Evidence Brief

How do long shifts, overtime, and higher patient load influence activities that support good nursing practice?

Nursing workforce factors like shift length, workload, and use of overtime are known to influence care quality and staff wellbeing. But to what extent do these factors influence other aspects of nursing work - such as care coordination and continuous professional development? We used data from a large national survey of nurses to see if working long shifts, overtime, and having higher patient loads influenced nurses' opportunities for completing activities that support good practice.

Background

Previous health workforce research has explored how components of nursing work may be impacted when different staffing and scheduling configurations are used. A large body of evidence shows the potentially harmful effects that long shifts (12 hours or more), working beyond contracted hours (also referred to as "overtime"), and low staffing levels have on outcomes like care quality, missed care, and nurses' wellbeing (1–6).

In addition to direct care, nurses are also responsible for completing work that indirectly supports good nursing practice. This can include: fostering care continuity, ensuring good communication with colleagues, and maintaining/updating skills and knowledge. Whilst not part of face-to-face care delivery, these activities are critical to the delivery of safe and continuous care, as well as for building workforce capacity (7).

Nurses' ability to complete these supportive activities may also change when nurses are operating under strained working conditions. To explore this idea further, we looked at the influence of long shifts, overtime, and higher patient load on nurses' opportunity for completing work that supports good nursing practice.

Data collection & analysis

We analysed survey data from 2,990 nurses working on general medical and surgical wards across 48 hospitals in England. These surveys were originally collected as part of the Nurse Forecasting in Europe (RN4CAST) study (8). We selected four survey questions to examine activities that support good practice: 1) taking part in staff development/continuing education programs, 2) having time to discuss patient care problems with other nurses, 3) observing care assignments that foster continuity of care, and 4) observing loss of patient care information during shift changes. Nurses were asked to rate on a 4- or 5-point scale the extent to which each were present in their jobs.

We looked at respondents' demographic profiles and the percentage of nurses agreeing with each statement, according to the length of shift worked, whether they worked overtime, and patient load (measured as average patient-to-nurse ratios). We tested relationships between workforce configurations and responses using multilevel logistic mixed models, which allowed us to account for other factors that may influence nurses' responses, like age and gender, full time or part time status, and shift timing (day, afternoon/evening, night). We used 'odds ratios' to estimate the relative likelihood (or 'odds') of a particular outcome (like undertaking professional development) by comparing two sets of people: one group who was exposed to something (like working long shifts) and another who was not.

Who was surveyed?

Nurses were about 40 years old on average, with 92% being female and 77% working full-time. In terms of the length of last shift worked, 33% of nurses worked 8 hours or less, 14% worked between 8 and 10 hours, 19% worked between 10 and 12 hours, and 34% worked 12 hours or more. The average patient load was calculated as 8.6 patients per nurse, and 51% reported working overtime during their last shift.

Effects of working long shifts

Nurses who worked 12 hours or more were 42% less likely to report having time for professional development and 28% less likely to report having time to discuss care problems when compared to nurses who worked 8 hours or less on their last shift. Shift length did not appear to make a difference to nurses' reports of continuity of care or information loss during handovers.

Effects of working overtime

Nurses who worked overtime on their last shift were less likely to report having time for professional development when compared to those who kept to their contracted hours. They were also considerably less likely to report being able to discuss care problems with other nurses, were less likely to see patient care assignments that foster continuity, and more likely to report loss of care information during shift changes.

Effects of higher patient loads

For each additional patient per nurse (i.e., an increase in patient load), there was a 4% decrease in likelihood of having time for professional development, a 9% decrease in likelihood of having time to discuss patient care problems with other nurses, a 5% decrease in likelihood of observing care assignments that foster continuity of care and a 3% increase in likelihood of observing loss of care information during shift changes.

What do these results tell us?

Nurses are significantly less likely to have time and opportunity to complete activities that support good nursing practice when working long shifts, overtime, and when they have higher patient loads. Opportunity for continuous professional development was most negatively impacted when nurses worked long shifts. Discussing care problems with colleagues, observing continuity of care assignments, and observing loss of care information during handovers were most negatively impacted when nurses worked overtime. All four outcomes worsened when nurses had higher patient loads.

Other studies specifically exploring incomplete/missed care have found associations between these workforce configurations and worsened patient outcomes (9,10). Yet despite these associated problems, long shifts, overtime, and high patient loads are often seen as being unavoidable responses to system-wide pressures due to nursing shortages (11). To counter potential consequences, support for current staff must be strengthened so that they have enough time to complete all aspects of their work. General solutions – like protecting time for team discussion/debriefing and administrative paperwork, streamlining charting and data entry processes, and incentivising professional development – can be introduced or revitalised, but more local solutions (i.e., on the ward-, hospital-, or trust-level) are also necessary to address different staff needs and priorities.

Conclusion

In addition to direct care work, nurses need adequate time/opportunity to complete activities that support good practice. However, opportunities to complete these activities may be reduced for nurses working long shifts, overtime, and with heavier patient loads. Decision makers and managers must carefully consider the implications of using these workforce configurations, since they have consequences for care quality in the short-term and long-term. Additionally, completing this supportive work is likely to improve nurses' capacity to manage workloads, team collaboration, and career satisfaction - all of which are important for staff recruitment and retention.

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