Building a 'bridge' to link simulation to practicum – mixed methods exploration of learning transfer

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Background

School of Nursing

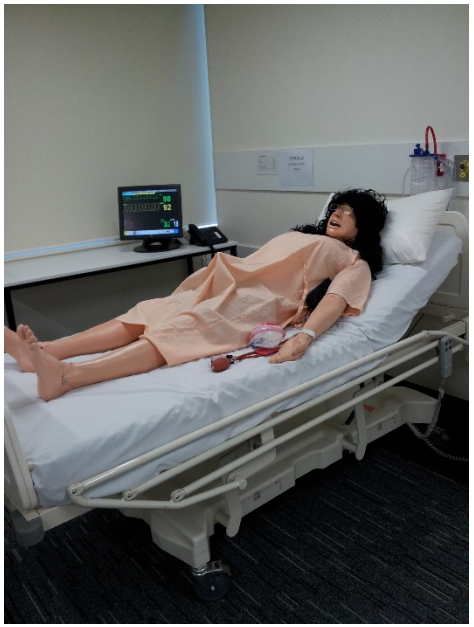
BN course

Clinical reasoning

Large cohorts

HFS

One session per course



- ***How could the simulated learning experience be maximised to enable transfer of learning to the clinical setting??***

Building a bridge

Clinical placement

Simulation

Debriefing

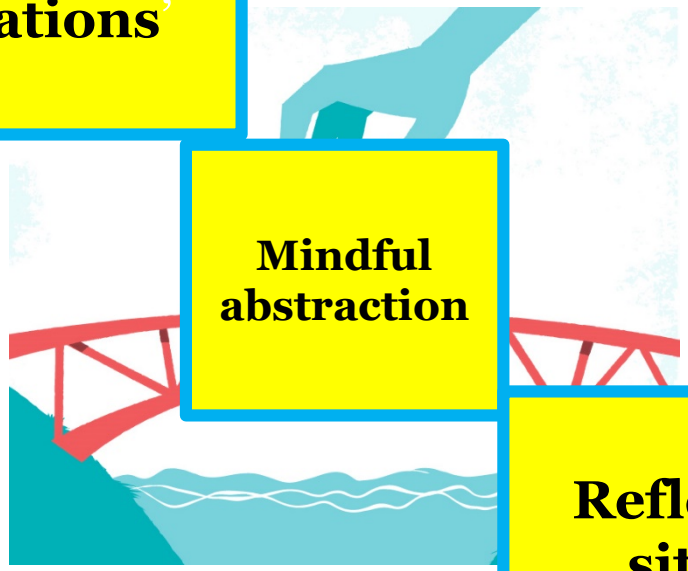
Abstract Conceptualisation[1]

Active experimentation

Reflect on past situations[2]

Mindful abstraction

Link to new situations'



Debriefing

- STANDARD
- "sandwich" approach

- INTERVENTION
- Backward reaching questions
- Abstract concepts formed of the patient problem – chest pain
- Forward reaching questions

Research Question……

Is there a difference in perceptions of transfer of learning to the clinical environment in students who participate in a transfer of learning debriefing as compared to students who participate in a standard debrief?

(Ethics approved)

Methods

- Convergent parallel mixed methods
- Quasi experimental – pre and post test + FG
- ***Transfer of learning debrief as single intervention***
- Population: BN final year students in clinical subject
- Sample: n=213 (n_{exp} =103; n_{con}=110)
- FG :n=25 (n_{exp} =15; n_{con} =10)

Instruments

- Demographics
- Nurses Clinical Reasoning Scale (NCRS)[3]
- 15 items based on conceptual definition of clinical reasoning[4]
- 5 point Likert scale
- FG questions

