Rethinking student night duty placements

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KEY WORDS

clinical placement, graduate preparation, night shift, nursing student, work readiness

ABSTRACT

Objective

Student clinical placements principally occur over morning and afternoon shifts. This paper reports findings from a qualitative study that investigated experiences and value of night duty placements for undergraduate nursing students.

Design

Final year students from one university were invited to participate in a two week night shift placement. A qualitative approach involving focus groups with students and ward nurses, prior to, and following the clinical placements was used. In addition, individual interviews were conducted with other key stakeholders from the university and health care service.

Setting

The study was conducted in one metropolitan public hospital in Victoria, Australia. A clinical teacher was employed by the university to provide student support during the placement.

Subjects

Fourteen final year nursing students, five permanent night staff from the hospital and four key personnel representing university and hospital perspectives consented to participate.

Main outcome measures

All transcripts were thematically analysed together within the context of placement value and experience.

Results

Three themes emerged from pre-placement interviews: nature of night shift, preparing to be a graduate, and change and adjustment. Post-placement interviews revealed the themes: time to learn and time to teach, adjusting, continuity and preparing to be a graduate.

Conclusions

Night duty placements offered a range of possibilities and challenges. They provided opportunities for skills consolidation, enhanced understanding of nursing work and were perceived to contribute to readiness for graduate practice. Further research is needed to explore such placements on a larger scale.

INTRODUCTION

Clinical education provision in undergraduate Australian nurse education most commonly involves students attending clinical placements from Monday to Friday, either on morning or afternoon shifts. Few individuals may experience night duty work until they become registered nurses. This work can be vastly different to that during the day. Lack of graduate preparation for such situations may contribute to perceptions that they lack work readiness and familiarity with realities of clinical nursing practice settings (Heath 2002; Department of Human Services 2001).

LITERATURE REVIEW

Clinical placements allow students to apply classroom learning into 'real' clinical situations. Despite having clinical experiences in their undergraduate education, graduates express feelings of being unprepared for their roles on entering the workforce (Newton and McKenna 2007). This has been partially attributed to the existence of a theory-practice gap (Maben et al 2006) but may also relate to the nature of clinical exposure. Little research to date has explored different types of shifts that students undertake during their courses and the impact of these on graduate readiness.

Difficulties and stresses in making the transition from student to registered nurse have been well described. These include lack of confidence and/or competence, fear of making mistakes, increased responsibility, encountering new situations, environments and procedures for the first time (Delaney 2003; Oermann and Garvin 2002), dealing with families (Duchscher 2001) and time pressure limiting care delivery (Maben et al 2006). Chang and Hancock (2003) found graduates experienced role ambiguity in the first few months after commencement, and ten months later experienced role overload. Kapborg and Fischbein (1998) found new graduates experienced difficulties in feeling relaxed during off duty time so may not have had opportunities to deal with their work-related stress.

Many new graduates entering the workforce for the first time, may be newly living away from home and coping with demands of shiftwork and responsibilities inherent with their roles (Ulrich 2003). Halfer and Graf (2006) suggest that new graduates grapple with dissatisfaction in work schedules for up to twelve months following commencement of work. They assert that graduates undergo "a grieving process... through loss of the academic schedule. They no longer have school schedules with weekends and holidays free and winter/summer vacations" (p154-155). A study by West et al (2007) found new graduates experienced significant difficulty adapting to lifestyle effects of shift work.

Night duty nursing may be first experienced during the graduate year. This has been identified as clearly different to day or afternoon shifts. Bohle and Tilley (1998) examined attitudes of 130 registered nurses towards shift work in their first 15 months following graduation. Their findings suggest that nurses found night duty to be more peaceful, allowed greater independence, required more responsibility and was friendlier. However, the work was perceived as less interesting than during the day, shifts longer, more lonely and tiring. Overall, participants rated nights more negatively than other shifts due to increased fatigue, sleep deprivation, gastrointestinal complaints, impact on leisure time and social activity.

Much available literature around night duty work deals with complications arising from altered sleep patterns and circadian rhythm, resulting from misalignment between the body's biological clock, and timing of sleep and wake periods (Santhi et al 2005). The body is pushed into a pattern contrary to its natural program (Grossman 1997), consequently, altering sleep patterns. Daytime sleep may be shorter in duration and of poorer overall quality (Coburn and Sirois 2000).

