

Australasian College for Infection Prevention and Control

5th International Conference
Melbourne, 2016

Infection prevention and control learning & practice in pre-registration undergraduate nursing: the sociological influences of the clinical environment

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Declaration of interest

Recipient of the Australasian College for Infection Prevention and Control 2015 Seed Grant

“No time for losers: producing infection control champions in the healthcare setting”

Purpose of the study

- Students learn infection prevention strategies at University
- There is an expectation of high levels of adherence to these in the clinical setting for patient safety
- Infection prevention and control is a patient and healthcare worker safety and advocacy issue
- Does this always happen?
- What influences this practice?
- What do the students do if they see good or poor practice?



Background and significance

- Infection prevention and control practices can range from excellent to very poor in the clinical setting
- We aim to explore the students' knowledge (theoretical and practical) of infection control on their current infection control practices



Research question

What clinical environment sociological factors influence infection prevention and control (IPC) practice of pre-registration nursing students?



- Descriptive design
- Previously validated survey tool¹
- Non-probability purposive sample (n=225)
- Divided into year level cohorts (1, 2, 3)
- Descriptive and inferential statistics
- Semi-structured interviews with clinical facilitators (n=8)
- Thematic analysis

¹(Hinkin & Cutter, 2013)

Results

Influencing factors on infection control practice (n=225)

Influencing factor	% likely to be influenced
University education	97.5
Mentor	89.7
Perceived risk of infection	89.0
Practice of other nurses	85.2
Availability of facilities/equipment	84.5
Previous experience	82.7
Time	70.7
Practice of medical staff	66.8
Workload	69.6
Practice of other team members	69.5

“I think they're prepared well enough. I think they just need reminding. As I said, they know about the moments, but they can't name them separately. If I said what's your situation, they can't tell me what moment it is.” CF2

“In the wards, if the staff aren’t putting on goggles or protective eyewear where there could be instances of splashing and that, I ask the student about what they were doing and did you have PPE. ‘Oh no, because my buddy said I didn’t need it’. So I’m finding that that sort of thing is happening for that, that sort of issues.” CF2

Influence of clinician practice on infection control practice

Year level	Follow poor practice	Tell clinician of poor practice	Ignore and perform good practice	Influenced by clinician practice
Year 1 (n= 34)	Nil	42.9%	57.1%	92%
Year 2 (n=105)	10%	40%	50%	95%
Year 3 (n=56)	7.7%	28.8%	63.5%	88.9%
Total (n=195)	6.2%	41.5%	52.3%	89.7%

***“So those first-years,
before they're exposed to the workforce have that ethical
basis that they know that's what they should do. But by
third year, maybe some of those students have tried to stand
up and actually been eaten alive.” CF3***

“They certainly are not all armed with good assertive skills, those skills in assertiveness, and we see that in the lab. So actually empowering them with those skills so they feel that they have the skills but they feel safe in using those skills to stand up and say, this is correct practice and this is what needs to be happening.”

CF3

“They are reluctant to step up to the clinicians, but they will step up to the CF to say this is not properly - the practice is not very good in this particular ward area.” CF8

“They just feel like if they say something their buddy's going to give bad feedback to the facilitator and then they're going to be frowned on.” CF2

- Practice of mentors had a major influence on IPC practice
- Findings in line with Hinkin and Cutter's work but contradictory to others (Barrett & Randle, 2008; Ward, 2010)
 - Need to "fit in" to the clinical environment
 - Fear of being ostracised from the team
 - Fear of a bad clinical report



Clearly students practice of Infection Prevention and Control Strategies are influenced by:

- Knowledge of Infection Prevention and Control
- Observed practices, both positive and negative
- Lack of assertiveness when viewing poor practices due to fear of repercussions e.g. exclusion, inability to fit in to the clinical environment and failure

- Interestingly we found that:
 - Many students knew what they needed to do for infection prevention and control but did not know why
 - No 1st year students, 10% of 2nd year students and 7.7% of 3rd year students **were prepared to follow poor practice.**
 - 40% of 2nd year students dropping to **28.8%** of third year students would tell the mentor of the poor practice.
 - 63.5% of 3rd year students would ignore the poor practice and perform good practice themselves

probably for the reasons outlined on the previous slide

Conclusions

- Opportunities to support students in the clinical space need to be improved
- Opportunities to prepare students and mentors better for their roles in Infection Prevention and Control
- Sociological influence is clear and needs to be discussed prior to each clinical placement
- Need for higher education providers to prepare students on a curricula level (not limited to nursing)

Next phase?

“Whether you look at infection control practices or whether you look at carrying out best practice on anything, I think the fundamental thing is the culture, the underlying culture, and that thing still exists.” CF3



References

- Barrett, R., Randle, J., 2007. Hand hygiene practices: nursing students' perceptions. *Journal of Clinical Nursing* 17, 1851-1857.
- Hinkin, J., Cutter, J., 2014. How do university education and clinical experience influence pre-registration nursing students' infection control practice? A descriptive cross sectional survey. *Nurse Education Today* 34, 196-201.
- Ward, D.J., 2010. Infection control in clinical placements: experiences of nursing and midwifery students. *Journal of Advanced Nursing* 66, 1533-1542.