

Incorporating an Undergraduate Student in Nursing program into the workforce: a prospective observational study

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KEY WORDS

health workforce; nursing students; paediatric nursing; undergraduate; hospitals, paediatric

ABSTRACT

Objectives

The objective was to describe the organisational perspective of the implementation of the Undergraduate Student in Nursing (USiN) program and to describe the experience of nursing staff working with these Undergraduate Students in Nursing.

Design

Prospective, observation design.

Setting

The study took place at a large tertiary paediatric hospital in Brisbane, Australia over a twelve month period.

Subjects

Participants were registered nurses (n=169) employed in a permanent capacity in the following clinical areas – medical, surgical, rehabilitation, paediatric intensive care unit and perioperative.

Interventions

Pre and post staff questionnaires were distributed to staff based on three domains; anticipated thought; assertion in the workplace and role delineation; and reflective practice.

Results

Prior to implementation of USiNs, the primary concerns of staff surrounding the introduction of the role included; impact on patient safety, poor skill mix, decrease in quality of care and patient and family satisfaction, impact on unit/ward operation, and the potential attitudes of the students. At 12 months post-implementation, respondents felt that patient safety had increased, skill mix had not been adversely impacted, workload had improved, overall quality of patient care and satisfaction had increased among children and parents.

Conclusion

This introduction improved important elements within the clinical space such as patient safety and quality of care. Registered nurses perceived their workload was reduced and parent and child satisfaction was increased. The results of this study could be generalised beyond paediatrics to adult facilities. We would recommend other organisations consider this model if faced with similar workforce demands.

INTRODUCTION

Nurses are pivotal to global healthcare systems, making up 40 to 50% of the global healthcare workforce (Gaynor et al 2008). With ongoing attention being given to current nursing shortfalls within Australia, it is imperative for the Australian health care system to consider new strategies to address workforce demands (Franklin 2013).

The paediatric healthcare environment is no exception in the challenge to develop the future workforce that is adaptive and skilled with experienced paediatric nurses. As a strategy to address workforce demand, a large tertiary paediatric hospital in Brisbane Australia, developed a new workforce model which incorporated a 'grow your own' approach to developing the future workforce. A pilot program was developed to introduce an Undergraduate Student in Nursing (USiN) model. The USiN is an undergraduate completing a Bachelor of Nursing or equivalent that entitles them (at completion) to apply for registration with the Australian Health Practitioners Registration Authority as a Registered Nurse. The aim of introducing the USiN role within the paediatric setting involved exposing nursing students to paediatric nursing as a recruitment initiative; decreasing orientation time and costs by improving gaps in transition to practice; creating a pipeline to paediatric nursing and; decreasing casual and agency assistant in nursing usage. In essence, the USiN role offers students the opportunity to work part time in the hospital whilst completing their studies.

This paper will examine the process of implementing and coordinating a USiN pilot program in the paediatric setting. This paper will explore the impact of the USiN pilot program from an organisational perspective as well as identify the benefits and challenges felt by the registered nurses and Nurse Unit Managers working alongside these USiNs.

BACKGROUND

The nursing workforce in Australia is experiencing stressors similar to our international counterparts; there is an overall shortage of graduate positions coupled with an increasingly ageing workforce (Duffield 2008). Interestingly, the specialty of paediatrics is difficult to recruit to and this effect is amplified within paediatric specialties such as critical care and oncology. As a strategy to address workforce demand, new workforce models were considered which incorporated a 'grow your own' approach to develop the future workforce. A pilot program, supported by the Office of the Chief Nursing and Midwifery Officer, Queensland Government was developed to introduce the USiN nursing model at our paediatric tertiary hospital. The USiN is an undergraduate completing a Bachelor of Nursing or equivalent that entitles them (at completion) to apply for registration with the Australian Health Practitioners Registration Authority as a Registered Nurse. Funding for the pilot supported recruitment of 18.6 full time equivalent USiN plus 0.5 full time equivalent Clinical Nurse- Clinical Practice Facilitator to support the introduction of USiN role to the organisation.