In a recent Swedish study, Campbell et al (2008) explored nurses' learning during the night shift. Change-of-shift report, personal rounds and interaction with doctors were shown to contribute

to learning. They concluded night duty could offer important learning opportunities for students, however, no literature was sourced around students' experiences and learning outcomes from night placements. It is possible that learning and clinical performance may be altered. Research on emergency physicians has found that undertaking serial night shifts causes a decline in cognitive performance (Dula et al 2001). Fatigue resulting from sleep deprivation may lead to accidents (Gold et al 1992), greater incidence of mistakes, and ultimately impact on patient care (Kunert et al 2007; Muecke 2005).

METHODS

The purpose of this study was to explore experiences and value of night shift placements for undergraduate students. A pilot program was developed by one university and a partner health care service to examine night shift placements for third year undergraduate nursing students through student, ward staff and key stakeholder perspectives.

Final year students were invited to undertake a clinical placement consisting of two weeks night duty, along with a focus group interview prior to, and following the placement. Ethical approval for the project was obtained from both relevant university and health care service human ethics committees prior to commencing recruitment. Subsequently, two groups of seven students participated. Each group was supported during the placement by a clinical teacher employed specifically to facilitate learning and assist adaptation to the night duty environment. Pre and post placement focus groups were conducted with five permanent night ward staff who were to be involved in providing student experiences.

Pre-placement interviews were designed to explore expectations of students and staff and address any concerns that may arise. Students were asked their reasons for participating, what they hoped to learn, and any concerns. Ward staff were asked about their expectations of students, perceived challenges and concerns. Post-placement interviews examined students' and staff experiences and

renewed perceptions on completion of the placement. Here, students were asked about fulfilment of their expectations, significant learning experiences, contribution of the placement to their graduate readiness, and whether they recommended such placements for other students. Staff were asked their perceptions of the placements, student learning and contribution to graduate preparation, benefits and limitations. Pre and post-placement interviews facilitated comparisons between expectations and actual experiences. Finally, key personnel from the university and hospital were invited to participate in one-to-one semi-structured interviews to explore any other issues arising. Two clinical teachers and two clinical administrators (one university and one hospital) agreed to participate. Focus groups and individual interviews were audiotaped and transcribed verbatim. Thematic analysis informed by the work of Ezzy (2002) was employed in analysing the data. This entailed open coding to initially sort and categorise data, axial coding to explore relations between codes and selective coding to finalise categories and the overall story.

FINDINGS

Three themes emerged from both pre-placement interviews and post-placement interviews relating to experiences and placement value.

Pre-placement interviews

Themes emerging from pre-placement interviews were: *Nature of Night Shift*, *Preparing to be a Graduate* and *Change and Adjustment*.

Nature of Night Shift

Students and staff perceived that night shift would be different to that experienced during the day. Students perceived it would be quieter than they had been used to but there was also uncertainty about what nurses did during the night.

It won't be so busy as working on a day, passing a lot more time. I don't have any real idea what the night staff do or whether there will be periods of nothing. (Student)

Some students felt they may see more at night.

You see so much more than you do during the day such as accident cases. (Student)

I actually think that you will see things – conditions that will flare up during the night that you don't see during the day. (Student)

Nursing staff recognised other aspects that were different. Less support than during the day was identified as particularly important and staff were keen to help students deal with this. Emphasis was placed upon the need for teamwork at night.

You don't have all the supports around you... You cannot say the blood pressure's this and just leave it at that...You're going to have to take the steps you need...If I have them [students] I want to guide them through that. (Staff)

At night its all teamwork. That's the main thing about nights, its all teamwork. (Staff)

Documentation was also emphasised by staff as an important component of working at night.

Learning how to fill out charts correctly so that people can read them, and knowing what to document and how to do it correctly, looking after drains, knowing that they have to be emptied at midnight and that sort of thing because they [students] don't do during the days. (Staff)

Preparing to be a Graduate

A night duty placement was seen by staff and students as beneficial for understanding graduate roles and nursing practice realities. Students felt the placement would better prepare them for their graduate year, recognising benefits in undertaking the rotation with support in a student role.

It is a reality of our job. Nurses work 24 hours a day. (Student)

You won't feel so anxious next year when you are faced with going onto nights. (Student)

I want to actually do a night and feel what its like. Learning how to do things in the dark. (Student)

If you do feel uncomfortable it is a lot easier to step aside and say 'help' than in a grad position when you are the nurse. (Student) Staff saw benefits in having better prepared colleagues to work with.

