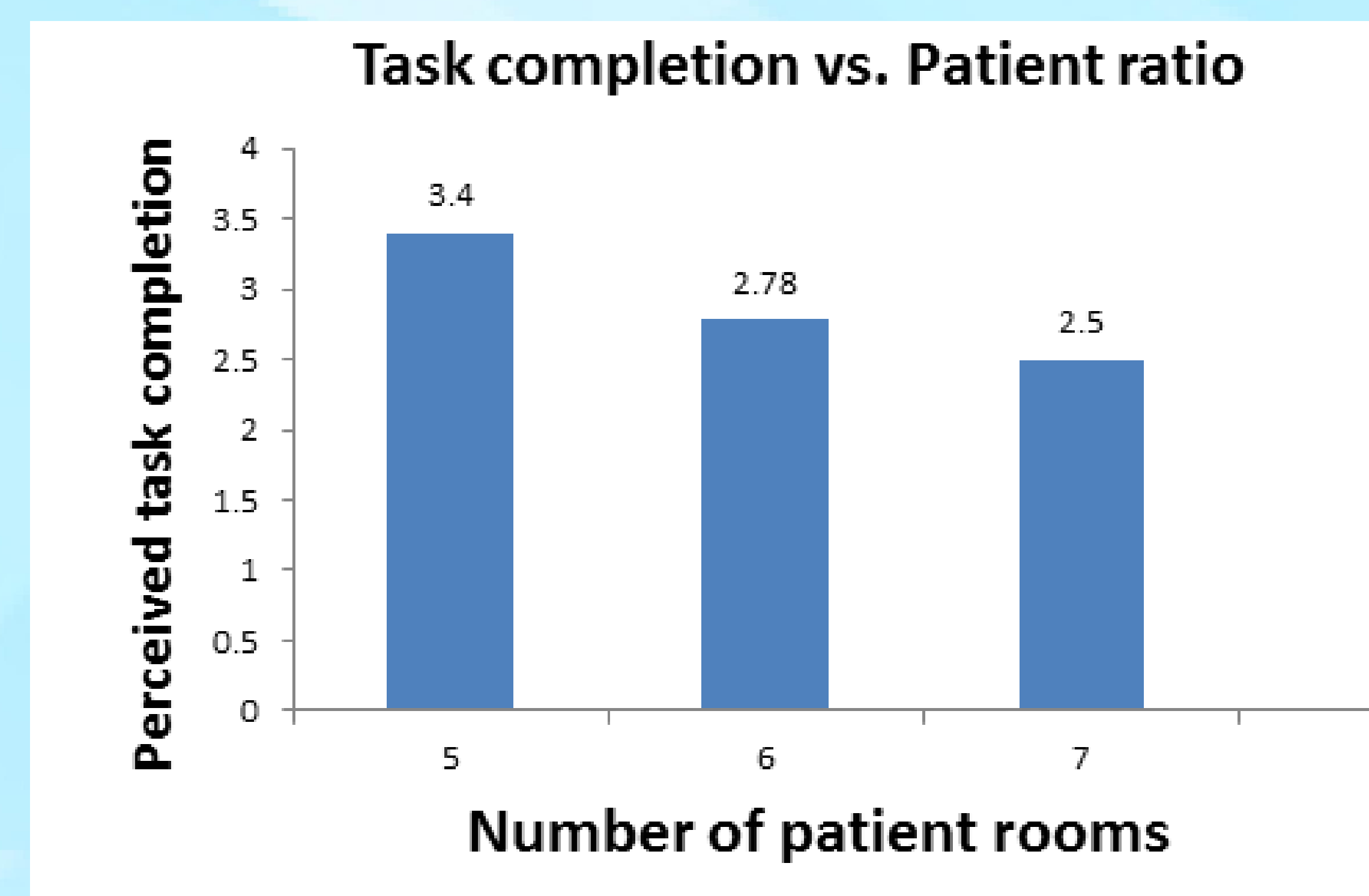
- P: Day shift nurses on a med-surgical floor
- I: Nurse to patient ratio on 6:1 or 7:1
- C: Nurse to patient ratio of 5:1
- O: Perceived stress and perceived shift task completion

EVIDENCE

- 10,184 staff nurses were surveyed from 210 hospitals in PA; found higher emotional exhaustion and job dissatisfaction were significantly associated with nurse-patient ratio (Aiken, Clarke, and Sloane, 2002).
- Survey data was collected from 197 nurses. Results showed that perceived stress scale and nurse stress scale scores were positively correlated with number of patients (Purcell, Kutash, Arnp, Cobb, 2011).
- Surveys were mailed to nurses in CA, FL, NJ, and PA. Results found that nurses working in hospitals with better staffing have lower odds of job dissatisfaction (McHugh and Ma, 2014).

OUTCOMES

- Survey responses were received from 23 nurses on med-surg floors.
- Perceived shift task completion was higher among nurses with a lower patient ratio than with a higher patient ratio. This means that nurses with fewer assigned patient rooms felt that they were better able to complete all required tasks during their shifts.
- Perceived stress level was higher among nurses with a higher patient ratio than with a lower patient ratio. This demonstrates that nurses with more assigned patient rooms felt higher levels of stress than those with fewer patient rooms.



IMPLEMENTATION

- 5-question survey was given to nurses at the end of each shift.
- 4-point rating scale: strongly agree, agree, disagree, strongly disagree
- Data analyzed to examine if level of stress and perceived shift task completion differed between nurses with 5:1 patient ratio versus 6:1/7:1 patient ratio
 - I had enough time to complete all of my nursing tasks.
 - I had enough time to respond to the needs of my patients.
 - I did not feel overwhelmed frequently during my shift.
 - I did not experience a high level of stress during my shift.
 - I don't feel exhausted after providing care for my patients today.

NEXT STEPS

- More research is needed on larger sample of day-shift nurses on different med-surg units in the network to examine effects of perceived stress and task completion.
- Further research is needed on night shift nurses to examine same variables to see if the same findings apply.
- There is a need for continued research to identify major variables that contribute to nurse stress to see how these could potentially be decreased.

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