The concept of the USiN program was borne out of a need to create a pipeline for paediatric nursing. The organisation's aim was to develop a program that would entice undergraduate students to the hospital with paid, part-time positions during their final year at university. This would provide the student with the opportunity to have increased exposure to paediatrics which traditionally is only briefly covered in general undergraduate programs. The program involved a great deal of preparatory work ensuring the USiN's scope of practice was aligned with their curriculum and that safe practice was paramount. As a risk mitigation strategy, initial USiN practice scope was conservative and well below mapped levels of academic theoretical preparation.

The objective of this study was to describe the organisational perspective of the implementation of the USiN program and to describe the experience of nursing staff working with the USiNs.

METHOD

In this descriptive and observational study an anonymous staff questionnaire was developed based on three domains; anticipated thought; assertion in the workplace and role delineation; and reflective practice. All nursing staff with a permanent position were eligible to participate in the study. Demographic data was limited to position grade and clinical area of employment. The staff pre-implementation survey was distributed on paper to each inpatient clinical area within our hospital in April, 2015 just prior to the start date for the USiN's. The staff post USiN implementation survey was distributed electronically using Survey Monkey™ software 12 months after the USiN commencement date. Each questionnaire comprised of a range of multiple choice questions and free text options.

The questionnaires were each piloted prior to dissemination. Data from each of the questionnaires was exported into Excel for the purposes of analysis. Descriptive statistics were generated. Free text responses were input into Nvivo© and thematically analysed.

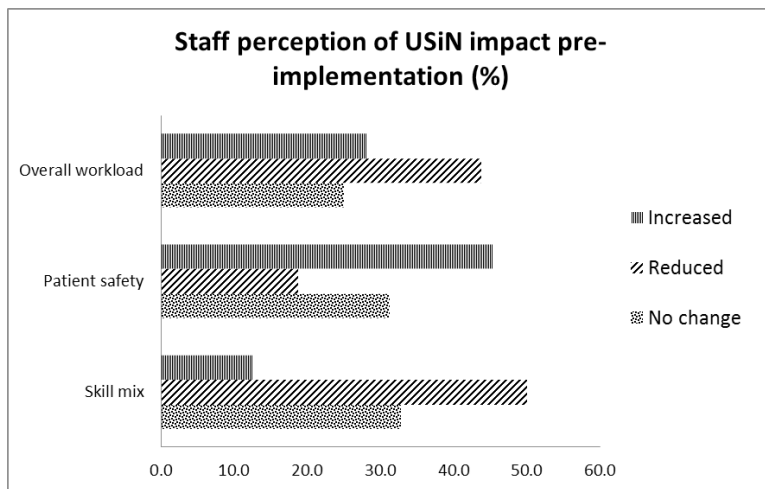
This study was endorsed by the local Human Research Ethics Committee. Each questionnaire contained an opening statement explaining the purpose of the project and giving assurance of confidentiality and stating that participation was voluntary. Return or submission of a completed questionnaire was taken as consent to participate.

RESULTS

The staff pre-implementation and 12 month evaluation surveys were distributed to five clinical areas; medical ward, surgical ward, rehabilitation ward, the paediatric intensive care unit and the operating theatres. Sixty four responses were collated from the pre-implementation survey representing 19.46% of their full time equivalent staff members at that time. Respondents were all nurses ranging from Assistants in Nursing (Grade 1) through to Nurse Unit Managers and Nurse Educators (Grade 7). The majority (62.5%) of respondents were Registered Nurses (Grade 5). The 12 month evaluation survey focused on Registered Nurses from Grade 5 to Grade 7. There were 105 respondents to the 12 month evaluation survey representing 29% of the full time equivalent workforce.

Prior to the implementation of USiN's the principle concern of staff respondents was that patient safety and skill mix of staff could be reduced (45.3% and 50% respectively) (figure 1). The respondents did anticipate their overall workload would be reduced (43%) and most respondents (85%) felt the quality of care provided would remain the same or increase. Staff respondents also felt that child and parent satisfaction would remain the same or increase (85.2%). A clearly defined scope of practice for the USiN was identified early in the project as an essential element for implementation; 70.3% of respondents were confident in their understanding, 17% were unsure and 12.5% did not know the scope of practice.