I know how to collect an admitted patient's health information quickly.
I can apply proper assessment skills to collect a patient's current health information.
I can identify abnormalities from the collected patient information.
I can identify a patient's health problem from the abnormal information collected.
I can recognise possible early signs or symptoms when a patient's health deteriorates.
I can explain the mechanism and development associated with the early signs and symptoms when a patient's health deteriorates.
I can accurately prioritise and manage any identifiable patient problems.
I can correctly explain the mechanism behind a patient's problems.
I can set nursing goals properly for the identified patient problems.
I can provide appropriate nursing intervention for the identified patient problems.
I am knowledgeable of each nursing intervention provided.
I can identify and communicate vital information clearly to the doctors based on a patient's current condition.
I can anticipate the prescription ordered by the doctor according to the patient information provided.
I can accurately evaluate and identify whether a patient's condition has improved.
I know the follow-up steps to take if a patient's condition does not improve.

Quantitative Results

- 12 out of 15 NCRS items – control
- 7 out of the 15 NCRS items – intervention

statistically significant improvement ($p<0.05$)

- No change for either groups in 3 criteria:
  - I know how to collect an admitted patient's health information quickly
  - I can set nursing goals properly for the identified patient problems
  - I can identify and communicate vital information clearly to the doctors based on a patient's current condition

Qualitative Findings

- The key themes which emerged from the analysis were
  - using a structure to guide clinical practice – frameworks
  - making sense of learning – remembering 'steps' to manage patient condition

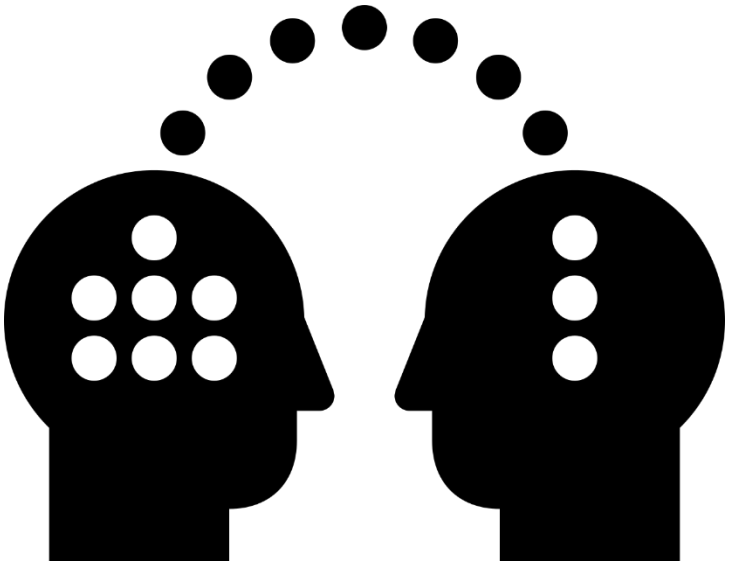
Mixed Methods Results

- No change 3 quantitative items
  - I know how to collect health information quickly
  - I can set nursing goals
  - I can identify and communicate vital information

- *But* qualitative findings diverged.
- *Both* groups specifically verbalized assessment and communication skills

Discussion

- Final year students – previous experience & CR
- Skill of debriefer
- Criteria of no improvement - ??cause for concern
- Skills transfer



Implications- nursing education/ further research

- Debriefing questions may not be appropriate to use as a whole - focus on conceptualising
- Different cohorts of students would require different levels of assistance to achieve abstractions.
- Only one sim + debriefing - facilitating conceptual understanding may able to be undertaken other practice activities and may complement simulated learning.

Limitations

- Convenience sampling
- Study design
- Hawthorne effect
- Self-reporting
- Scenarios used and debriefing methods used are unique to the program offered at the university research site.

Questions?

Thank you!

References

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- 2. Salomon, G., & Perkins, D. (1989). Rocky roads to transfer: Rethinking mechanism of a neglected phenomenon. *Educational Psychologist, 24*(2), 113-142 Billing, D. (2007). Teaching for transfer of core/key skills in higher education: Cognitive skills. *Higher Education*, *53*(4), 483-516.
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