When you get grads onto nights they're pretty lost to start with because they've got no confidence of what to do on nights. They're suddenly thrown in as a grad and they've got eight patients to look after. (Staff)

Change and Adjustment

The final theme emerging in the pre-placement interviews was around adjustments that would be necessary. This not only related to students, but also to staff who were having students for the first time. Understanding where students were at, as well as letting students undertake tasks they would do automatically were the main aspects raised.

I think its just getting a bit of confidence in them [students]. Like suddenly you've got students and knowing just what they can and can't do. (Staff)

Getting them to do something rather than doing it yourself. It is like you just get on and do...Just learning to slow down enough and give them something to do and supervise them. (Staff)

Given students were undertaking night duty for the first time, they raised a number of issues relating to adjustment. These involved perceived physical and social alterations that would be needed. Many students were eager to explore their own coping mechanisms.

Learning how to cope, not just the night shift but during the next day, and then going back into doing nights. (Student)

It will be interesting to see how we will function at four o'clock in the morning. (Student)

Especially over the weekends, re-adjusting to being awake during the day and then back asleep at night and then changing back again. (Student)

Post-placement interviews

Post-placement interviews yielded extensive, rich data. Four themes emerged, these being: *Time to learn, Time to Teach, Adjusting, Continuity* and *Preparing to be a Graduate.*

Time to Learn, Time to Teach

One significant aspect emerging involved educational benefits of the placements. It was highlighted there was often more time to learn about things that were happening, as well as time for staff to teach than during the daytime.

You have time to actually understand why you are doing things and understand the diseases. You can pull things together. (Student)

You had time to read histories. And they [night staff] had time to teach us. (Student)

They actually got a lot out of it, getting time to understand why they were doing things (Clinical teacher)

I found I was in resus the other day and we intubated someone. Afterwards they [staff] sat down with me, showed me the equipment, how it all worked. I don't think during the day they would have that sort of time. (Student)

There were opportunities for many new learning experiences during the placements. In addition, previously learned skills and knowledge were able to be further refined. Students identified physical assessment and documentation skills as particularly necessary for night staff.

Even learning to assess people while they're asleep. Getting used to walking around with a torch in your hand and not bumping into things. (Student)

I've taken more bloods and done more ECGs in the past two weeks than I've ever taken. (Student)

I'd never taken blood before this placement and I did that on the ward. (Student)

Particular experiences were identified by students and clinical teachers not normally possible during the day, which added to overall placement benefits.

I've had a couple of code greys which is quite exciting. During the day you just don't get involved at all. At night you have to do something as well and help restrain. (Student)

They got to see things they wouldn't during the day.

Like the certification process when someone has been brought to the hospital dead on arrival, how the process occurred, they learnt stuff about triage, how people are seen and what rating they are given. (Clinical teacher)

I got to see an underwater seal drainage straight from someone post-op and I've never seen that before. If it was during the day if there were other students around I just wouldn't have had the chance to see it at all. (Student)

Adjusting

As anticipated in pre-placement interviews, there was a process of adjustment for students. This included both physical and social factors, however, students did not place as much emphasis on these as they had in the pre-placement interviews.

The overall benefit for me is coping through the lull. When you're getting tired. You are really having to concentrate and it was a good opportunity to have insight into that. (Student)

The way a night shift works I now know that I can make it through the night. (Student)

Even organising your own life. I've struggled with paying the bills and ringing people before five o'clock. Getting to the post office by five o'clock I have to get out of bed by four and you're a bit sluggish and think I'll go tomorrow (Student)

Most students found changes to sleeping patterns not as great as expected. Some recognised patterns necessary for enhancing the sleep they were able to achieve.

You can't go to sleep as soon as you get home. You need to unwind and if you've got other appointments as well it throws you out. You have long standing things like doctor's appointments and you might only have two and a half hours sleep, that's when you struggle a bit. (Student)

Continuity

One unexpected positive aspect was that students were exposed to more continuity of care than previously experienced. Students and clinical

teachers discussed how students were able to follow patients through from acute admission states to stabilisation.

They [students] had the time to stay with the same person and actually see when something was given to the patient and slowly watch the patient come good...looking at more complex treatment, seeing which way the patient was going to go and how to stabilise them. (Clinical teacher)

Seeing what happens before they come up on the ward and going through the emergency, the whole process (Student)

Continuity was also evident in students' enhanced understanding of twenty four hour nursing work. They recognised the continuous nature of nursing care delivery and how each shift impacted on the next.