Figure 1. Pre-implementation responses on overall workload, patient safety & skill mix



Respondents were asked to describe any concerns they had around the introduction of USiN’s into their clinical area. The responses were analysed and the dominant themes were; impact on ward unit operations, additional responsibility subsequent to having unlicensed workers in the clinical area and the USiN’s attitude in the clinical area. Impact on ward unit operations includes scope of practice, communication and distribution of workload. Scope of practice was the greatest area of concern with staff expressing concern that there was ambiguity around the USiN’s scope of practice and their level of responsibility.

“May increase work load initially as they will need an increased requirement for supervision. Also need very clear communications around scope of practice.” (Intensive care Registered Nurse)

The additional responsibility associated with having unlicensed workers in the clinical area was a source of concern for many respondents. Many responses highlighted anxiety surrounding working alongside unlicensed health care workers such as accountability, responsibility and supervision.

“Registered Nurses will be expected to carry all the responsibility. Our job will be non-stop med checks & administration. No time for thorough assessment or rapport building, yet if something goes wrong it will be on the Registered Nurse’s shoulders.” (Medical ward Registered Nurse)

The final dominant theme in the pre-implementation survey of staff focused on the anticipated attitude of the USiN in the clinical area. Respondents expressed concern around USiN’s potentially wanting to avoid menial tasks in favour of more advanced level skills which were outside of their scope of practice.



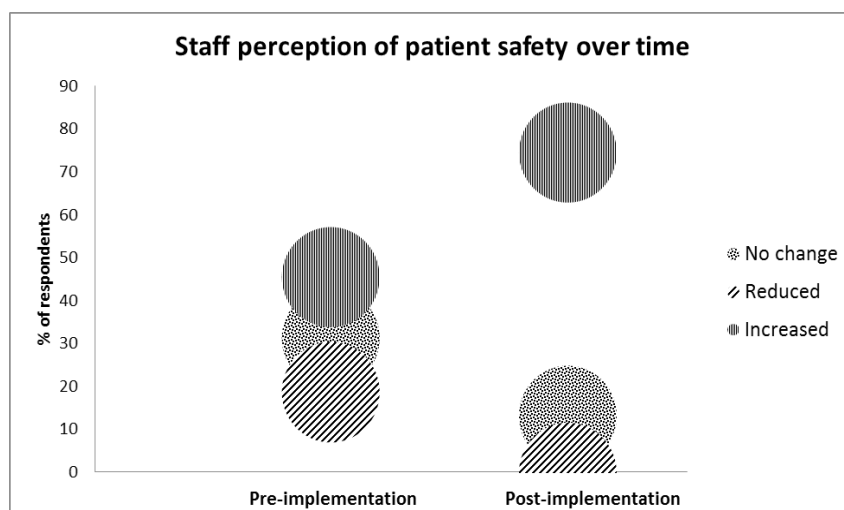
Figure 2: Word map of respondents’ descriptive text

In the evaluation survey conducted 12 months after the USiN implementation 86.9% of respondents perceived patient safety had substantially increased (figure 3). Appropriate skill mix in the clinical area had been a source of concern however at 12 months respondents stated there had been a 0% reduction in skill mix. Perceptions of changes in workload initially suggested that USiNs would reduce the burden of workload. At 12 months 85.8% of respondents perceived their workload had improved. Respondents anticipated in the pre implementation survey that child and parent satisfaction would increase with the introduction of USiNs into the clinical area. At the 12 month evaluation, respondents felt child and parent satisfaction had increased, 25.6% more than initially anticipated. Confusion around the scope of practice was a significant concern prior to the USiN implementation, yet at 12 months greater than 90% of respondents' state they were confident in their understanding and knew what resources were available to provide clarity. In the evaluation survey staff were given an opportunity to provide feedback or suggestions on how to improve the utilisation of the USiN role. There was equal proportions of staff that advocated for or against an increase in scope of practice. This increase included skills such as taking blood sugar levels, performing neurovascular observations, removing intravenous cannulas and enteral feeding. At 12 months 85.37% of respondents stated the USiN role had met their expectations and 87.9% of respondents saw the introduction into the clinical area as a positive change.

“Having USiN’s on the ward allows us as a multilevel team to provide better holistic care to children and families in the sub-acute/ rehab format. Team nursing with USiN’s means children are supported therapeutically by staff who have the time to spend the “extras” with them.” (Rehabilitation ward Senior Registered Nurse)

“Brilliant program. As a senior Registered Nurse I was completely overwhelmed with our workload and felt unable to provide the support required to my patients and team members. The USiNs have taken over a lot of the time consuming tasks that now free me up to focus on providing excellent care and leadership. I have noticed an enormous improvement.” (Intensive Care, Senior Registered Nurse)

Figure 3: Staff perception of patient safety in the clinical unit pre and post implementation of the USiN program



DISCUSSION

The challenges around securing adequate human resources for health is recognised globally (Berland et al 2016). Workforce shortages are predicted across all sectors of health but the greatest deficit is predicted to affect middle and high income countries leading up to 2020 (Berland et al 2016). Locally, competition between hospitals and health service districts to secure nursing graduates is stiff and retaining your workforce demands executive attention. To pro-actively manage this challenge a range of innovative strategies needed consideration such as the USiN program. Nursing executives at our hospital were emboldened to undertake this initiative which aimed to act as both a recruitment drive and a means to address a workforce shortage.

The scope of practice was developed after extensive consultation with Nursing Management, Nurse Educators and utilising the experiences of The Prince Charles Hospital who had previously run a USiN program. The nursing workforce initially had reservations around unlicensed workers in the clinical area and the scope of practice they would be given. To address this prior to commencement, education occurred in pilot areas around the USiN role and the agreed practice scope as negotiated with nursing leaders, Nurse Educators, clinical teams and the Queensland Nurses Union. Supporting procedures, learning resources and competency based assessment tools were developed to support the practice scope. Pivotal to the success of the USiN implementation was the dedicated Clinical Nurse Facilitator who supported the USiN and addressed issues and any ambiguity around the role with staff in the clinical areas. Some variance to practice scope occurred in the critical care areas context based on staffing ratios and patient stability. Success of this strategy was evidenced by the increased understanding of the scope of practice of the USiN plus the perceived positive addition to the clinical space at 12 months. The evaluation results indicated that a review of the scope of practice may be warranted. Many staff suggested a range of skills that could be added to the scope of practice of the USiN which better aligned with their academic progression. A pilot proposal was made to increase the USiN scope in one clinical area however the proposal was declined due to industrial concerns.

Safe practice for the USiN and patient safety were principle considerations in the implementation of USiNs. Staff were originally concerned that patient safety may be jeopardised by the presence of unlicensed healthcare workers and that skill mix would be reduced. Evaluation illustrates this was not the outcome and clinicians felt safety had substantially increased and skill mix was either unaffected or improved. Original staff scepticism may be attributed to staff concern around changes in workforce structure and professional identity which is an acknowledged barrier (Fowler et al 2006; Hayman et al 2006). For example, the employment of USiNs prompted a shift towards team nursing and some staff felt that this may reduce their holistic approach to nursing care. Team nursing or hybrids of this model have illustrated improvements in safety and quality of care and staff satisfaction (Fernandez et al 2012; Fairbrother et al 2010; Tran et al 2010). Some staff felt that by delegating some of these more simple tasks would negatively impact on their ability to provide complete patient and family centred care. Reluctance to delegate and supervise may also be borne from inexperience (Hall et al 2012).

The introduction of USiNs into the clinical area had an overwhelmingly positive affect for parents and children as perceived by the respondents. The 'extras' that USiNs had the time to undertake included rounding, spending time with patients, playing and tidying in patient areas. These simple tasks contribute substantially to the parent and patient experience. By utilising the USiN to undertake these tasks this had the added benefit of allowing the registered nurse time to practice to top of licence.

CONCLUSION

Innovations in the workforce are essential given the global pressures associated with nursing shortages. Paediatric specialties are not immune to this pressure. Our organisation developed a model with a supportive framework to introduce USiN's into the clinical area in a paid part time capacity. With a defined scope of practice this introduction improved important elements within the clinical space such as patient safety and quality of care. Additionally the registered nurses perceived their workload was reduced and that parent and child satisfaction with the hospital experience was increased. The results of this study could be generalised beyond paediatrics to adult facilities. We would recommend other organisations consider this model if faced with similar workforce demands.

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