It's nice to know what night shift actually do. You come on during the day and the day staff knock what the night shift do and its nice to see it from the other side. Its nice to see what the staff have to do, how they prepare patients in the mornings and how you help the day staff but also how the day staff help the night staff. (Student)

Preparing to be a Graduate

Placements were seen to contribute to students' readiness for graduate practice. Students were provided with opportunities to consolidate previous learning and clinical skills.

They have been able to consolidate some nursing practices. (Clinical teacher)

Getting blood and getting that down pat. You do so many [on nights] that you feel much more confident. (Student)

Even how things that are done during the day effect the night. The main one for me is the fluid balance charts. When you do them and they are incomplete and also preparing all the paperwork for the following day. Knowing how much easier things would flow. (Student)

For some students, the experience provided scope to develop confidence in their abilities. It allowed

them to overcome anxieties about taking the next step into a graduate role.

I can't wait to get out there and work. I think this has made me want that [to be a graduate] more. (Student)

It made me realise what I can actually do. I was quite hesitant coming into this semester thinking there's only eight weeks of clinical and then you're on your own. (Student)

The experience provided students with a supported introduction into roles and responsibilities of nursing at night. Hence, as graduates it would be expected these individuals would have better understanding and preparedness for what would be expected of them.

I definitely think its beneficial. If they [students] rotate onto night duty as part of their grad program, this stint would definitely help them in regard to lives at home, adjusting to nights, sleeping during the day when on night shift, and being able to experience the day then the night shift as a different world. (Clinical teacher)

It gave them [students] confidence. They got a bit of autonomy where they could make independent decisions on their feet and they were making right decisions and were being applauded for that. (Clinical teacher)

The night duty [staff] don't have the support if a patient was to deteriorate. Whereas on days you have more nurses, the doctors are always floating around. But on nights there are fewer nurses and you have to call for the doctor. You have to have more patient skills. (Student)

DISCUSSION

This study explored experiences and value of night duty placements for undergraduate students, an area currently poorly researched. Findings indicate that placements allowed participants to appreciate the round-the-clock nature of nursing work prior to their graduate years. This is a time when learning to cope with shift work demands has been found to contribute

to stress (Ulrich 2003). The present study supports Campbell et al (2008), where placements were found to offer different learning opportunities than students had encountered during the day. Similar to Bohle and Tilley's (1998) work with qualified nurses, students in this study found that the environment was quieter but this allowed them to make connections between theory and practice, and consolidate clinical skills in an environment where there was less competition for learning opportunities.

The night shift offers unique learning opportunities compared with those available during the day. Campbell et al (2008) identified that night duty nurses learnt through change-of-shift report, clinical rounds and interactions with doctors. The current study extends that understanding, identifying a range of unique learning opportunities for nursing students such as understanding patients' conditions, enhancing physical assessment skills, consolidating technical skills and experiencing greater continuity of care. The placement also provided students with opportunities to face physical adjustments to night duty work (Coburn and Sirois 2000; Santhi et al 2005) in a supported context.

The graduate year has been demonstrated to be stressful as the new nurse encounters unfamiliar situations and procedures, assumes greater responsibility (Duchscher 2001; Oermann and Garvin 2002) and confronts the demands of shift work (Ulrich 2003; Halfer and Graf 2006). Many individuals currently undertake their first night duty experiences as new nurse graduates. The findings of this study suggest that night duty placements as students may assist to overcome some challenges and potentially reduce stressors encountered during the graduate year. This requires particular consideration and further study.

While overall findings are positive, they need to be considered with caution as they cannot be generalised beyond the groups who participated. The study involved only two groups of final year nursing students placed in one public health care agency, and was limited by time constraints placed on the project. Further studies are recommended that incorporate

students from other universities, other year levels and include other hospitals. Students who participated in this pilot study were in their final semester. It is unclear whether such placements would be beneficial earlier in undergraduate courses or whether they are more appropriate just prior to graduation. The value of night duty placements earlier in courses warrants further exploration. Finally, follow-up studies need to evaluate the impact of placements on actual graduate outcomes.

CONCLUSION

Night duty clinical placements offer a range of untapped possibilities and challenges for nursing students. This study suggests that these may promote graduate preparation potentially assisting graduate work readiness. Placements can allow students to consolidate skills, appreciate the continual nature of nursing work and experience continuity of care. Further work is needed to extend understandings of the value of night duty placements for students on their work as graduates.

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